

CONNECTIONS

MISSION: POSSIBLE



**By Bradford Sherman
& Thomas Worley**
CFAES South Centers

Even during this time of unprecedented change and uncertainty, the critical mission of enhancing southern Ohio and assisting people with informed decision-making through responsive research, education, entrepreneurial application, and collaborative partnerships continues to be the guiding priority for all programs at the College's Piketon campus.

Work across all program areas continues at The Ohio State University South Centers, either with on-site personnel to insure that all facilities and farm operations remain functional and secure or through telecommuting from home, as Ohio and the nation rides out the COVID-19 pandemic.

See MISSION Page 2

The different methods and tools we are using to accomplish our mission



Essential Personnel



Online Meetings and Programming



Telecommuting

MISSION from Front

South Centers began a temporary closure to the public on March 17 in compliance with the guidance provided by university leadership. With only the most critical staff permitted on the premises for keeping fish fed, maintaining perennial crops, and performing facility walk-throughs, it meant that South Centers needed to adapt and change the way it serves clientele.

“In normal times we rely heavily upon delivering our information, training, and counseling through direct, in-person meetings and workshops,” explained South Centers Director Dr. Tom Worley. “These ‘stay at home and work from home’ times have challenged us to be creative and innovative in our methods of delivery and our staff have all risen to the occasion to continue our work in all programs including aquaculture, business development, soil and water, and specialty crops.”

In this issue, you will read several stories outlining how those various programs are working to meet the challenge. Some of our specialists are involved in Ag Madness, a creative virtual Extension workshop teaching platform that invokes the spirit of the NCAA basketball tournament; others are using similar digital tools to either disseminate their knowledge to the public; and our support staff makes certain that it all runs smoothly. Some are continuing to apply for grants to fund current and future research, or helping farmers and food producers continue their critical operations, while our business team members are counseling regional banks, businesses, and industries through the numerous financial assistance programs being rolled out via new federal legislation during this crucial time.

“Video conferences, teleconferences, email, instant messaging and newsletters, blogs and social media posts have kept staff in touch with our clientele, added Worley. “Although business owners and managers have been hard hit by the restrictions placed on them, our counselors have done their best to keep abreast of the economic assistance programs that have been put in place to keep paychecks coming for employees and forgivable

loans provided to small and medium size businesses to meet other operating expenses in the short run.”

Of course, not all work can be performed remotely and a limited number of staff continue to come to the South Centers campus as necessary to perform certain critical tasks.

For example, the aquaculture staff have maintained all of the yellow perch, bluegill, and largemouth bass that are the primary focus of the aquaculture research and Extension program at South Centers. Thousands of fish in our 16 ponds as well as fish held in around 260 indoor water-recirculating or flow-thru tanks continue to be fed and their water quality maintained on a daily basis by our research assistants coming on site for a few hours each day.

“Our field support staff members have also been engaged on-site to the extent necessary to conduct essential spring activity in our plots and field trials of wine grapes, several kinds of berries, hops, and bioenergy crops,” Worley explained.

These are all perennial crops that take several years to establish and thus it is critical that they be maintained during this critical spring period. All routine operations including fungicide, herbicide and insecticide applications, and pruning and mulching are being performed by our field research assistants in a timely manner.

OSU South Centers staff members look forward to when our operations can return to a more normal, although certainly to be different, way of operating. Until that time comes, we will continue to strive toward delivering on our mission by serving the needs of people within the many communities touched by our programs in any way we can.

As you will read in the following pages, this experience has taught us new and innovative ways to serve you, which we will be able to carry forward and implement into future programming. Most likely, we will never be the same, but we certainly intend to make the new ways of serving our widely scattered clients a most positive outcome.



TOP: South Centers Connections Editor Bradford Sherman works on the latest issue of the newsletter from his dining room table.

RIGHT: Research Assistant Dean Rapp performs those essential functions associated with the aquaculture program by caring for some of the thousands of fish at the Piketon campus.



CONTENTS



Cover Story: **Mission: Possible**

In times like these, when Ohioans and Americans are facing unprecedented challenges and feeling disconnected from one another, it is more important than ever to be connected with helpful resources like those provided by The Ohio State University South Centers.

Stories

A Message from Gary Gao.....Pages 4-5

Small fruits specialist Dr. Gary Gao shares some helpful resources for fruit growers.

Ag Madness a slam dunk.....Page 6

A new innovative Extension program helps fill the void left by the cancellation of the popular NCAA basketball tournament.

Broad Thinking.....Pages 12-13

Broadband access is more important than ever, could the cooperative model be a key to filling the broadband gap in rural America?

Program Areas

Specialty Crops.....Pages 4-6

Marketing.....Page 7

Aquaculture.....Page 8

Soil and Water.....Page 9-11

Co-ops.....Pages 12-13

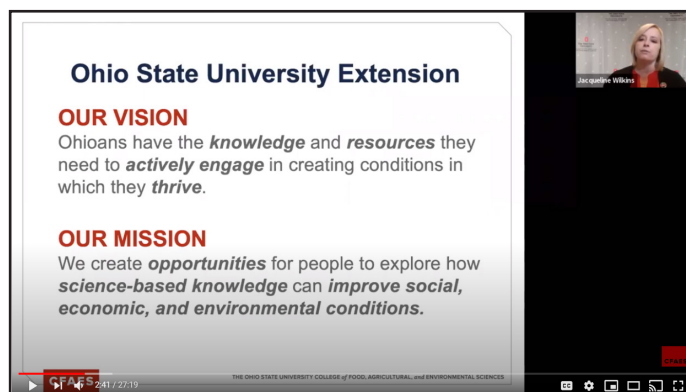
Business.....Page 13-15

SOUTH CENTERS VIDEO TEAM PRODUCING SPECIAL EDUCATIONAL PROGRAMS AMID COVID-19 PANDEMIC

The video production team at The Ohio State University South Centers has been working on several videos (using zoom) on relevant topics that address some of the concerns surrounding the COVID-19 virus. We have been video conferencing with some special guests who look at some of the social aspects individuals may have concerns about during this unique time. We are also progressing with training programs that affect all of Ohio.

One of our programs features OSU Extension Interim Director Jackie Wilkins, who along with South Centers Director Tom Worley, discusses how OSU Extension programs are continuing to function throughout Ohio. These include the OSU Extension, Ohio 4-H Development, Agriculture and Natural Resources, Family and Consumer Sciences, Community Development, Learning and Organizational Development Resources, and Knowledge Resources.

We are also focusing on special training programs in the areas of agriculture, horticultural, aquaculture and business development. Visit youtube.com/user/southcenters/videos for a list of videos and playlists. Make sure to click the subscribe button and the bell icon so you will be notified whenever we post new videos.



South Centers Chat

Jackie Kirby Wilkins,
Interim Director, OSU Extension
youtube.com/watch?v=WYN76eVvqCo

Feel free to contact any member of the video production staff (Patrick Dengel – dengel.3@osu.edu; Duane Rigsby – rigsby.11@osu.edu; or Sarah Swanson – swanson.345@osu.edu) for additional information.

HELPFUL RESOURCES FOR **FRUIT GROWERS**

A MESSAGE FROM DR. GARY GAO

Professor and Extension Specialist

While the COVID-19 pandemic has been turning our world upside down, we have been working hard to find new and innovative ways to help all citizens in Ohio. During these past two months, we have answered many questions from growers and gardeners, produced news releases, taught online classes using Zoom, developed fact sheets on new crops, and continued our research projects.

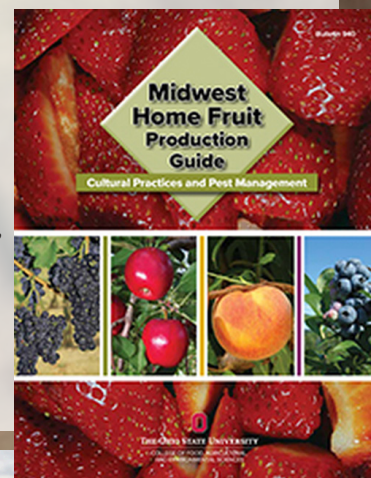
Personally, I have watched many instructional videos, read quite a few articles, and contacted some of my colleagues with The Ohio State University and other land grant universities. Because it appears that COVID-19 will be with us for a while longer, we will need to develop new ways to develop and deliver our educational resources.

Existing Resources

*Midwest Home Fruit
Production Guide (OSU
Extension Bulletin #940)*

This guide, now in its third printing, is an excellent resource for home gardeners, master gardener volunteers, gardener center employees, and new fruit growers.

See GAO Page 5



Gary Gao demonstrates how to prune cherry trees at the Fruit Pruning Workshop on March 12, 2020 at OSU South Centers.

GAO from Page 4

There is currently a surge in fruit and vegetable production in home gardens. Many new farmers want to grow fruit crops in order to diversify their operations. More and more row crop growers are looking for ways to utilize their land more efficiently. The Midwest Home Fruit Production Guide will be an excellent reference for many. I am very happy to report that more than 5,000 copies have been sold since 2009. Visit extensionpubs.osu.edu/midwest-home-fruit-production-guide to purchase a copy.

Midwest Blueberry Production Guide

This regional publication, to which I was a key contributor, was published in 2003 by The University of Kentucky and included contributions from several within The Ohio State University. This guide was designed with commercial growers in mind, but also includes useful information for home gardeners. You can download a digital copy of this bulletin by visiting www2.ca.uky.edu/agcomm/pubs/ID/ID210/ID210.pdf.

What is not included in the bulletin is how to grow blueberries in containers, because that has not yet been produced. Research Assistant Ryan Slaughter and I have been conducting research trials with container blueberries and once the social restrictions are lifted, you are welcome to visit us at OSU South Centers to see how it is done.

Online Training Courses

Specialists such as myself have done a few online classes through Zoom or WebEx. Little did I know that this was the only way our training classes would be offered during the COVID-19 pandemic. I have a feeling that the online training method will become even more prevalent as we move forward. When I first started with OSU Extension back in 1994, I embraced technology, but it has taken more time to get used to new technology as I haven't gotten older. On April 16, I taught a class on edible landscaping for Greene County Extension. More than 130 people participated in this training and learned new and useful information. It was a wonderful experience for me! By the time this newsletter publishes, I will have likely conducted three more online classes. I suppose it is possible to teach an old dog new tricks. As we look at this pandemic and beyond, we may need to develop better online training classes and offer even more comprehensive training programs for continuing education.

You may have seen some of my YouTube videos. While they will not be winning academy awards any time soon, I am hopeful that growers and gardeners can learn a few things from our videos. As we challenge ourselves to get better at these new technologies, our instructional videos and webinars should be getting better and better.



Ryan Slaughter is pictured in front of hardy fig plants in a high tunnel at OSU South Centers in Piketon. The project is funded by a specialty crop block grant from USDA through Ohio Department of Horticulture. (Photo by Gary Gao)

Research Projects

While it is true that COVID-19 has caused many disruptions with our research projects, our research support staff members have managed to finish the critical tasks for our funded projects. Ryan Slaughter is a key member of our fruit Extension and research team and was instrumental in accomplishing our critical tasks. We will be finishing our brambles, hardy fig, and hardy kiwi projects this year. We have been particularly impressed by the hardy kiwi cultivar known as Hardy Chicago or Chicago Hardy. It is important to grow hardy kiwis in a high tunnel for an earlier harvest and higher yields.

We are also on course to wrap up our Laser Guided Intelligent Sprayer project, which was funded by USDA NIFA in 2020. Our Viticulture Extension research funded through Ohio Grape Industries Program will end on June 30. We will work hard to help our grape growers survive this difficult period.

Fruit Pruning School on March 12, 2020

We were able to host our Fruit Pruning School on March 12, 2020 at OSU South Centers in Piketon and it was a huge success. We tried both hands-on training, indoor presentation and a Zoom live streaming. Instead of just the usual berry crops, we added apple, peach, cherry, and hardy kiwi to our lineup this year.

AG MADNESS

A slam dunk success for OSU Extension

By Brad Bergefurd

Horticulture Extension Specialist

One of the many casualties of the COVID-19 pandemic was the wildly popular NCAA Men's Basketball Tournament, simply referred to by many as March Madness. In the spirit of that event, "Agriculture and Natural Resources Madness: A Tournament of Education" (Ag Madness) was born.

Faced with the challenge of continuing to deliver programming in the midst of travel restrictions and Governor Mike DeWine's stay at home order, Ohio State University South Centers specialists moved quickly to modify how they teach and assist clientele. Specialists began making themselves available electronically via social media, teleconferences, email, postal mail, phone calls and texting. Virtual farm and business visits, client counseling, and plant diagnostics have become the norm over the past 30 days.

One of the largest and most successful ways specialists

have been delivering programming has been Ag Madness. It is a virtual training platform organized by OSU Extension that includes 64 educational events broken into daily brackets. Each day, a virtual educational session is held at 9 a.m., noon, and 3 p.m. The education tournament is provided free of charge and will likely continue until mid-May.

South Centers specialists Christie Welch, Gary Gao, and Brad Bergefurd taught topics on direct marketing, online marketing, drive-thru farmers markets, selling food to schools, strawberry, blackberry, apple, and hemp production, plasticulture and drip irrigation to help train and prepare farmers for the upcoming growing and marketing season. The hemp training has been one of the largest attended trainings to date with 1,115 participants.

If you missed these virtual trainings, recordings can be viewed by going to <https://agnr.osu.edu/events/agriculture-and-natural-resources-madness/full-bracket> and clicking on watch replay button.



Local food producers learn to navigate social distancing to serve customers

By Christie Welch

Direct Marketing Program Manager

The impact of the COVID-19 global pandemic has swiftly changed our world. Who could have anticipated the shutdown of America, more or less within a 24-hour period? While this pandemic has changed many things, one thing has not – farmers are still farming.

With the manner in which they market their products to consumers having changed, The Ohio State University's Direct Food and Agricultural Marketing Team has been there to help producers source the information they need.

Over the past month, our team has heard from many local food producers needing questions answered and factual information to determine how to operate their businesses in the current environment of social distancing and the stay-at-home order.

One of the first steps we took was to collaborate with the OSU Produce Safety team on a number of webinars as part of the AgMadness Tournament of Education. Dr. Sanja Ilic and Dr. Melanie Ivey conducted three webinars on produce safety in light of COVID-19; these webinars provided the fact-based information our producers were seeking.

Secondly, we developed a COVID-19 working group consisting of OSU educators and researchers and many additional organizations that serve Ohio's local food producers including Ohio Farmers Market Network ([OFMN](#)), Ohio Ecological Food and Farm Association ([OEFFA](#)), Ohio Farm Bureau Federation ([OFBF](#)), and Ohio Produce Growers and Marketers Association ([OPGMA](#)). This working group came together to help identify producers' needs, resources to help meet those needs, and to address additional concerns that may be forthcoming related to COVID-19. This working group has met weekly, collaborating to assist our local food producers with accessing needed resources.

With the high demand for personal protective equipment (PPE), we worked to identify suppliers that could provide access to these items. Collaborating with this working group and the Ohio Manufacturing Extension Partnership (MEP), we were able to share information on where producers could look to access PPE. One source is Ohio's distilleries. Many of them have begun producing hand sanitizer, which is not only needed by frontline workers and



A drive-thru farmer's market in Las Vegas, Nevada.

first responders, but also by our local food producers. MEP developed an exchange where businesses that have these items can be listed, and those needing this equipment can more easily find these sources. You can view the exchange at repurposingproject.sharetribe.com

We also worked to provide information on managing farm and farmers markets in a manner that still allows consumers access to Ohio's locally produced foods, while at the same time maintaining social distancing and no or low contact purchasing. We offered a webinar on drive-thru farmers markets, how to use online platforms to sell locally produced foods to consumers, and expansion of the senior farmers market nutrition program in Ohio. All are available for viewing at southcenters.osu.edu/direct-marketing/covid-19-webinars-and-resources

Throughout all of this learning, sharing, and identifying concerns, we are hearing from our local food producers that consumer demand is high. While the way in which consumers can access locally produced foods has changed, our farmers are still farming, our consumers are still demanding it, and we will get through this together.

You cannot come out, but you can outcome

Dr. Hanping Wang completes four proposals from home isolation

With the outbreak of coronavirus, most of us are now teleworking from home. In a normal situation, if you were able to work from home for a week, you would typically be feeling happy; but if you have to work at home for a month or longer, that can be a different story.

It is difficult to work from home. There is always something else you



can do, for example watching television, eating snacks, or doing a home project; however, if you focus, you can get a lot of things done with writing in home isolation.

Dr. Hanping Wang, program leader of the South Centers aquaculture program, has completed four grant proposals worth a total of around \$3 million since the home isolation. These proposals were submitted to the National Science Foundation, USDA-NIFA, and US Soybean Board.

He would like to thank Pam Schlegel and Lori Kaser in the Grant Development Support Unit for their guidance and assistance in budget preparation and submission process for these proposals.

Aquaculture team publishes two papers in top aqua-journals

Dr. Hanping Wang

Aquaculture Program Leader

Aquaculture team members at The Ohio State University South Centers recently published two papers in top journals within the aquaculture industry.

The first paper deals with the evaluation of genetic variation and gene expression patterns of different strains related to the utilization of soybean meal (SBM) in largemouth bass (LMB). It was published by AQUACULTURE, the No. 1 journal in aquaculture, in March 2020.

In that paper, the team found that genetic variation exists for growth and feed efficiency in LMB fed diets containing both SBM and fishmeal, and genetic improvement may be possible for the trait of feed efficiency. In all the three strains they tested, the growth performance of individuals in the S35 (35% fishmeal replaced by SBM) groups declined when compared with the S0 group, and the specific growth rate and weight gain correlated negatively with dietary levels of SBM.



Genes that were differentially expressed between dietary SBM levels were identified. Transcripts of genes related to insulin-signaling pathway and fatty acid metabolism and biosynthesis were significantly downregulated in the S35 and S50 groups compared to the S0 group. This study provides important information for improving growth and breeding strategies of LBM for the aquaculture industry, which contributes ~0.5 million tons of production globally per year. <https://doi.org/10.1016/j.aquaculture.2020.735214>.

The second paper discusses the use of medicinal herb to improve immune responses and stress in Nile tilapia, and was published by Fish and Shellfish Immunology (FSI) in January 2020. FSI is the another of the top-ranked journals in the aquaculture industry.

In this study, the team found that the medicinal herb they used significantly enhanced lysozyme activity and nitrous oxide activities, as well as improved superoxide dismutase, catalase, and glutathione peroxidase activities. Growth performance was also markedly improved. Expression of heat shock protein 70 and interleukin 1 beta genes were significantly upregulated throughout the entire experimental period.

When challenged with bacterium, the mortality of treated groups was significantly lower than the control. Current results prove that medicinal herb has a synergistic effect on immune and stress responses, growth performance, and disease resistance. The findings are important for reducing stress and disease in tilapia, the No. 1 aquaculture species in the world.

<https://doi.org/10.1016/j.fsi.2019.12.025>.

Organic Production:

An Indian experience at OEFFA Conference

By Dr. Rafiq Islam
SWBR Program Leader

South Centers visiting scholar Riti Chatterjee was one of the speakers invited to deliver a presentation at the 2020 Ohio Ecological Food and Farm Association (OEFFA) annual conference in Dayton on February 13, alongside Aaron Wilson, Rafiq Islam, Vinayak Shedekar, and Alan Sundermeier of The Ohio State University.



Her presentation topic was titled “Indian Experience on Organic Farming” and was included in the Building Agricultural Resilience to a Changing Climate session. In it, she discussed India’s rich and diverse heritage of agricultural traditions that makes it suitable for designing organic production systems, investment in applied research, Extension, and marketing infrastructure.

Chatterjee also touched on the constraints farmers are facing with special reference to small vegetable farmers. Lastly, she told a success story of an Indian organic farmer, elucidating how he is raising various types of vegetables on his 7-acre farm.

See RITI Page 10



OSU Extension Educator Alan Sundermeier, Dr. Rafiq Islam, program leader of the Soil, Water and Bioenergy Resources program at OSU South Centers, and visiting scholar Riti Chatterjee visit the OEFFA Conference.

OSU contributes to OEFFA Conference

By Dr. M.A. Rahman, Shib Pattadar, Riti Chatterjee & Jordan Maxwell
South Centers Soil and Water Team

Rafiq Islam delivered a presentation on 21st Century Climate-Smart Agriculture in response to global climate change effects, increasing population growth, and degraded soil and water ecosystems at the Ohio Ecological Food and Farm Association Annual Conference held in February in Dayton.

Islam, who leads the Soil, Water, and Bioenergy Resources Program at the Ohio State University South Centers, also organized a preconference workshop titled “Building Agricultural Resilience to a Changing Climate” along with Aaron Wilson (Byrd Polar & Climate Research Center; CFAES-OSU Extension; and State Climate Office), Vinayak Shedekar (Dept. of Food, Agricultural and Biological Engineering and Healthy Soil Healthy Environment

Extension Signature Program, OSU Extension), and Alan Sundermeier (OSU Extension, Wood County) of The Ohio State University.

Islam and Sundermeier also organized two more sessions at the OEFFA annual conference, one titled “Climate-Smart Organic Grains for Healthy Soils, Healthy Food, and Healthy People,” and another titled “Climate-Smart Organic Vegetables for Healthy Soils, Healthy Food, and Healthy People.”

These presentations focused on current and future global climate change effects, organic grain and vegetable production in Ohio and the United States, degradation of soil health and water quality, chemical inducing of plants to improve water and nutrient-use efficiency, and conservation agriculture to enhance ecosystem services associated with improved food quality, nutrients, amino acid profiling and phytochemicals to support public health.

RITI from Page 9

Additionally, she spoke about government assistance, management and cultural practices he follows at his farm, his online and direct marketing strategy for the produce, labor engagement, etc. In response to questions from the audience, she elaborated how Sikkim, an Indian state, became fully organic.

Chatterjee, a PhD candidate at Bidhan Chandra Krishi Vishwavidyalaya in West Bengal, India, is working on conservation agriculture as one of the Senior Research Fellows at the Center for Advanced Agricultural Science and Technology, Indian Council of Agricultural Research-NAHEP, and World Bank-funded project. She is pursuing her doctoral research on estimation of ecological services in terms of energy, climate, and knowledge management: the dynamics of social ecology of conservation agriculture.

She earned both her bachelor's and master's degrees in agricultural sciences from Bidhan Chandra Krishi Vishwavidyalaya. In her MS degree program under the supervision of Professor S.K. Acharya, she focused on the health and ecological dynamics of farmwomen. Hers was named best master's thesis jointly by Banaras Hindu University and RASSA. So far, she has published seven peer-reviewed research articles in national and international journals and co-authored book chapters.

As part of her on-going PhD program on conservation agriculture, she received the World Bank fellowship for a period of six months to pursue her Extension outreach research at The Ohio State University. Currently, she is working as a visiting scholar in the Soil, Water, and Bioenergy Resources Program at The Ohio State University South Centers at Piketon under the supervision of Dr. Rafiq Islam.

Chatterjee can be reached at ritichatterjee2015@gmail.com.

Soil and Water team well represented at Hawaiian aquaculture conference



Maxwell delivers collaborative research talk

By Dr. Rafiq Islam
SWBR Program Leader

Jordan Maxwell, one of the researchers in the Soil, Water, and Bioenergy Resources Program at The Ohio State University South Centers, participated in the 2020 World Aquaculture Society America Conference held February 10-12 in Honolulu, Hawaii.

She delivered a pair of presentations at the conference. One poster presentation was titled "Aquaponic System Impacts on Lettuce Yield and Quality" and disseminated our research findings of green leafy lettuce grown in a deep water culture aquaponic system using Nile tilapia and compared that data to a replicated hydroponics system.

See MAXWELL Page 11

PhD pursuit takes Pattadar to Hawaii

By Dr. Rafiq Islam
SWBR Program Leader

Shib Nath Pattadar participated in the 2020 World Aquaculture Society America Conference held in Honolulu, Hawaii in February as part of his PhD research work. As one of the authors, he delivered one oral and one poster presentation at the conference.

Pattadar is a PhD student of School of Environment and Natural Resources (SENR), College of Food, Agricultural, and Environmental Sciences at The Ohio State University and is currently pursuing his graduate research work on aquaponics and water quality, funded by a USDA capacity-building collaborative project of the Ohio State University South Centers at Piketon and Central State University.

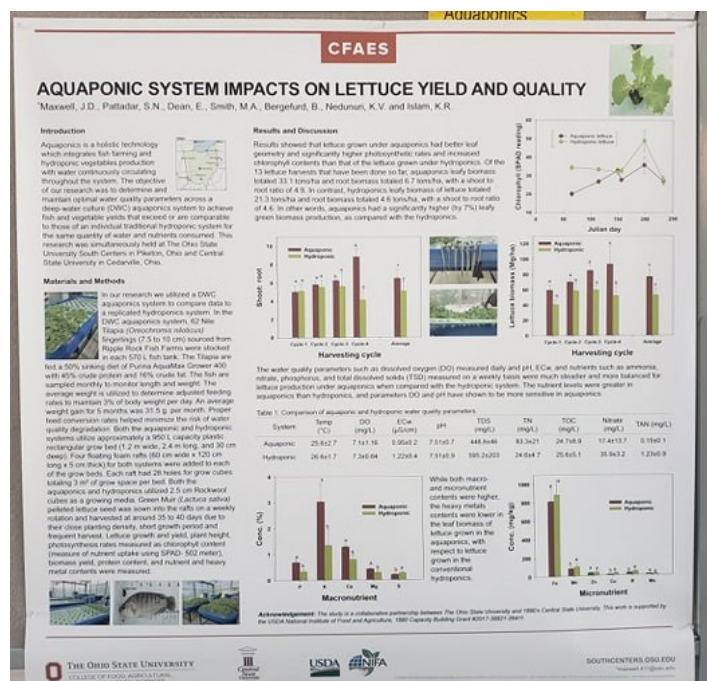
See PATTADAR Page 11

MAXWELL from Page 10

Our results indicated the lettuce production and quality was significantly higher in the aquaponic system compared to the traditional hydroponic system.

She also gave an oral presentation titled “Building Educational Capacity Through Collaborative Aquaponics Extension Education,” an overview of the Ohio State University South Center’s history of collecting research data, demonstrating, and transferring unbiased research-based aquaponics knowledge to expand educational outreach capacity.

Additionally, her collaborative research was part of a presentation delivered by Shib Pattadar, “Is Fish Quality Healthier in Aquaponics?” which was presented as part of the Aquaculture Engineering Society session. The goal was to evaluate whether the fish produced in U.S. aquaponics systems are as healthy and nutritionally enriched as imported fish.



Maxwell's poster presentation titled "Aquaponic System Impacts on Lettuce Yield and Quality."



Shib Pattadar discusses his research with a fellow attendee of the World Aquaculture Society America Conference 2020 held in Honolulu, Hawaii.

PATTADAR from Page 10

The title of his oral presentation was “Is Fish Quality Healthier in Aquaponics?” and was delivered as part of the Aquaculture Engineering Society session of the conference. The overarching goal of the research was to determine whether the quality of tilapia fish produced in our aquaponics operations are as healthy and nutritionally enriched as imported, conventionally raised fish available in the U.S. markets in terms of amino acids profiling, fatty acids composition, and mineral nutrition to support public health. He had an ample opportunity to meet with world-renowned aquaculture scientists and network with them as part of his professional development.

He received his undergraduate degree in fisheries and aquaculture from Bangladesh Agricultural University, Bangladesh and his MS degree in nematology from Ghent University in Belgium.

Before joining The Ohio State University as a graduate student, he was employed as a faculty member in the Department of Aquaculture at Patuakhali Science and Technology University in Bangladesh.

Currently, he is pursuing his PhD dissertation under the supervision of Drs. Brian Slater (SENR) and Rafiq Islam (OSU South Centers).

BROAD THINKING

Why the cooperative model could be a key to closing the broadband gap

By Hannah Scott

Center for Cooperatives

The impacts of the COVID-19 public health emergency are vast and varied. While we recognize and thank the many people who continue to do the essential jobs of feeding, moving, and caring for America in person, many Americans are now working, learning, and connecting online. Everyday tasks like work meetings, classes, grocery shopping, religious services, doctor appointments, hangouts with friends, and more, have moved online. But what happens when you don't have reliable internet access at home? Millions of rural Americans faced this question long before the current

public health crisis and in our current context, the broadband divide between urban and rural America has become more pronounced than ever.

Connected Nation Ohio, an organization that studies and provides resources for rural broadband connection, estimates that approximately 710,000 Ohioans do not have internet access at home. That does not include people who have internet access that is unreliable or prohibitively slow. The Federal Communications Commission estimates that almost 30 million Americans are "unable to reap the benefits of the digital age." In 2017, the Interagency Task Force on Agriculture and Rural Prosperity

recognized the expansion of high-speed, high-capacity internet as a key infrastructure priority in rural America. Beth Ford, Chief Executive Officer of Land O' Lakes, one of the nation's largest farmer-owned cooperatives, has highlighted the far-reaching effects of the problem and called for significant infrastructure investments in broadband, reminding people that, "there is a shared destiny between urban and rural America."

Cooperatives are not new to problem-solving on behalf of rural Americans. According to the National Rural Electric Cooperative Association, in the mid-1930's as many as 90% of rural homes lacked electricity. By 1953, more than 90% of America's farms had electricity. This transformation was the result of the rapid growth of rural electric cooperatives, which currently provide electricity to 56% of the nation's landmass and over 20 million member-owners. Co-ops are owned and controlled by their users and provide services to member-owners at cost. Today, nearly 100 rural electric cooperatives are investing in infrastructure to bring high speed internet to their member-owners.

In some communities, the cooperative model is being explored anew to determine whether a community-owned enterprise can help close the broadband gap.

See COOPS Page 13



COOPS from Page 12

Groups are coming together to assess whether they can form cooperatives to invest in the infrastructure to connect their homes and businesses to broadband service providers. The enterprises would be controlled by community members through an elected board of directors.

Community members in Washington County, Ohio have begun exploring options for a community-owned broadband enterprise. David Brown, who is leading the Southeast Ohio Broadband Cooperative Exploratory group along with additional volunteers from the community, explains, "Most areas have no broadband access at all and rely on slow, expensive and unreliable technologies like cellular hotspots and satellite internet."

After conversations with elected leaders, local economic developers, and others, the group surveyed the community about their current broadband access and interest in joining a broadband co-op. They started engaging with community members via a Facebook group where they share updates and information. The group has over 1,000 members after just three weeks. While they have a lot of work ahead to develop their co-op, David Brown shares that the group's vision is to, "bring affordable, reliable broadband access to rural areas in SE Ohio that will create economic opportunities, connect communities and encourage members to be a part of the solution to a problem that has long plagued the area."

When exploring a cooperative model in any industry, it is vital to explore the feasibility of an enterprise and to develop robust business plans. At the same time, organizers should educate their potential members on the co-op model and help them understand their role in a newly formed business. The College of Food, Agricultural, and Environmental Sciences Center for Cooperatives at Ohio State has been assisting new and emerging cooperatives since 2001, helping groups understand the co-op model, explore the feasibility of a new co-op, develop the business plans and structure for a new enterprise, and more.

If you would like to learn more about broadband cooperatives or to explore an opportunity for community-owned enterprises in your community, contact the CFAES Center for Cooperatives.

Contact the CFAES Center for Cooperatives for more information

740-289-2071 ext 111 bauman.67@osu.edu

Check the CFAES Center for Cooperatives website and social media for updates!

 go.osu.edu/cooperatives  [@OSUCooperatives](https://twitter.com/OSUCooperatives)

Endeavor Center manager offers update, telework tips

By Ryan Mapes

Endeavor Center Manager

Hope this note finds everyone safe and healthy. While the Endeavor Center remains closed to the public, it is open on a very limited basis to our tenants. Tenants continue to have access to their offices but most, if not all, are choosing to telework. All meeting room rentals have been canceled through at least April 30 with the high probability of an extended cancellation period. Our goal is to provide at least a two-week notice of cancellation to those who have reserved space in the Endeavor Center. We will continue to evaluate the situation and schedule as we receive additional guidance from University leadership. As always, we are here to help and look forward to business returning to normal. Do not hesitate to contact the South Centers if you have any questions regarding facility usage.

Below are some teleworking tips for employers and employees:

Employers

- Have infrastructure in place. Make sure that employees have access to things such as internet, computers, phones, printers, and instant messaging platforms.
- Establish company policies for working from home. Communication is key. Frequently check in with employees to ensure that progress toward goals is made.
- Be flexible. Often things arise at home that are not present in the workplace. Be considerate and understanding of employee needs as they arise.
- Support wellness. Encourage employees to take breaks for exercise, to go outside or simply relax for a few minutes to regain focus.

Employees

- Maintain regular work hours and a normal schedule
- Schedule breaks and lunch away from your work periodically throughout the day.
- Establish a workspace that is comfortable and set ground rules for others who are home.
- Stay in touch with your co-workers. Set up a Zoom meeting, make phone calls or text each other throughout the day. Stay in contact as much as possible.
- Frequently communicate with company leadership. This is new to them as well and we are all in this together.

SBDC continues to support clients and their businesses amid COVID-19

By Brad Bapst

SBDC Director

The Small Business Development Center (SBDC) at The Ohio State University South Centers is continuing to serve the needs of businesses in our region. The safety and well-being of our clients, training attendees, and staff are of utmost importance to us. We are continuing to monitor the evolving coronavirus (COVID-19) pandemic, and with the information and guidance provided by the university, state, and federal government officials, we are taking all necessary precautions to reduce the spread of the virus. As a result, we are cancelling all in-person events and will be conducting one-on-one advising remotely until further notice.

We know that the COVID-19 pandemic will present obstacles and challenges to you and your business in the days and weeks ahead, and we want you to know that we remain operational to ensure you receive the business management and technical assistance you have come to expect from us. We have been continuing to work with clients remotely through telecommuting practices. We utilize telephone, e-mail, social media, and most recently video conferencing through the Zoom communications platform.



Zoom meetings have enabled our SBDC team to share current updates concerning the CARES Act SBA loan programs to southern Ohio businesses. Our team is currently participating in several weekly Zoom meetings with various chambers of commerce in our service area. We provide the latest information on the SBA programs and resources to help companies survive this challenging economic situation. We also continue to update businesses with the latest information through our Facebook page.

Our team of certified business advisors are here to support you and your business. Your health, well-being, and business success are our top priorities. Moving forward, the SBDC is preparing to provide additional resources in the coming months in an effort to assist businesses in the recovery process from the pandemic-induced economic disaster.

To reach us please call 740-289-2071 or visit us online at southcenters.osu.edu/business.

New OSHA obligations for a post-COVID 19 world

As employers begin looking beyond the immediate effects of the COVID-19 pandemic and start thinking of bringing people back to work, they will be wise to realize the new virus means permanent changes related to their obligation to provide a safe workplace. It is a new day in terms of keeping workers safe.

While the Occupational Safety and Health Act does not reference the coronavirus or COVID-19 and no specific regulation addresses it, the Act's General Duty Clause requires employers to provide a workplace free of recognized

hazards. In March, the virus was formally identified as a recognized hazard in the workplace, meaning employers are obligated to take steps to prevent employees from transmitting the disease at work.

OSHA has been issuing various documents in recent weeks, including an enforcement plan released April 13 intended as guidance for its area directors as they prioritize complaints about workplace exposures.

See OSHA Page 15

Ohio Manufacturing Alliance to Fight COVID-19 pandemic

In response to the challenges caused by the COVID-19 pandemic, The Ohio Manufacturers' Association (OMA), Ohio Hospital Association (OHA), Ohio Manufacturing Extension Program (Ohio MEP), nursing homes, and JobsOhio have joined forces through the Ohio Manufacturing Alliance to Fight COVID-19.

This collaborative effort is currently engaged with Ohio manufacturers to see which companies have interest in repurposing their manufacturing operations to produce some of the most in-demand products in the fight against COVID-19, especially PPE (personal protective equipment).

The full Alliance website can be found at repurposingproject.com.

More information on PPE and additional frequently asked questions can be found at manufacturingsuccess.org/ppe-faq.

OMA Launches Exchange to Help Facilitate Access to PPE

Online marketplace offers PPE and related equipment for health care workers, first responders, and essential businesses

The Ohio Manufacturing Alliance to Fight COVID-19 has launched the Ohio Emergency PPE Makers' Exchange, an online marketplace where organizations that need personal protective equipment (PPE) and related equipment can find a wide selection offered by Ohio manufacturers.

"Nearly 2,000 Ohio manufacturers have answered the call to fight COVID-19 by repurposing and retooling to make PPE and other urgently needed equipment," said Eric Burkland, president of The Ohio Manufacturers' Association. "The online exchange will enable the Alliance to speed up the process of connecting sellers and buyers with equipment to help protect our protectors and keep Ohioans safe."

The Exchange is not an e-commerce site and the Ohio Manufacturing Alliance will not be involved in transactions between buyers and sellers. The platform is more like Craigslist than eBay. In this way, the Exchange enables PPE makers to list

items they are ready to sell or give away. Those looking for local PPE can search listings and connect with makers to procure items for their organizations. Manufacturers that want to list products on the Exchange must first complete a short survey.

The Alliance was announced by Governor Mike DeWine on April 1. The public-private partnership was formed to help meet the urgent need for more PPE used by health care workers and first responders. The Alliance is led by The Ohio Manufacturers' Association, the Ohio Manufacturing Extension Partnership (and its partner organization MAGNET), the Ohio Hospital Association, and JobsOhio, in partnership with the Ohio Development Services Agency, the Ohio Department of Administrative Services, and the Ohio Department of Health.

A list of practical items manufacturers need to be thinking about and do today to prepare for COVID-19 can be viewed at manufacturingsuccess.org/covid-19.

OSHA from Page 14

The guidance also lets employers know what they can expect in terms of agency inspections and enforcement.

Employers need to evaluate the nature of the coronavirus hazard in their workplaces, and they need to understand that it is pervasive.

Decisions on what steps to take will have to be made case by case and what makes the most sense for your business, but examples of steps to

incorporate in a plan may include screening employees for fever, putting out questionnaires, testing employees for the virus on a regular basis, preventing anyone testing positive from entering the workplace, sending infected workers home, doing contact tracing within the workplace, and educating employees. Businesses may also need to institute engineering controls, protective coverings, enforcing six-foot distance rules and requiring face masks. Businesses and employers will have to have plans for different kinds of employees based on

potential exposure risk.

Putting an effective plan in place can help employers stay in operation by not losing employees to sickness or quarantine and can keep workers' compensation insurance rates down.

In addition to OSHA'S April 13 enforcement plan, the agency released a policy on April 16 outlining discretion in enforcement of agency standards when employers act in good faith during the COVID-19 crisis available at osha.gov/Publications/OSHA3990.pdf.

The Ohio State University South Centers
1864 Shyville Road
Piketon, OH 45661
Phone: 740-289-2071
Toll Free: 800-297-2072
Fax: 740-289-4591
southcenters.osu.edu



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES

CFAES provides research and related educational programs to clientele on a nondiscriminatory basis. For more information, visit cfaesdiversity.osu.edu. For an accessible format of this publication, visit cfaes.osu.edu/accessibility.

