

Inside This Issue

Addressing Family Issues
through Education.....1

Providing Business
Development Education for
Ohio's Entrepreneurs.....2

Inspiring Mindful Eating and
Exercise in West Dayton.....2

Educating Ohio's Farmers.....3

2018 Minority, Women, and
Small Farmer's Conference –
Wilberforce, Ohio.....3

Engaging Youth in Science and
Agriculture – 4-H Enrichment
Programs.....4

Updates and Upcoming
Programs.....5

There are some exciting things happening with Central State University Extension (CSUE). The name of the College of Science and Engineering was changed to the College of Engineering, Science, Technology, and Agriculture (CESTA). This new name will broaden our opportunities to pursue the Land-Grant mission at Central State University (CSU). In addition, we continue to make remarkable strides as we push agriculture, family and nutrition education, 4-H Youth Development, and economic development education programs across the state of Ohio. Not only that, we continue to push our community-based holistic Extension programming approach to improve the overall conditions facing families in Ohio's communities and to address agricultural issues in rural and urban locations. Finally, we are forging new partnerships for impactful programming, including the Xenia REACH Center and the City of Trotwood community-based programming. We also continue to strengthen our existing relationships with Ohio State University Extension and our partners statewide.

As we enter into spring, we are gearing up our extension and education efforts to reach people across Ohio this summer with youth camps, education programs, Ag tours, conferences, and workshops. For a detailed listing of upcoming programs, see *Updates and Upcoming Programs*.

This issue highlights some of the things we are accomplishing across the state. For more information on CSUE and our upcoming programs, visit our website at www.CentralState.edu/csueextension.

Addressing Family Concerns through Education

Diabetes Prevention and Management Programs

Family and Consumer Sciences staff kicked off their diabetes programming in Franklin County with the *Understanding Diabetes Prevention and Management* program. This program provided a general overview of diabetes and lifestyle risk factors that make individuals more susceptible to developing diabetes and an understanding of the symptoms and complications if left undiagnosed or untreated. Participants learned strategies to manage pre-diabetes and diabetes by making simple lifestyle changes. Diabetes is a far reaching chronic disease and according to the Centers for Disease Control and Prevention (CDC), 1 out of 3 American adults have elevated blood sugar levels – a serious condition associated with an increased risk of developing type 2 diabetes, heart disease, and stroke.

Extension is now scheduling a workshop series *Diabetes Empowerment Education Program* (DEEP). This in-depth program addresses diabetes prevention, management, complications simple lifestyle changes, and food preparation and recipe tasting.



Empowering Women with Back to Me

CSUE and the YWCA of Northwest Ohio began an enrichment program for the ladies and children who utilize the YWCA's services. *Back 2 Me*, a program which encourages growth and confidence for women through an inclusive group structure, kicked off with a "girls night out" theme. The ladies enjoyed dinner and conversation as they shared thoughts on self-love, careers, family, dreams, and more of life's hot topics. They participated in fun activities that gauged their attitude towards life and who they are as women. The group's follow up meeting focused on parent/child relationships. Taking the concept from *The Family Dinner Project*, the women prepared a healthy chicken salad dinner, while talking of their experiences of being a parent. Afterwards, a family-style dinner was shared with their children.



Providing Business Development Education for Ohio's Entrepreneurs

In response to a community needs assessment, CSU Extension is working hard to develop and administer additional business development education programs to individuals across the state of Ohio.

Improving Access to Capital for Women, Ages 50+

CSUE was asked to serve on the Economic Community Development Institute's SBA Women's Business Center and the Cleveland Encore Entrepreneur Initiative (EEL) Access to Capital panel (Cuyahoga County). The Cleveland EEL program is a cohort of 10 - 15 female entrepreneurs aged 50+ who are looking to blaze a new trail by starting or expanding a small business. The program includes business development training and allows participants to complete a business plan. Different types of crowdfunding were explained to the women entrepreneurs in attendance. The primary forms of crowdfunding are donation-based, reward-based, and investment or securities-based crowdfunding. Many entrepreneurs are familiar with popular crowdfunding portals such as Kickstarter.com, Indiegogo.com, and GoFundMe.com. On these platforms, the primary activity is donation-based and reward-based crowdfunding. For business owners, there are other options. Regulation Crowdfunding enables eligible companies to offer and sell securities through crowdfunding.



Discussion of crowdfunding as part of access to capital puts it into perspective as an option that may be available to the entrepreneur. CSUE's *Crowdfunding for Entrepreneurs* program covers the subject in greater detail and allows the entrepreneur to evaluate and consider crowdfunding as a source of capital for their business.

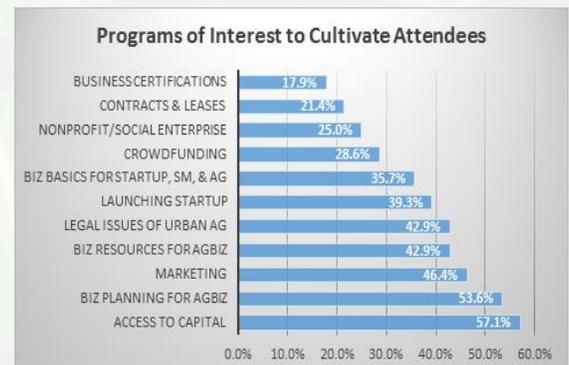
Cultivating Agribusiness

Cultivate: Agri-Business Startup & Growth Education is a series of workshops that are designed to assist small agribusiness entrepreneurs who are ready to implement their business ideas or to expand an existing agribusiness into a more viable and profitable enterprise. The workshops introduce urban agricultural producers and agribusiness entrepreneurs to an overview of the business planning process, including the importance of business planning and entity formation, as well as provide a number of business resources that are often underutilized by agribusinesses. These are critical components of new business development that often get overlooked.

The first Cultivate workshops were held in Cuyahoga County where CSUE works with a number of community partners to introduce attendees to various public and private business development resources that are available to agribusinesses. Some of these resources include the Ohio Small Business Development Center, Natural Resources Conservation Service, Economic Community Development Institute, Ohio State University Extension, and Central State University Extension.

Both the attendees and the community partners benefitted from participating in the program. Participants gained knowledge and access to resources that they previously did not know. Likewise, the resource partners were able to expand their pool of potential clientele. As a result, Cultivate was successful in creating a bridge between the urban agricultural producers and some of the available business resources that were previously unknown to them. Evaluations completed by the Cultivate participants revealed that access to capital, followed by business planning and marketing, are the most common concerns they would like to see addressed through future programs.

Since the program's inception, variations of the Cultivate program have been given in Cuyahoga, Franklin, and Greene Counties.



Inspiring Mindful Eating and Exercise in West Dayton



The Expanded Food and Nutrition Education Program (EFNEP) is a nutrition education program addressing nutrition and physical activity behaviors of low-income families. Through a community-based, relationship-driven, hands-on educational approach, EFNEP has directly impacted economic, obesity, and food insecurity challenges that hinder the health and wellbeing of this nation.

CSU Extension brings EFNEP nutrition and cooking classes to community centers, schools, residential centers, and churches with the goal of inspiring parents and adults to engage in mindful eating and to increase physical activity. Parents are learning the benefits of regular meal planning skills, how to save more money on groceries and how to prepare simple yet healthy meals for their families. One participant, a 38 year old father of two, reported after four classes, he had more confidence that he could help his wife in the kitchen and not put all of the responsibility of their meals on her. Another participant, a 56 year old grandmother, shared that she struggled with regularly consuming soft drinks throughout her day. After learning about the amount of sugar in a 12oz can of soda, however, she reported she can now see that she is consuming too much sugar each day and needs to take steps to reduce her soda intake.

Educating Ohio's Farmers

Extending Your Growing Season

A collaborative program offered by CSU Extension and the USDA Natural Resource Conservation Service (NRCS), *Extending Your Growing Season*, educates participants on a variety of ways and methods by which to shelter your crops from cold temperatures and harsh elements. These modifications allow for improved crop diversity and a longer, larger harvest. The *Extending* program has been held in Hamilton, Butler, and Greene Counties, and has provided education to hundreds of individuals from Ohio and Northern Kentucky.



84th Annual Ohio Farmers Union Convention

The 84th Annual Ohio Farmers Union (OFU) Convention was held on January 26th and 27th in Columbus, Ohio. This informative and dynamic event included a variety of Ohio-Ag workshops and presentations by experts in both industry and government. Representatives from CSUE, in collaboration with Rid-All Green Partnership, gave a presentation entitled *Cultivate: Legal Considerations of an Agribusiness Startup* to conference attendees. This presentation provided skills and knowledge on topics to address issues and questions that beginning farmers have about the business aspect of their agricultural businesses.



39th Annual Ohio Ecological Food and Farm Association Conference

In February, CSUE sponsored the Urban Agriculture Workshop Track at the 39th Annual Ohio Ecological Food and Farm Association (OEFFA) Conference – A Taste for Change. This track included a variety of presentations which provided skills and knowledge on topics to address production efficiency for small spaces, summer high tunnel production, cover crops, and dealing with uncertain land tenure. CSUE Extension employees presented on the following: *From HINI to Histoplasmosis-Preventing Zoonotic Disease Transmission from Livestock and other Animals*, *Cover Crops for Small-Scale Vegetable Production*, *Business Basics for Today's Start-up Farmer*, and "Cultivating" Your New Agribusiness: The First Five Years.

Farmer, Producer, and Landowner Workshop

In March, in partnership with Butler Soil and Water Conservation District, USDA NRCS, and USDA Farm Service Agency, CSUE participated in the Farmer, Producer, and Landowner Workshop at Butler Soil and Water Conservation District. CSUE Extension employees discussed Noxious Weed Management and Palmer Amaranth and also provided participants updates on CSUE programs offered throughout the county and state.

Workshop at Butler Soil and Water Conservation District. CSUE Extension employees discussed Noxious Weed Management and Palmer Amaranth and also provided participants updates on CSUE programs offered throughout the county and state.

2018 Minority, Women, and Small Farmer's Conference – Wilberforce, Ohio

In early April, Central State University Extension hosted the Minority, Women, and Small Farmer's (MWSF) Conference on the Central State University main campus. The two-day agricultural conference, in its second offering, provided insight on traditional agriculture challenges, urban agriculture opportunities, and barriers facing small and new farmers, women, veterans, socially disadvantaged groups, and communities. This year's conference theme was *Sustainable Agriculture for a Sustainable Community*, and featured over 20 technical presentations and panel discussions. This informative event also provided opportunities for nearly 200 individuals to network and discuss ways to improve their current farming practices.

The conference featured an informative session by USDA Rural Development as well as a panel discussion with state leaders representing the following USDA groups: Farm Service Agency, Forest Service, Natural Resources Conservation Service, and Rural Development. Conference attendees also had the opportunity to interact with vendors inclusive of government agencies, businesses, industry professionals, companies, for-profit, and non-profit organizations. Other conference presentations included topics relating to Agriculture Finance, Farm Management, Sustainable Agriculture, Urban Agriculture, and Research and Extension.

CSUE staff gave a variety of presentations throughout the conference on topics related to community gardening and urban farming, extending the growing season, soil monitoring and soil health, and agribusiness.

This was the first conference hosted by Central State Extension staff, and surveys indicate the conference was well received by all participants. One participant stated:

I would like to express my gratitude for the invitation I received to participate ... and congratulate you for the high level of organization and the professionalism which made it possible to gather so many different experts, great speakers, the right mix of subjects, people and time. Your conference was very informative and has been a great success in all possible respects. You and your staff did an excellent job.

Extension staff have already started planning next year's MWSF Conference which will take place on Friday and Saturday, April 12-13, 2019.



Engaging Youth in Science and Agriculture – 4-H STEAM Enrichment Programs

Connecting Urban Youth to Agriculture

Urban Gardening – Tower Garden Pilot Program

For many urban school students, agriculture is a foreign concept. At Central State University, however, Extension staff are determined to change that. A new 4-H School Enrichment pilot program, *Urban Gardening*, challenges students to think about different ways of growing food and how we will feed nine billion people in 2050.

Students participate in more than six hours of academic instruction related to urban agriculture, and then erect a soilless tower garden which operates hydroponically/aeroponically – meaning roots receive nutrients via water or air respectively. Each participating school is given the opportunity to customize the lesson. Some classrooms have chosen to complete comparative growth studies, while other classrooms are using the tower garden to learn and apply principles of entrepreneurship by growing and then selling their produce. The program’s culminating event includes eating salad with lettuce the students have grown as part of their school project. So far, the Tower Garden pilot program has been taken to over 100 students in Franklin, Greene, Hamilton, and Montgomery Counties.



Collaborative CSU Extension / Rid-All Green Partnership In-School Program

CSUE and Rid-All Green Partnership are working to bring urban agriculture and sustainability in-school programming to Ohio youth. The collaborative program launched at Richard Allen Academy III (Hamilton County), where nearly 60 students, ranging from 3rd through 6th grades, learned a variety of principles related to urban agriculture and sustainability. The hands-on workshop included topics on the importance of worms and vermicomposting, plant anatomy, and how to plant seeds. Students also had the opportunity to start their own

mini-compost bins. Rid-All Green Partnership will visit schools in Hamilton, Butler, Franklin, and Montgomery Counties over the next several months, and will provide programs focusing on aquaculture, agribusiness, and 4-H Youth Development.



Discovering STEM with Hands-on Activities

“Kitchen Chemistry” with West Dayton Strong

CSUE Extension conducted an Intro to 4-H/Kitchen Chemistry program with the West Dayton Strong program in Montgomery County. The afterschool program lasted eight weeks, and the program served the youth of DeSota Bass Courts in Dayton, OH. The participants learned about chemical changes and varying densities by conducting fun science experiments. The kids loved that they could recreate the experiments because the materials used were common in most homes. Experiments included: *Shiny Penny*, *Mysterious Mud*, *Science of Slime*, and others. Parents were warned of the potential messes, but most parents were just as intrigued as the kids.



The Science of Bubbles

Blowing bubbles is a favorite pastime for many. Even as adults we have a hard time resisting blowing bubbles when the opportunity presents itself. In Franklin County, students are learning that there is more to bubbles than just “fun” – there is actually a lot of science! It is impossible to blow bubbles in pure water because of its physical properties; but when soap is added, this “special force” is broken up, thus allowing bubbles to form. Students had the opportunity to blow bubbles under various controlled conditions and to make observations on how manipulating these different variables directly impacted bubble formation. Observations included changes in size, shape, or the amount of time the bubble retained its shape (rate of evaporation).

Junk Drawer Robotics

Students at Midnimo Cross Cultural Middle School (Franklin County) have been engaged with 4-H Junk Drawer Robotics, building marshmallow catapults and trebuchets, and more recently, NXT Mindstorm Robots. Since December 2017, approximately 113 students in the 6th, 7th and 8th grade have been teamed with other classmates to plan, design, build, test and improve their robots. Unfamiliar with robotic design, the students have demonstrated much interest and enthusiasm.

Problem-solving has been an integral part of improving their robots to function by entering computer-programmed data. Teachers have been very appreciative of CSUE support, using 4-H curriculum, and the direct involvement of CSUE staff. The teachers also look forward to continuing to develop relationships with CSUE and utilizing 4-H curriculum to enhance the school curriculum, propelling these students into STEM opportunities.



Updates and Upcoming Programs

Extension Work in Progress

We have the following new projects and partnerships in development to better serve Ohioans and to fulfill the CSUE mission:

- Trotwood Community-Based Programming
- East Cleveland Community-Based Programming and Agreement
- Xenia Community-Based Programming and Agreement
- Aquaculture/Aquaponics Production Site being developed

Upcoming Programs

We are continuing to program across our four impact areas throughout the state of Ohio. Look for these upcoming programs near you!

Agriculture and Natural Resources

- CSUE/Rid-All Aquaponics Workshops (Butler, Franklin, Hamilton, Lucas, and Montgomery)
- Aquaponics Education Workshops (Montgomery)
- Extending Your Growing Season (Cuyahoga, Franklin)
- CSUE/FoodBank Urban Gardening Series (Montgomery)
- CSUE/OEFFA Farm Tours (Statewide)
- County Fairs (Butler, Cuyahoga, Franklin, Greene, Hamilton, Lucas, and Montgomery)
- State Fair (Franklin)

4-H Youth Development

- CSUE/Rid-All 4-H Youth Development Workshops (Butler, Franklin, Lucas, and Montgomery)
- 4-H School In-School & Afterschool Enrichment Programs (Franklin, Greene, Hamilton, and Montgomery)
- Seed to Bloom Ag-STEM Institute (Greene)
- Seed to Bloom Research and Extension Apprenticeship Program (Greene)
- Seed to Bloom Discovery Day Camp (Greene)



Community and Economic Development

- Ready, Set, Grow! (Cuyahoga)
- Crowdfunding for Entrepreneurs (Cuyahoga)
- CSUE/Rid-All Agribusiness Workshops (Butler, Franklin, Hamilton, Lucas, and Montgomery)
- Inside the Courtroom – Questions & Answers (Montgomery)
- Sealing of Criminal Records Clinic (Greene)

Family and Consumer Sciences

- Men Take a Stand For Your Health – Men's Health Fair (Montgomery)
- Understanding Diabetes Prevention and Management (Franklin)
- Diabetes Empowerment Education Program (Butler, Franklin, Hamilton, and Lucas)
- The Art of Food Preservation Series (Hamilton)
- Budgeting 101: Keeping it Real (Franklin)
- EFNEP: Eating Smart, Being Active (Montgomery)
- EFNEP: Eat for the Health of It (Montgomery)

For more information about the programs being offered, visit our website: www.CentralState.edu/csuextension

Interested in CSUE conducting a program with your organization? Reach out to us to inquire!

Central State University Extension Leadership

Dr. Alton Johnson

Dean and Director of Land-Grant
ajohnson@CentralState.edu

Community and Economic Development Program Leader
abarwick@CentralState.edu

Anthony Barwick

Dr. Clarence Bunch

Associate Director of Extension
cbunch@CentralState.edu

Dr. Prosper Doamekpor

4-H Youth Development Program Leader
pdoamekpor@CentralState.edu

Tara Marlow

Program Manager
tmarlow@CentralState.edu

Dr. Oliver Freeman

Agriculture and Natural Resources Program Leader
ofreeman@CentralState.edu

Michelle Smith

Program Development Coordinator
msmith2@CentralState.edu

Dr. Mary Kershaw

Family and Consumer Sciences Program Leader
EFNEP Coordinator
mkershaw@CentralState.edu



Central State University is an Equal Opportunity institution.