Ohio State University Extension
Agriculture and Natural Resources
Program Review

Final Report from the External Review Committee

November 2020
Preface

Purpose
The purpose of a program review is to guide program development on a continual basis. A program review is a process that evaluates the status, effectiveness, and progress of programs and helps identify future direction and priorities. Program reviews are a standard practice in youth development programs (Roth & Brooks-Gunn, 2016) and higher education (Halonen & Dunn, 2017). The Ohio State University Extension Agriculture and Natural Resources (ANR) program review is a voluntary practice for self-study and external review.

External Review Committee Process
An external review committee, comprised of four leaders from statewide Extension agriculture and natural resources programs, accepted the invitation to participate in the review process. They convened via webinar, due to the COVID-19 pandemic, in September 2020 after reviewing documents on the state of agriculture and natural resources in Ohio, an internal self-study, and crowdsourcing insights. They met with more than 75 people in eight different groups to further inform them about the Ohio State University Extension Agriculture and Natural Resources program.

The Review Included Five Elements
- The State of Agriculture and Natural Resources in Ohio (link)
- Ohio State University Extension Agriculture and Natural Resources Internal Self-Study (link)
- Ohio State University Extension Crowdsourcing Insight Summary: Agriculture and Natural Resources (link)
- External committee visits and final report
- Key stakeholder communication throughout the process

Context
Ohio State University Extension embarked upon a multi-year effort to build the Extension organization of the future. That journey began with the Vice President’s Conversation on the Future of Extension. The overall goal of that effort was to ensure that OSU Extension remains relevant and responsive to the needs of Ohioans well into the future.

Data gathered through the Vice President’s Conversation was used as a foundation for a designEXT effort to put ideas into action. One of the designEXT steps includes partnering with individuals and communities to co-create multi-faceted solutions for current and emerging issues.

The OSU Extension Agriculture and Natural Resources Program Review is part of a series of OSU Extension program reviews.

Our land-grant mission –
OSU Extension delivers knowledge from Ohio State to every county in Ohio, and we work WITH people right where they live to strengthen their own lives and communities.
(excerpt from OSU Extension Interim Director update, Jackie Kirby Wilkins – August 2019)

Contact
This Ohio State University Extension Program Review was conducted on behalf of Dr. Jackie Wilkins, director of OSU Extension and associate dean, College of Food, Agricultural, and Environmental Sciences. The review was led by Dr. Greg Davis, with support from Terri Fisher.

https://extension.osu.edu/strategic-initiatives/
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External Reviewers
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Darren Jarboe, Assistant Director and Program Leader, Agriculture and Food Systems Program, University of Maryland Extension
Saqib Mukhtar, Associate Dean and Program Leader, Agriculture and Natural Resources, IFAS Extension, University of Florida

For the purpose of this report, the Ohio State University Extension Agriculture and Natural Resources program may be referred to as simply as ANR.
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  b. Evaluate flexible work hours and remote arrangements for efficiency and effectiveness
  c. Consider accessibility of information and programs at the forefront of every program
I. Executive Summary

Introduction

To help guide Ohio State University Extension as a learning organization, the external review committee for the 2020 OSU Extension Agriculture and Natural Resources program review reported its observations and recommendations for program development on a continual basis. The observations are based on visiting with more than 75 people from eight different groups, as well reviewing three documents and related resources.

This document provides an assessment of the Ohio State University Extension Agriculture and Natural Resources (ANR) program by a team of external reviewers. The review team members are Extension ANR program leaders from Purdue University, University of Florida, University of Maine, and University of Maryland, College Park. The leadership of OSU Extension ANR is to be commended for conducting a review of its statewide programs. Opening the organization to the scrutiny of outsiders takes courage and demonstrates a strong desire to improve. The support of the College of Food, Agricultural, and Environmental Sciences (CFAES) and Extension administration was key to this information gathering and evaluation process.

The review team read, saw, and heard about the numerous aspects of the OSU Extension ANR program; many of these are regional or national models, while other areas offer opportunities. The documents provided to the team gave an excellent overview of the OSU Extension ANR program, OSU Extension, and Extension’s place in the CFAES, enabling the review team to ask probing questions during the interviews with faculty, staff, partners, and stakeholders. The dedication of faculty and staff to Extension’s mission to serve Ohioans was evident from their knowledge of Extension, its people, and stakeholders, as well as the OSU Extension way of conducting affairs. They recognized opportunities for the OSU Extension ANR program to develop deeper relationships with the Ohioans it currently serves and the exploration of developing relationships with new audiences across the state. Collaborators and external stakeholders consider the ANR program by OSU Extension a valuable resource with potential for even greater influence over the success of Extension’s respective members and organizations.

The review team appreciated and enjoyed participating in this learning opportunity. In this report, they are offering insights from their preliminary document review and virtual interactions with several groups on August 11–12, 2020. Herein the strengths of the OSU Extension ANR program are highlighted and recommendations to build on those strengths are discussed.

Strengths

Ohio State is a leading institution for research, education, and Extension that has excellent name recognition and a solid reputation with Ohioans and beyond. OSU Extension’s ANR program has many strengths, starting with its people. The faculty and staff are talented, dedicated, and productive. A common theme heard repeatedly from ANR Extension field staff is that they love their jobs. Most of them could earn higher salaries elsewhere, but have chosen to remain with OSU Extension ANR because of their sincere commitment to helping people. Their outreach programming depth and breadth across agriculture, aquaculture, forestry, gardening, urban work, and other areas are outstanding. Their ability to continue to deliver important educational programs during the COVID-19 crisis is a testimony to their commitment and resourcefulness.
There are CFAES departments with excellent connections to Extension field faculty and staff, forming effective applied research and outreach teams. Some ANR educators have courtesy appointments in academic departments; these strengthen relationships between on-campus and off-campus faculty and staff. Examples of significant ANR programs are the Farm Science Review, Income Tax School, Agricultural and Resource Law program (now known as Farm Office), Integrated Pest Management, Pesticide Safety, and Agricultural Safety and Health. Newer offerings in meteorology and risk management have demonstrated growth potential. Ornamental horticulture, forestry, agronomy, and pesticide applicator training programs have been consistently well-received.

The OSU Extension ANR program has strong industry partnerships that provide models to build new relationships that improve agribusiness and environmental services. Statewide communications are available via the Crop Observation and Recommendation Newsletter (C.O.R.N.), Buckeye Yard and Garden Line (BYGL), and Ohio Beef CattleLetter. The program uses active advisory teams locally, regionally, and statewide as well as highly dedicated programmatic volunteers to connect with and engage Ohioans.

**Conclusion**

The OSU Extension ANR program is well-respected within the state and nationally; however, all successful organizations adapt as conditions change and strive to continuously improve to meet the needs of their clientele.

The ANR program offerings from OSU Extension are expansive; however, refinement and adaptation can often improve the effectiveness of a program. Each program has its own history, traditions, strengths, and weaknesses; nevertheless, these programs come together to positively affect individuals, families, farms, businesses, industries, and the environment.

Implementing change can be time-consuming and difficult. It is acknowledged that current and past faculty and staff have laid a solid foundation from which to strengthen programs.

For more about Agriculture and Natural Resources, visit [https://agnr.osu.edu/](https://agnr.osu.edu/).
II. Observations and Recommendations

The external review committee recognized the value of a strategic approach to change that accounts for the links between themes, the complexity of the Agriculture and Natural Resources program rooted in the land-grant university, and the dynamic reality of changes within OSU Extension at the time of the review.

A. Communications

Background and Observations
Regular communication of timely and concise messaging to faculty and staff is important. There is room for the ANR program leadership team to continue improving its communication with faculty and staff. Some of this communication and collaboration is now happening organically due to COVID-19. Lengthy emails should be avoided at any time, but especially at the end of the work week.

Recommendations
Extension should consider publishing a monthly or bi-monthly ANR or Extension electronic newsletter that includes information on Extension program highlights by individuals and teams. Information on newly hired and retiring or departing faculty as well as other content pertinent to the ANR program or overall Extension program could be included. An internal newsletter to all faculty and staff can be very helpful in keeping everyone informed about organizational updates, including upcoming major events. Example of an internal newsletter (https://extadmin.ifas.ufl.edu/media/extadminifasufledu/comings-amp-goings/pdfs/extcng09012020.pdf).

The ANR program leadership should create opportunities to improve communications and collaborations between county educators and state specialists. Meaningful work groups (program implementation teams) of county educators and state specialists should be developed that address major ANR issues and priorities of the state through mutual collaborations. These collaborations will result in effective needs assessments; specific, measurable, achievable, relevant, and time-bound (SMART) program objectives; and meaningful documentation of outcomes and impacts through individual and team educational efforts.

Create an all-Extension directory that includes each member’s area of expertise, location, and affiliation. This directory should be available electronically and reviewed periodically by department chairs and area leaders, and updated as necessary. Example of an Extension-wide faculty directory (https://directory.ifas.ufl.edu/).

B. Extension Volunteers

Background and Observations
Volunteers are integral in the outreach, success, and effectiveness of Extension. The review team learned about OSU Extension ANR volunteer programs such as Master Gardener Volunteers (2,901 volunteers) and Ohio Certified Volunteer Naturalists (1,000 volunteers). Perhaps other Extension volunteer efforts of ANR also exist.
**Recommendations**

We recommend that the programs involving the existing volunteer efforts be enhanced. We also recommend that new volunteer programs for other Extension efforts be considered. We realize volunteers need to be recruited, trained, and managed for effectiveness and satisfaction. We also realize that volunteers get involved in Extension programs for different reasons. The bottom line is volunteers enjoy what they are doing and appreciate the knowledge and skills they gain through training and volunteering. Although Extension volunteers represent different age groups, most of these volunteers are over 60 years of age. We also recommend that OSU Extension consider recruiting retirees with specific skill sets for specific efforts. One possible example is involving retired electricians or electrical engineers to help with energy management efforts on Ohio farms. It is imperative that volunteer recruiting efforts for OSU Extension ANR efforts reach diverse populations and underserved audiences.

**C. Industry Support and Partnerships**

**Background and Observations**

Although there is industry support and partnerships, there is opportunity for growth and development of relationships.

**Recommendations**

The review team recommends that OSU Extension enhance existing partnerships with agriculture, food, and biorenewables industries. We believe more partnerships ought to be cultivated. This means identifying suitable entities, meeting with specific CEOs, executive directors, and/or executive committees to discuss possible partnerships. These talks would outline the expectations for each partner, identify objectives and roles, determine outcome measurement, plan how best to communicate, and cultivate working relationships with the agriculture, aquaculture, forestry, and other industries. Because the leadership in specific industries or entities may change, it is important to keep the connections and relationships current. All sponsorships and fees from industry, companies, and foundations to support Extension should be pursued further. Since Extension is viewed as a neutral party, faculty and staff could possibly be contracted to perform specific research, analyze data, or perform reviews for commodity groups or private entities.

**D. In-Person Meetings**

**Background and Observations**

It is evident that meetings held in or near Columbus are a time drain, expensive, and limiting for off-campus personnel.

**Recommendations**

It is recommended that plans for all meetings be developed to ascertain the essential purpose(s) and need(s). Whenever possible, meetings involving agriculture and natural resources Extension personnel should be held virtually to save time, energy, and expense. Virtual meetings ought to be well-planned for effectiveness and efficiency.
E. Marketing Efforts

Background and Observations
There appear to be gaps in marketing the programming efforts of ANR faculty and staff. It is unclear whether this includes internal communication (among and between Extension faculty and staff) or the promotion of Extension efforts to audiences outside of Extension (i.e., stakeholders, clientele groups, and/or the public).

Recommendations
It is recommended that the current process be evaluated and revised to meet the needs of faculty and staff ultimately to better serve clientele.

F. Mentoring New Employees

Background and Observations
There is a lack of an ANR mentoring program.

Recommendations
An Extension mentoring program designed to provide experienced state and county faculty is needed to assist and guide the transition of new faculty into the organization. Formal mentoring training should be provided, and mentoring resources need to be available online. Topics such as mentoring roles and responsibilities, tools for work/life balance, program development, methods of teaching and learning, and helping new faculty integrate into the organizational culture could be included. Incentives for mentoring and recognition of excellent mentors with awards would promote participation. Informal mentoring of new faculty should also be encouraged. An example mentoring publication from the University of Florida Extension is available at https://edis.ifas.ufl.edu/pdffiles/WC/WC08700.pdf.

G. Onboarding and Orientation

Background and Observations
There is a lack of an ANR onboarding and orientation program.

Recommendations
A New Faculty Academy (NFA) program should be developed. New Extension state specialists, field specialists, and county educators should be required to participate in a two- to three-day faculty academy. The NFA should be held within the first six months of hiring. The academy may include information on the land-grant system, Extension methods (including needs assessment), development and delivery of Extension programs, and program evaluation methods. An overview of the structural and administrative (county and state) facets of the organization as well as distribution of information about ANR faculty with their academic department or county affiliation and expertise should be provided. The NFA should be repeated for the same set of Extension faculty within the first two years of their appointment in the ANR program to follow up on progress and address faculty concerns. The NFA also provides an opportunity for new state and county faculty to build professional relationships with each other and with NFA instructors. The ANR program leader and other administration should participate in the NFA on the first day, or when available, to discuss their vision for the ANR program, address new faculty questions and concerns, and convey ANR program expectations of the
newly hired faculty. This could also be an appropriate time for new employees to set professional goals.

H. Online Extension Education Programs

Background and Observations
Extension online learning related to agriculture and natural resources could be an important source for training and professional development for clients.

Recommendations
The ANR program should lead online Extension education efforts with fee-based and free courses available to audiences in the state and globally. An online format of continuing education and non-credit courses will provide flexible and convenient learning options that can be completed from anywhere in the world and are available anytime. New research-based courses and modules can be continually added to the catalog of offerings developed by ANR faculty. An online education program also presents revenue generation opportunities to enhance this program and build capacity to improve instructional design.

I. Professional Development and In-Service Training

Background and Observations
Professional development of faculty and evaluation of Extension programs are vital to ensure delivery of quality programs by highly trained individuals in their area of expertise, and to conduct appropriate assessment of quantitative and qualitative program outcomes and impacts.

During interactions with county educators, it was conveyed to the review team that in-service trainings (IST) for all new ANR educators should be conducted to build core competencies and skills such as fundamentals of animal agriculture, sound biosecurity practices, recordkeeping principles, farm and agribusiness management, soil fertility testing, plant disease diagnostics, integrated pest management (IPM), identification of weeds and invasive species, pesticide safety, Food Safety Modernization Act (FSMA), and other commonly asked questions by producers and the public in the county.

Recommendations
State ANR specialists and evaluation specialists should conduct regular professional development and program evaluation training for new and existing county educators.

Create a pool of professional development funds for programmatic faculty and staff. A competitive process would need to be developed to allocate these funds for participation in training beyond Ohio State.

Conducting regular ISTs for county educators will require funding dedicated for in-person and virtual training. We believe the benefits of these training programs will outweigh the investment in effective professional development and evaluation. Moreover, these training programs will create opportunities for specialists and county educators to build effective professional relationships and collaborations.
**J. Promotion and Tenure**

**Background and Observations**

In the current arrangement, several faculty members in the state academic departments have less than 0.2 FTE Extension appointments. A few department Extension leaders also have less than 0.5 FTE Extension appointments. Two intertwined issues were recognized regarding Extension appointments in academic departments. The first is that some faculty with minor Extension appointments are not effectively involved in Extension activities.

The review team was perplexed that academic faculty members with even a majority Extension appointment were not evaluated on their Extension program for promotion and tenure. Instead, they were promoted based on research and teaching excellence. As a result, it is common for a faculty member to put emphasis on research and teaching excellence and show little effort in the scholarship of Extension. Unfortunately, the existing tenure and promotion process sends a message to faculty that Extension is not valued as highly as research and teaching, but is something to do on the side as time allows.

**Recommendations**

It is our recommendation that, barring special circumstances, no Extension appointment of less than 0.2 FTE be assigned to academic faculty. Second, the expectation of faculty with an Extension appointment would be that they conduct a needs assessment of their clientele, develop a plan of work to meet those needs, execute the plan, evaluate the impact of the program, and appropriately report their yearly accomplishments. We suggest the college develop a document describing the scholarship of Extension/engagement to guide faculty with Extension appointments in the development and yearly reporting of their programs.

It is our recommendation that academic faculty with Extension appointments be evaluated for tenure and promotion based on the caliber of their Extension program, using the criteria described. Additionally, Extension specialists should include a narrative of their Extension program in their tenure and promotion packets. The narrative should clearly show how the candidate has achieved distinction in the scholarship of Extension. The implementation of this change may be gradual, because current junior faculty have likely planned their programs based on Extension activities not being considered in the tenure and promotion decision-making process.

The review team also suggests that county educators have a clearly defined promotion system that recognizes educator growth and includes increasing expectations as educators move through their career. For example, the model used for Purdue University county staff has a five-tiered system with the levels described as P1 through P5. P stands for professional. P1 and P2 are entry-level positions, with P1 requiring a BS degree and P2 requiring a MS degree. Table 1 summarizes the expectations for the different levels. As educators advance to the next P level, they have a new job description with new and greater expectations. The review committee suggests that OSU Extension consider developing a similar system for its county educators.
Table 1. Extension Career Stream Level Guidelines.

<table>
<thead>
<tr>
<th>Expertise</th>
<th>P1-P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic Coverage</td>
<td>County</td>
<td>Regional</td>
<td>State</td>
<td>Multi-state or</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>national events</td>
</tr>
<tr>
<td>Impact Statements</td>
<td>Collective impact</td>
<td>Success story/collective</td>
<td>Mid- to long-term impact statements</td>
<td>Mid- to long-term impact statements</td>
</tr>
<tr>
<td>Relationship Building</td>
<td>Local relationships</td>
<td>Regional relationships</td>
<td>State relationships</td>
<td>National Extension relationships</td>
</tr>
<tr>
<td>Leadership</td>
<td>Support area/district efforts</td>
<td>Lead area/district efforts</td>
<td>Lead statewide efforts</td>
<td>Lead focus areas</td>
</tr>
<tr>
<td>Resource Generation and Fee-Based Activities</td>
<td>Local grants for local programs and fee-based activities</td>
<td>Regional or state-level grants and fee-based programs</td>
<td>Grant opportunities with campus and fee-based activities</td>
<td>Grants and fee-based activities that support new programming</td>
</tr>
<tr>
<td>Programming</td>
<td>Deliver programs</td>
<td>Develop programs</td>
<td>Development team on state-wide programs</td>
<td>Multi-state or national deployment</td>
</tr>
<tr>
<td>Publications and Curriculum</td>
<td>Newsletters</td>
<td>Newsletters</td>
<td>Works with teams to revise or create curriculum</td>
<td>Recognized as a leader in the creation of curriculum</td>
</tr>
</tbody>
</table>

K. Publications

Background and Observations

Barriers appear to exist that prevent or impede Extension educators from authoring or co-authoring publications (publications designed for the public as well as for academia – i.e., journal articles).

Recommendations

It is recommended that the current process (drafting, reviewing, approving, formatting, etc.) for publications be evaluated and streamlined so publications can reach intended audiences quickly. Educators should be co-authors of refereed publications and Extension factsheets when and where appropriate.

We recommend that state faculty be encouraged to include county educators in the grant planning process whenever possible. As principal investigators (PIs), funds for county educators’ time and travel should be included in grants.
L. Revenue Generation

Background and Observations
We believe the need for greater revenue generation by Extension is becoming increasingly important. It is evident there is a difference between public good and public service (e.g., offering CEUs for professionals, Master Gardener Volunteer (MGV) training, pesticide credits).

Recommendations
We suggest that OSU Extension position itself for probable cuts from county, state, and federal governments. We encourage OSU Extension to provide and enhance current grant development services including small grants. We also suggest looking into charging for Extension programs as appropriate (fee-based programs). In charging fees, OSU Extension should consider scholarships for underserved audiences to maintain program accessibility. Online programs could generate income beyond the borders of Ohio.

M. Supervision

Background and Observations
County educators and a couple of area leaders emphasized that area leader positions could be aligned by expertise, so an area leader with ANR expertise would supervise ANR educators across several of the 24 administrative areas in the state. Additionally, there appears to be a gap in the training and responsibilities of supervisors.

Recommendations
The review team agrees that program leaders with ANR expertise will more effectively assess the programmatic and professional development needs of county educators. The review team believes this change will allow ANR leaders to focus on ANR program improvements that result in better mentoring of educators and improved ANR program outcomes.

The team recommends each staff member who is a supervisor receives a clearly defined written description of his or her roles and responsibilities as a supervisor. Furthermore, supervisors should be offered training programs on effective supervision that are specifically designed for their expected role. All new and existing supervisors will benefit from this training initially and then at regular intervals for continuing education.

N. Urban Agriculture

Background and Observations
During the review process, there was very little mention of urban agriculture, a subject of increasing importance. The food supply chain issues this past spring and summer provided more evidence for promoting local production of food crops, including in urban settings. Another benefit of offering programs in urban agriculture is the opportunity to reach more urban audiences, particularly those that are underserved by typical home horticulture programs such as the Master Gardener Volunteer program. There is a place for urban agriculture programming throughout the state, not just in Cincinnati, Cleveland, and Columbus. Smaller cities and even some towns offer opportunities for urban agriculture programs.
**Recommendations**

All ANR educators should be equipped and empowered to offer programs in urban agriculture if the need exists in their county. It is our recommendation that teams of campus specialists and educators work together to develop programs like the community gardening, Summer Sprout gardening, and refugee gardening programs. These new programs can be delivered in urban settings throughout the state. In-service training should be offered to aid educators in effective program delivery for urban audiences. This effort would be a perfect opportunity to collaborate with Central State University.

**O. Post-COVID-19 Recommendations**

**Background and Observations**

The faculty and staff’s performance during the pandemic has shown that flexible work hours are helpful and doable. However, there are likely weaknesses to such arrangements.

**Recommendations**

Because the health and safety of faculty, staff, and clients are key, we recommend that OSU Extension continue to use and enhance virtual options (e.g., planning meetings, programmatic educational presentations). Flexible work hours and remote work arrangements should be evaluated for efficiency and effectiveness. We strongly recommend that accessibility of information and programs for all clients (including and beyond web-based) be at the forefront of every program.
IV. Appendix

Key Elements of the Review

The State of Agriculture and Natural Resources in Ohio  Link
Report prepared by Sam Custer (ANR interim assistant director), Andy Londo (former ANR assistant director), Julie Strawser, Teresa Funk, Dianne Shoemaker, Aaron Wilson, Ben Brown.

Ohio State University Extension Agriculture and Natural Resources Internal Self-Study  Link
Report prepared by Samuel Custer (ANR interim assistant director), Andy Londo (former ANR assistant director), ANR faculty and staff.

Ohio State University Extension Crowdsourcing Insight Summary: Agriculture and Natural Resources  Link
Research and report generated by Amy Elhadi, Brian Butler, DaVonti’ Haynes, and Dr. Debby Lewis.

Key Stakeholder Communications  Link
OSU Extension Director Jackie Kirby Wilkins, professor and associate dean, College of Food, Agricultural, and Environmental Sciences, shared the project purpose, process, and updates through video webinars, statewide personnel events, advisory discussions, and administrative meetings. A project website was established to support transparency.

External Review Committee Visits and Final Report
Due to coronavirus concerns, visits were held virtually (instead of in-person) on August 11-12, 2020. Committee members represented diverse perspectives of ANR programs varying in size, scope, and geographic location.

The role of the external review committee members was to learn about the OSU Extension Agriculture and Natural Resources program by reviewing three documents (The State of Agriculture and Natural Resources in Ohio, Ohio State University Extension Agriculture and Natural Resources Internal Self-Study, and Ohio State University Extension Crowdsourcing Insight Summary: Agriculture and Natural Resources), and then visiting with external and internal stakeholders; and sharing their observations and recommendations through this final report.

External review committee members included:

- Richard Brzozowski, Food System program administrator, University of Maine Cooperative Extension
- Rick Foster, assistant director and program leader, Agriculture and Natural Resources, Purdue University Extension
- Darren Jarboe, assistant director and program leader, Agriculture and Food Systems Program, University of Maryland Extension
- Saqib Mukhtar, associate dean and program leader, Agriculture and Natural Resources, IFAS Extension, University of Florida

Interviewed groups included: state faculty and staff, county personnel (new and experienced), dean’s cabinet, external partners, team leaders, chair and interim assistant director, and internal partners/faculty.
Glossary of Acronyms
ANR – Agriculture and Natural Resources
BYGL – Buckeye Yard and Garden Line
CEU – Continuing Education Unit
CFAES – College of Food, Agricultural, and Environmental Sciences
C.O.R.N. – Crop Observation and Recommendation Newsletter
COVID-19 – Coronavirus disease caused by SARS-CoV-2
CSU – Central State University
IST – In-Service Training
IT – Information Technology
FSMA – Food Safety Modernization Act
FTE – Full-Time Equivalent
MGV – Master Gardener Volunteer
MOU – Memorandum of Understanding
NCR – North Central Region
NFA – New Faculty Academy
NRCS – Natural Resources Conservation Service
ODA – Ohio Department of Agriculture
Ohio State – The Ohio State University
SMART – Specific, Measurable, Achievable, Relevant, and Time-bound
USDA – United States Department of Agriculture