

Agronomic Crops Team CV

The Agronomic Crops (AgCrops) Team was formed in 1995 to provide an Extension program that linked all disciplines together to provide an integrated delivery mechanism designed to address corn, soybean, wheat, and forage producer needs in a timely manner. The AgCrops Team is comprised of approximately 40 core members, including county extension educators, water quality specialists, field specialists, and state specialists. Specialists cover crop management, entomology, weed science, agricultural engineering, and soil fertility for all major field crops (corn, soybean, small grains, and alfalfa). The team represents six departments within the College of Food, Agricultural, and Environmental Science (Extension, Horticulture & Crop Science, School of Environment and Natural Resources, Food, Agricultural, and Biological Engineering, Plant Pathology, and Entomology). The team meets weekly over Zoom during the growing season and every other week during the winter and in-person twice per year.

The team is co-lead by: Laura Lindsey (Horticulture and Crop Science), Stephanie Karhoff (Extension), and Amanda Douridas (Extension).

PUBLICATIONS

Crop Observation and Recommendation Network (CORN) Newsletter. The CORN newsletter is the primary mechanism used to disseminate information to stakeholders ([link](#)).

- 41 newsletter issues published annually.
- 245 articles published in 2021. 246 articles published in 2022 from January-October.
- 154,752 website users and 306,629 page views in 2021. 151,229 users and 281,084 page views in 2022 from January-October.
- In a 2022 survey, CORN newsletter subscribers found value in the newsletter's:
 - "Timely topics appropriate for the date published. Up to date on numerous training and meeting dates across Ohio."
 - "Timely information. Also thought-provoking solutions as the experts are often not afraid to share their opinions on current topics that often requires 'out of the box' thinking and solutions."
 - "Timely narrative about upcoming or current conditions in our environment."
 - "Updates on what to look for and real time updates on what they see coming at us."

Corn, Soybean, Wheat, and Forages Field Guide. The Corn, Soybean, Wheat, and Forages Field Guide (2019) is a bulletin authored by 16 team members. The field guide is designed to be used by scouts, crop advisors, and farmers when they are scouting their fields. The pocket-sized guide includes information on insect, disease, and weed identification as well as agronomic information that is of value while checking fields. The newest edition of the field guide included co-authorship with Penn State University to broaden our team's reach. 3,055 copies have been sold since 2019.

Ohio Agronomy Guide, 15th edition. The Ohio Agronomy Guide (2017) is a bulletin authored by 13 team members. The guide was first published in 1966; however, it continues to serve as the official compilation of adaptive research results and recommendations from research and educational programs. The team is in the process of releasing the 16th edition of the guide, which will be released in early 2023. 823 copies have been sold since 2019.

OUTREACH PROGRAMS

Demonstration Area at Farm Science Review. Demonstration plots at the entrance of Farm Science Review share corn, soybean, wheat, forage, and cover crop research from across the state in a visual and interactive way. Placed between Gates B and C, approximately 115,000 Farm Science Review attendees pass by the plots each year, with hundreds of in-depth conversations with those who stop by to discuss the plots.

Virtual Corn College and Soybean School. In 2021, we established a virtual Corn College and Soybean School due to COVID-19 travel restrictions. Total 'live' attendance was 215 with an additional 982 YouTube views of the presentations.

- 94% of the survey respondents (n = 137) agreed or strongly agreed that they learned new information from the program and planned to use the information they learned.
- On the survey, we asked "What was the most helpful part of this program?"
 - "The fact that OSU has presented a first class virtual program is perfect for the present time. This program is getting the job done! In-person attendance, although enjoyable, has always required several hours of driving and compromises about being able to hear and see the speakers. Your programs solve the problem. Access to the recorded webinars is also appreciated."
 - "It was a timely refresher on many of the issues we face in agriculture."
 - "Reviewing the basic background info on each topic."
 - "I'm a little weak on identification of diseases and insects, so these areas were particularly helpful to me."

Weed University. This new high-impact program was initiated in 2022 and designed for producers wanting to be on the "cutting edge" of weed management. Topics included: late season weed issues, weed biology and control strategies, weed identification, tank-mixing sequence, and nozzle selection and calibration.

- 74 participants attended from 24 Ohio counties.
- The average farm size represented was 777 acres, ranging from 12 to 3,000 acres.
- Crop consultants represented 560,000 acres.
- Action items participants said they would "take home with them" included:
 - "Better scouting techniques."
 - "Re-examine herbicide program."
 - "Calibrate and pay closer attention to spray nozzles."

Conservation Tillage and Technology Conference. This is an event that is put together largely by AgCrops Team members who also serve as the majority of speakers. The pandemic has impacted attendance, but our team is working to rebuild the program, with 775 attendees in 2020 and 563 attendees in 2022. The 2021 conference was completely virtual and attracted 481 participants. In 2022, the team recorded all 69 presentations and posted them for viewing after the conference.

SURVEYS

Weed Survey. Since 2006, the team has recorded weed issues in soybean fields across the state to monitor weed population shifts and the potential for herbicide resistance. Prior to soybean harvest, participating extension educators drive a circular route in their county, recording weed observations on approximately 100 fields.

- 31 participating counties with over 2,750 fields surveyed in 2020.
- 36 participating counties with over 3,620 fields surveyed in 2021.

Virtual Crop Tour. Since 2020, the team has partnered with Ohio's Country Journal for the virtual component of their annual Crop Tour. Each August, team members scout corn and soybean fields and perform yield estimates. This gives team members the opportunity to interact with clientele and provide valuable information as farmers finalize their grain marketing plans.

FOCUS AREAS

In 2020, we surveyed AgCrop Team members about important issues affecting their stakeholders. Three areas rose in importance: soil health, extreme weather events, and niche crops. We established a committee for each one of these focus areas to provide extension programming on these topics. In 2021 alone, webinars from these focus areas included 4,077 participants attending 'live' sessions, representing 78 Ohio counties, 36 U.S. states, and 12 countries. 40 hours of free instruction from academic experts, industry, and farmers. 30.5 hours of Certified Crop Adviser (CCA) Continuing Education Units (CEUs) were available.

Soil Health Committee. This committee was developed in response to increasing demand from stakeholders to know more about soil health. The committee is comprised of 30 members from Extension, Food, Agricultural, and Biological Engineering, and School of Environment and Natural Resources. The main objectives of this committee are to: 1) improve growers' understanding of soil health assessment and management, and 2) provide training and resources for producers interested in adopting soil health practices on their own farms.

- 2021 Winter Webinar Series Metrics
 - 8 webinars
 - 1,517 total 'live' attendees, averaging 190 per webinar
 - 95% of survey respondents reported that they learned new information because of attending.
 - 89% of survey respondents reported that they plan to use the information they learned to improve soil health on their farm.
- 2022 Winter Webinar Series Metrics
 - 3 webinars
 - 286 total 'live' attendees with 519 recorded views on YouTube
 - Attendees represented 73 out of Ohio's 88 counties and 12 U.S. states
 - 92% of survey respondents reported that they gained new soil health information and better understanding because of attending.

Extreme Weather Events. In 2021, the extreme weather events committee focused on addressing issues arising on farms due to changing weather patterns. A webinar series was put together in 2021 to provide information on how to address these changes.

- 3 webinars in 2021.
- Topics included: Weather and climate impacts on diseases, Gibberella ear rot and vomitoxin in corn, managing water in today's wet and dry growing seasons, and a growing season outlook and changing weather patterns.
- 374 total views ('live' plus on YouTube)

Niche Crop. Beyond traditional corn, soybean, wheat, and forage production, our stakeholders were also interested in niche field crops to diversify their farming operations. The niche crop committee put together a webinar series in 2021 to address this need.

- 3 webinars in 2021.
- Topics included: Soft white winter wheat production, management considerations for winter malting barley, oats plus other winter annuals for forages, growing identity preserved crops, cover crop seed production, and best agronomic practices to produce high-yielding non-GMO soybean.
- 602 total views ('live' plus recorded views on YouTube)

SOCIAL MEDIA

Over the past several years, the AgCrops Team focused on increasing social media presence, including a YouTube channel, Twitter account, Facebook account, and pod cast series.

YouTube ([link](#)). A recent major effort of the AgCrops Team was to provide online content through our YouTube channel (Ohio State Agronomy). Our channel has grown from just under 5,000 views in 2019 to 24,500 views in the past year. We are adding approximately 200 new channel subscribers each year (previously this was 30 per year), for a total of 550 subscribers.

Twitter ([link](#)). The teams Twitter account (@OSU_Agronomy) was established in September 2022 to increase online engagement with stakeholders and currently has 80 followers.

Facebook ([link](#)). The Ohio State Agronomy Facebook page has 583 followers, reaching up to 5,300 people per post.

Pod cast ([link](#)). The Agronomy and Farm Management podcast began in May 2018 and release two new episodes each month. To date, there are 110 episodes. Pod casts are released on Apple Podcasts, Stitcher, Google Podcasts, and at podcast.osu.edu/agronomy. On Apple, episodes have been played 21,256 times with 1,982 listeners.