

### **COVID-19 RESPONSE**

# Agriculture



The UW-Madison Division of Extension's Agriculture Institute uses applied research and educational outreach to support an economically viable agricultural industry that produces safe food in an environmentally responsible manner. The Institute's Horticulture Program also provides research-based information to help home-gardeners and green industry professionals manage landscapes to beautify communities while maintaining and improving the environment.

Working with researchers from the College of Agricultural and Life Sciences as well as educators across the state, the Agriculture Institute responded to urgent challenges and adapted outreach to virtual platforms at the start of the COVID crisis in April 2020.

## Food supply chain issues, declining demand, decreased commodity prices and general operational disruptions are creating challenges for many Wisconsin farmers

he COVID-19 pandemic is affecting Wisconsin's agriculture sectors in many ways. The closing of schools and restaurants caused changes to the types of dairy products being consumed, resulting in some dairy processing facilities not being able to take additional milk. These facilities were forced to ask some Wisconsin farms to dispose of milk they could not process. After years of low milk prices, dairy farmers had just started to see recovery, but the hit to worldwide markets has resulted in milk prices that will not be sustainable for many dairy farms. Due to overall reduced demand for fuel, Midwest corn ethanol producers slowed production or closed. This and other global market factors contributed to a back-slide of grain prices at the start of this growing season. A reduction in ethanol production has also led to reduced grain byproduct availability, which is typically fed to the state's livestock. Meat packing plants have been forced to close or reduce processing due to employee sickness, leaving many dairy and livestock farms in the state without a place to ship their animals. Farm operations have had to keep essential production and operations running while adjusting to the new challenges that COVID-19 has created.

#### How Extension responded

Extension has its finger on the pulse of emerging situations across the state due to the close connection to the agricultural community, allowing rapid

#### IN-DEPTH

# Guiding farmers through challenging financial decisions



The COVID-19 outbreak occurred during an already challenging economic time for farmers. Many farms may face tough conversations in the year ahead. Extension specialists and educators provided resources for economic recovery. A three-part video series and subsequent fact sheets are being used to help farmers understand the risks and develop a plan to address the challenges that may be faced today as well as in the weeks and months ahead. This included the development of new tools for calculating cash flow, debt, and equity assessment as well as guidance for making a plan for next steps.

development of needed resources and information. In responding to the challenges created by COVID-19 Extension specialists and educators across the state developed online workshops and information to provide stakeholders with timely, research-based information to help modify operations or manage disrupted markets. Examples of this include:

- An online workshop for farmers and agriculture industry professionals on growing and feeding alternative forages to alleviate livestock feed shortages.
- Resources and webinars on best management practices for disposing of excess milk to avoid potentially damaging environmental impacts
- Direct outreach to farmers and agribusinesses about the farm support programs under the CARES Act, including the Paycheck Protection Program, Pandemic Unemployment Insurance, Economic Injury Disaster Loans, and business tax provisions
- Resources for beef and dairy farmers on selling or retaining market cows and bulls during market disruptions.
- Alternative feed options for beef cattle with reduced availability of distiller's grains related to reduced ethanol production.
- Dairy management best practices delivered through online workshops, including data management and herd reproductive skills. Some of these events were held in support of Hispanic/ Latinx dairy workers.
- Weekly grower gatherings for organic vegetable farmers to share ideas and information on managing operations during the COVID-19 outbreak.
- Guidance for farmers markets to continue operations under COVID-19, which are a major direct marketing channel for many farmers.
- Transitioning a training program for youth to an online format so they can be certified to operate agricultural equipment for their family farm.



Some Wisconsin dairy farms were asked by their processors to withhold delivery of milk, resulting in the need for milk or milk/ manure mixtures to be applied to cropland. The "Considerations for Landspreading Milk" webinar hosted in collaboration with UW-Madison College of Agricultural & Life Sciences and UW Nutrient & Pest Management Program discussed reasons for milk surpluses and future expectations, nutrient management as it related to spreading of milk, and handling and storage issues that should be considered for milk as well regulatory requirements. A new fact sheet was also developed that outlines the considerations for choosing fields and application methods as well as agronomic guidance and nutrient values of raw milk if farmers need to apply milk to their fields.

#### Threats to farmer and farm employee health are leading to new operational challenges

Farm operations cannot pause, even during a pandemic. Farmers needed guidance on keeping themselves and their employees safe while milking cows, caring for livestock, and preparing to plant crops. Farmers also needed to develop best practices while service providers and vendors continue visiting the farm to support ongoing farm operations.

#### How Extension responded

Educators and researchers developed web-based resources that took current health guidelines and recommendations and adapted them to be relevant and appropriate for farmers and farm workers. Extension adapted content to be linguistically accessible and culturally appropriate. Examples of this included:

Multilingual videos for Latinx/Hispanic agriculture workers about COVID-19 response and resources.

- Fact sheets providing guidance for farm employers in maintaining a healthy workplace.
- Online video training for fresh produce growers about the basics of developing their own farm produce safety plan. This training was aimed at development of farm plans to help ensure safe fresh produce.
- Resources for farmers on developing protocols and creating plans to ensure their operations continue in the event of illness.
- A collection of educational resources for livestock producers to better understand COVID-19 transmission between animals and humans.
- A checklist of protocols that producers should develop to assist in reducing risk of virus spread when farm service providers enter the farm.



IN-DEPTH

# Guiding farmers to prepare continuance-of-operations plans in the face of a pandemic

The COVID-19 outbreak occurred just as farms across Wisconsin began preparing for planting and an anticipated early hay harvest. Many decisions are made during this time period, such as field preparations, fertilizer application, and selection and delivery of seed and crop protection products. In light of the pandemic and in preparation for the unfortunate event of farmers getting sick, written protocols are needed to ensure crucial field operations are being accomplished. Representing local stakeholders in Chippewa, Dunn, Eau Claire, and Rock Counties, Extension developed and rolled out online resources to assist farmers with farm field continuation plans, including direct outreach to stakeholders and broad dissemination through media partners.



#### Increased interest in growing safe food at home

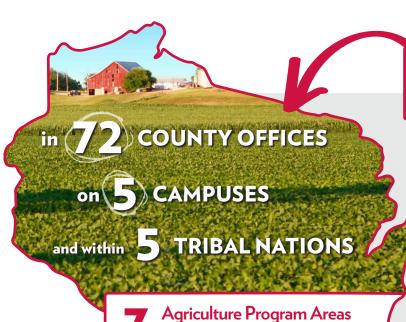
Anxiety around access to safe food and renewed interest in outdoor activities led to a unique need and surge in relevance for online gardening classes. Wisconsinites who may have never gardened before

sought research-based educational opportunities. Seasoned gardeners sought additional resources and were helping others learn how to garden. Seed companies and nurseries also saw an increase in sales. resulting in them seeking guidance and direction on how to adapt their businesses to meet this need with social distancing recommendations in place.

#### How Extension responded

Extension educators quickly adapted and expanded existing resources related to home gardening and leveraged a statewide Master Gardener network to reach and support residents interested in growing food. Extension educators also developed guidance for industry businesses such as nurseries. Examples of this include:

- A program for home gardeners to learn information on the importance of soil health and how to compost at home. This program also provided information on how Master Gardener volunteers can use this knowledge to help others.
- Online workshops for seed starting in which participants learned skills related to successfully starting vegetable seeds.
- An interactive web series for participants to learn beginning gardening techniques to improve food security.
- Media outreach to widespread audiences about how COVID-19 was impacting community gardens. farmers markets, garden centers, and home gardeners.
- Engaging with county health departments to provide guidance on procedures related to safe operation of greenhouses and nurseries
- Creating connections for Master Gardener volunteers to plan and remediate impacts from COVID-19 to various community-based volunteer gardening projects.



More ways we're helping businesses, communities, youth, and families

Keeping a focus on our values to transform lives and communities, UW-Madison Extension is

leading businesses, communities, youth, and families in the response to the COVID-19 outbreak. We are uniquely positioned across the state to link university research to those in need of guidance and practical resources. Extension staff in counties and tribal nations are making connections to financial aid and instruction, providing best practices for emerging needs, and reinforcing connections for healthy communities. To see how Extension responded to COVID-19 across the state and across program areas, visit fyi.extension.wisc.edu/covid19/impacts.

- Dairy
- Discovery Farms
- Farm Management Master Gardener
- Horticulture