

# Supporting Food and Agriculture in the U.P.

Founded in 1899, the MSU Upper Peninsula Research and Extension Center (UPREC) is a hub for sustainable agriculture innovation and education that is relevant to the environment, economy and needs of UP communities. Applied research on forage & beef cattle, field crops, and organic specialty crops is conducted at our 830-acre facility in Chatham, MI and on collaborating farms across the UP. Outreach efforts focus on expanding capacity in local food and agriculture systems by educating producers and non-farmer audiences about the importance of agriculture for community prosperity.

#### **Forage and Pasture-Based Beef Cattle**

Forage and cattle are the foundation of UP agriculture; grazing can lower producers' cost of production and environmental impact. UPREC maintains a cow-calf herd of 350 Red Angus and Red Angus -Akaushi cross cattle bred for exceptional performance and meat quality when raised on pasture. The cattle are rotationally grazed in summer and fed bailage outside during the winter to integrate them with our cropping system and enhance soil health. UPREC also

conducts forage variety testing to identify the best annual and perennial forages for UP cattle producers

- In 2019, UPREC began a new research project funded by NCR-SARE comparing the performance and meat quality of grass-fed vs. grain fed beef cattle, including healthfulness and sensory evaluation of the meat to gauge consumer acceptance.
- UPREC also tested seventeen elite varieties of alfalfa, including reduced lignin and herbicide tolerant varieties that may offer yield or quality advantages for UP forage producers.



## **Commodity Grains and Specialty Field Crops**

Better than 50% of the upward trend in crop yields over the last several decades can be attributed to genetic improvements achieved through breeding and selection. UPREC coordinates research projects evaluating new field crop varieties at sites across Northern Michigan. These projects leverage partnerships between MSU and Michigan's Ag industries to provide growers with unbiased information on variety performance. For most crops, our research accounts for both yield and quality to help growers yield the most value per acre.



- In 2019, UPREC trialed 53 potato, 44 corn, 39 soybean, 27 malting barley, 16 oat and 9 hemp varieties across 12 MSU and cooperating on-farm locations. Ten field day events highlighting these trials reached over 255 participants.
- The UPREC malting barley quality lab analyzed over 125 samples in 2019 to provide growers and maltsters critical information to support growth of the craft beverage industry.



### Supporting Food and Agriculture in the U.P., continued

### **Organic Specialty Crops and the Next Generation of Farmers**

Development of robust local food systems supports the long-term health and vitality of Michigan communities. The North Farm at UPREC demonstrates organic specialty crop production and season extension as methods of adding diversity and value to U.P. agriculture. Our Farm Business Incubator program supports beginning farmers interested in adopting these methods with access to land, equipment and mentorship at UPREC as they start new farm businesses and help grow the local economy. The North Farm also provides educational opportunities for local students and teachers to cultivate the next generation of farmers and agriculture professionals.

- In 2019, UPREC hosted over 1,300 K-12 youth and teachers for school field trips offering land-based learning experiences that covered agri-science, local food systems and history.
- The UPREC Farm Business Incubator program hosted one beginning farm business, Mighty Soil Farm, which sells organic vegetables at markets across Alger and Marquette Counties. Interns from Superior Central High School (2) and MSU (2) worked at UPREC in 2019, exploring careers in agri-science.
- New research on climate resilience in dry beans, organic oats and hemp variety performance is supporting specialty crop producers across the North Central Region.

### The Upper Peninsula Research and Extension Center Team



Andy Bahrman Laborer 1 906-439-5114 bahrmana@msu.edu



Joe Charlebois Ag and Special Equipment Operator 906-439-5114, ext. 228 charleb2@msu.edu



Michelle Coleman Secretary 906-439-5114 Ext. 1 colema98@msu.edu



James DeDecker
Director of the MSU Upper
Peninsula Research and Extension
Center
906-439-5176
dedecke5@msu.edu



Christian Kapp Research Technician 906-439-5114 Ext. 226 kappchri@msu.edu



Floyd Kienitz Ag Laborer 1 906-439-5118 kienitz@msu.edu



Paul Naasz Operations Supervisor 906-439-5114 Ext. 2 naasz@msu.edu



**Abbey Palmer** Education Coordinator 906-439-5058 palmerab@msu.edu



Allison Stawara Horticulture Aid 906-439-5058 stawaraa@msu.edu



Darin Tyner Ag Laborer 1 906-439-5118 tyner@msu.edu



Matt Raven Ph.D.
Department of Community
Sustainability, Professor,
Coordinator, AgriScience
Education
517-432-0293
mraven@msu.edu



Jason Rowntree Ph.D. Associate Professor, Animal Science 517-974-9539 rowntre1@msu.edu



Kurt Thelen Ph.D. Professor 517-353-0232 thelenk3@msu.edu



