

2019 MAAE SUMMER CONFERENCE

MONDAY, JULY 8

9:00-12:00 MAAE Officer Meeting

12:30-3:00 MAAE Pre-Conference Board Meeting

1:00-4:30 Continuing Education Workshops

FBM – 2018 Farm Bill Programs

With the passage of the 2018 farm bill several changes came with it. From DMC to CSP and beyond, there are several farm programs that can benefit farmers going forward. This workshop will focus on two areas – the FSA programs that are just starting this summer each of specific emphasis on producer support. The second portion of this workshop will deal specifically with Natural Resources Conservation programs that can augment the cash flow of producers and outline the parameters to each. Presenters will be from Farm Service Agency and NRCS.

Mudhole Rod Building Clinic – Kerry Lindgren & Shawn Linder, Ag-Ed Instructors

WORKSHOP CONTINUES TO THURSDAY MORNING

Mudhole has been a primary resource for rod building of many agricultural education programs from across the state. In this workshop you will be provided a rod kit in which to build your own rod from scratch. This includes gluing the handle, setting the blank, wrapping the guides and attaching the tip-top. Suggested rod building equipment will also be on display to examine. A walk through the Mudhole website will also be done to help you get started toward your own rod building unit for your class.

Pollinator Habitat Curriculum Guide – Claire Bjork, Outreach Specialist, Earth Partnership, University of Wisconsin-Madison

Educators, there has never been a better time to teach your students about pollinators! This workshop will demonstrate the brand new Pollinator Habitat Curriculum Guide, with 28 engaging interdisciplinary activities for establishing, managing, and monitoring prairie habitat suitable for insect pollinators, monarch butterflies, and grassland birds. The activities can apply to your hands-on projects ranging from small pollinator gardens to large on-farm restorations. The guide is aligned with Common Core, Next Generation Science, and MN AFNR standards, and was created by the University of Wisconsin's Earth Partnership with support from Sand County Foundation, the Monarch Joint Venture, and Enel Green Power North America, Inc. All workshop attendees will receive a printed edition of the Guide.

MyCAERT Workshop – Dan Pentomy

MyCAERT workshop will familiarize teachers to the topics and abilities of this robust online curriculum. All 170 Agricultural lessons have five elements: Lesson plans, paper test w/answers, ten basic electronic test questions, E-unit student reading unit and a powerpoint. A powerful component of MyCAERT is the Electronic quiz program. You can easily create M/C, matching, TF and short answer quizzes. Each quiz is adaptable to specific teaching styles and situations. We look forward to demonstrating our online curriculum and quizzing program to the teachers of Minnesota.

Natural Resources Collaboration with Central Lakes College – Kenton Montgomery, Central Lakes College and Leah Bott, Silver Bay Ag-Ed Instructor

Learn about and explore opportunities with the faculty at Central Lakes College Natural Resources Program. This workshop is designed to introduce participants to a collaborative research project involving plants, animals and prevailing climate conditions that could be replicated at any school. It would involve some shared information across schools, but could

also be used for specific research projects. This hands-on workshop will be held at an outdoor site between Breezy Point and Brainerd.

- 1:00-3:30 CDE Committee Meeting
- 3:30-5:00 SAE Committee Meeting
- 3:30-5:00 Ag-Ed Intern Meeting
- 5:00-8:30 PEP – Professional Excellence Program Meeting – FBM Instructors
- 5:00 Recreational activities

- 6:00 Past President’s Dinner – Reception @ 6:00, Dinner @ 6:30
- 6:30-9:00 RPL – Resources for Professional Learning – High School Instructors

TUESDAY, JULY 9

AM

- 7:30-4:00 Exhibitors Display

- 7:30-9:30 Conference Registration

- 8:00-9:00 PEP - Professional Excellence Program – FBM Instructors
- 8:00-9:00 TIP - Teacher Induction Program - for new high school teachers & Ag-Ed interns
- 8:00-9:00 PIM - Post-Secondary Instructor Mentorship
- 8:00-9:00 RPL – Resources for Professional Learning – High School Instructors

- 9:30-10:30 Opening Session

- 10:30-11:15 Regional Meetings

- 11:30-1:00 Luncheon – Voting for 2019-2020 Officers

PM

- 1:00-2:00 Dedicated Exhibitor Time

- 2:00-4:30 Sectional Meetings (High School, Post Secondary, and Farm Business Management)

- 5:00 Picnic and Volleyball

- 7:30 Retirement Roast - this activity is open to **ALL** conference attendees.

WEDNESDAY, JULY 10

- 7:00-8:15 Agricultural Trade Association Breakfast – Buffet breakfast served from 7:00-7:30
MAAE Director Recognition

- 8:30-9:30 Commodity Group Updates

- 9:30-10:00 Regional Meetings

- 10:00-11:15 MAAE Annual Meeting

- 11:30-12:45 Light Luncheon

PM

- 1:15-5:00 **TOURS**
FBM ONLY TOUR – Water Quality – CLC Staples Campus Farm and Byron Site
52 minutes to tour site
This tour will focus on water quality as it pertains to nitrogen use on the farm. With new rules coming around application and use, this workshop will showcase specific research in the area of water quality, both public and private research. Furthermore, we will look at a new crop,

Kernza, that companies like General Mills are looking to utilize in food systems in the future. The research is on varieties and the crops ability to sequester loose nitrogen in the soil to prevent leaching.

Purple Marten Colony at Cuyuna Recreational Area – Jennifer Lust, Assistant Manager, Cuyuna Recreational Area – 30 minutes to tour site

Purple Martins are a beloved and fascinating species. This will be an up close and personal opportunity to learn some unique and often times, misunderstood facts about this bird. Visit an active Purple Martin Colony and find out what makes this location so successful! Meet the dedicated Purple Marten landlord that cares for the colony and its “tenants”. Not only will you discover how landlords play an important role in the marten’s survival, but you will also learn how you can become a part of the effort also. Activities such as bird banding and nest checks may be a possibility depending upon the weather, colony health, nesting cycles, and age distribution.

The Ag and Energy Center – 50 minutes to tour site

“The CLC Farm” invites you to an Agriculture Immersion Experience. Drive the tractor and/or sprayer to understand auto steer and the precision agriculture; experience the NEW aeroponics unit just installed on campus; explore the research projects Kernza, potatoes, sunflowers, to name a few; discover the Living Legacy Gardens that demonstrates and showcases USDA Zone 3 hardy plants; and participate in water quality activities. Please wear comfortable shoes and clothes for field walking.

Landsburg Landscape Nursery – 25 minutes to tour site

Roger and Marie opened the doors of Landsburg Landscape Nursery in 1979 with 3 employees and 1,440 square feet of greenhouse space. Today they have more than 53,000 square feet of greenhouse space and more than 50 employees! Nearing retirement, Roger and Marie have passed most of the responsibilities on to John and Tina. Landsburg 50+ staff members share the same passion for planting that you do, and they treat every project, large or small, as if it were their own. Landsburg’s operates 11 landscape crews, with decades of experience, so they are well-equipped to handle any project. This tour will be a walking tour of their greenhouse and landscaping spaces along with stages of production.

Pine Shadows – 31 minutes to tour site

Producing a top quality English Springer Spaniel gun dog and a household companion within the same dog has been a goal of Pine Shadows since 1976. Started by former Brainerd Agriculture teacher Mark Haglin and his wife Sophie, the business has since evolved into grooming, training and a boarding facility. Their son Morgan is involved now as Pine Shadows was among the first kennels in North America selected to become an Orvis Endorsed Hunting Dog Breeder and Trainer. This tour will include seeing their boarding and grooming operation as well as a demonstration on their training program.

Dennis Drummond Wine Company– 29 minutes to tour site

Tour and learn about grape growing and wine making from a local winery. Dennis Drummond has been involved in wine making for over 20 years and has taught Viticulture and Enology classes at Central Lakes College through the VESTA program. Dennis Drummond Wine Company uses grapes that are “Minnesota Winter Hardy” to make their wines, which comprise of classic blends and as well as unique combinations. Demonstrations and taste testing are included.

Nelson-Shine Produce and Country Sunshine – 40 minutes to tour site

Nelson-Shine Produce is a family owned and operated business south of Brainerd. Providing their customers with custom poultry processing and are committed to providing their customers with the freshest, locally grown and harvested produce. County Sunshine provides a wide

variety of plants and seeds for all of their customer's gardening needs, cut flowers, as well as goat milk soap and lotions. This destination will include a tour of the poultry processing plant, the cut flower operation and the greenhouses all at one location.

Barrett Petfood Innovations – 41 minutes to tour site

Barrett Petfood Innovations is growing at a rapid pace and has become a highly respected full-service premium pet food manufacturing company since its founding by Mike Barrett. In recent years Mike's children, Sarah and Tom, have taken over the organization but Mike is still involved through a different role. His farm is one of the main ingredients sources for the company. BPI produces over 150 different types of pet food from dog, cat and bird food to more exotic items such as turtle, fish and primate food. The final products are distributed locally as well as exported around the world. Tour will include seeing the production facility, warehouse, and process of pet food making from start to finish.

- 1:30 Team Ag-Ed Meeting
6:30 MAAE Annual Banquet
9:00 Reception for Award Recipients
9:30 Ag-Ed Relief Fundraiser

THURSDAY, JULY 11

FBM – Farm Business Management

PS – Post Secondary

HS – High School

AM

8:00-11:30 Continuing Education Workshops

FBM – First half – DHIA Research Results – Joleen Hadrich

Over a year ago almost 100 dairy farms agree to allow their farm data to be compared between DHIA and FINBIN. Early results and analysis will be shared. Common themes of management and profitability will be discussed.

FBM – First half – The Economics of the Local Foods Movement

The local foods movement has been described as either a way to save rural America or as a fraud. The FBM program has been gathering data on direct market farms for a decade, and we now have guidelines on what farms need to earn in order to be profitable. Financial rules like the 20/25 rule and 10K rule are similar for vegetables, small fruit, and tree fruit, and will be discussed here.

FBM – Second half – Dairy and Other Livestock Analysis Report – Pauline VanNurden

In May, a group of faculty came together to discuss and share issues / changes / use of dairy sorts and potential FINAN changes as it related to dairy. This group will share suggested changes and have an opportunity for Q & A around refining FINPACK to serve our dairy producers best while optimizing the FINBIN data to the general public.

FBM – Second half – Profitable Crops for the Local Food Movement –

Growers interested in local foods are exposed to extravagant claims for a particular crop. In this session, we will look at market potential, production limitations and economics of both major local crops (strawberries, apples, mixed vegetables) as well as a few new and unknown crops. Please bring questions about specific crops that you or your growers have shown interest in planting.

PS – Strengthening Career & Technical Education – Jeff Miller, CTE Pathways Director, Minnesota State – **WORKSHOP WILL BE HELD AT CENTRAL LAKES COLLEGE – BRAINERD FROM 9:00-2:30.**

This workshop will provide participants the opportunity to learn about the Strengthening Career and Technical Education for the 21st Century (Perkins V) legislation and how it relates to career and technical education. The session will be specific to agriculture education and the career pathways associated with career pathways in the agriculture field. One of the major foci of the session will include how Perkins funding can support efforts in agriculture education. This session will also encompass a panel type discussion with representatives from Minnesota Department of Education (teachers, specialists), Minnesota State Colleges and Universities (faculty, Perkins Consortia directors, Career Pathway directors) and industry partners. The panelist expert will share many topics including the importance of advisory committees, collaboration/partnerships, relationship building between secondary and post-secondary educators, career readiness and preparation, and sharing of promising practices in agricultural education.

HS - Mudhole Rod Building Clinic - *CONTINUED*

HS – Work Based Learning and Perkins V – Troy Haugen, Lakes Country Service Cooperative
Work Based Learning provides students with opportunities to build career awareness, explore careers, and develop critical thinking, decision-making and problem solving skills. WBL has an expanded role in Perkins V and this workshop will give an overview of these changes, discuss the role of the consortium, and provide information for instructors to carry out a successful WBL program with students. Important topics for instructors implementing work based learning programs that will be covered include child labor laws, placement criteria, and workplace safety. Pathway options to WBL licensure will be discussed.

HS – Minnesota Envirothon – Shawn Linder, Ag-Ed Instructor

Have you ever thought about participating in the Minnesota Envirothon? If so this workshop is going to go through the structure of this competition that is put on regionally and if you qualify, on the state level with the opportunity to compete nationally as well. In this workshop we will work through the stations of Envirothon including: forestry, wildlife, aquatics, soils, current events, and the presentation station. Educational resources, including past tests will be provided at this workshop.

HS – The World Food Prize (Minnesota Youth Institute) – Eleora DeMuth & Michelle Christopherson

Are you interested in the World Food Prize? Are you curious on how to implement the project into any classroom? The Northern Great Plains Youth Institute is a great project to include in any classroom with emphasis on food security and global agriculture. The University of Minnesota Crookston will facilitate the process of implementation into the classroom. Learn the do's and don'ts of paper writing and presentation preparation. Learn about the opportunities the event provides as well as information about the event held where students receive hands-on agricultural and food security based experiences. This event guarantees networking and \$1,000 scholarship upon completion. Various educational materials will be made available to assist students with this opportunity held around the state.

HS – Soils Lab Techniques – Kristian Walker

Do you need some help with evaluating soils for your classroom or FFA? In this workshop you will be doing some hands-on soil analysis such as soil texturing, soil testing for nutrients and pH, work with the Munsell Soil Book, evaluating a soil profile, understanding land capability classes, and assessing erosion risk. Components of the soils FFA handbook and the Oklahoma Land

Judging Manual will be discussed during this workshop. Some resources will be made available to you with this workshop.

HS – AET – Livestock SAE Projects – AET Staff

Case study on how to manage breeding and livestock SAE projects using AET's livestock managers. They can bring a laptop and we can assign them an example student account and handouts that cover example SAE's for livestock projects (market and breeding). This session would also cover how to grade their SAE work using AET's online grading tool.

HS – Embracing Health and Safety in the Classroom – Staff, Upper Midwest Agricultural Safety and Health Center (UMASH)

As teachers, we love our students as our own children sometimes. So why aren't we teaching them safety while we teach them about one of the most dangerous professions in America? This workshop will introduce a framework for incorporating health and safety into classroom lessons and activities throughout the year. Presenters will provide resources and walk-through practical application methods for teaching safety and health in the classroom. This hands-on training will assist educators in delivering current topics in agricultural health and safety. FREE Goody basket! In addition, for those present in the workshop we will raffle off a basket of safety goodies that you can use in your classroom, including but not limited to: 4 safety jeopardy games, earplugs, sunscreen, a full Telling the Story Discussion guide classroom set and more!

HS – Supporting Farm Youth Through Understanding and Intervention –

Monica Kramer-McConkey, LPC – Eyes on the Horizon Consulting

The farm economy of the last few years has been difficult and destructive for farm families. The downturn doesn't just affect the financial and emotional well-being of farm and ranch owners, it impacts their family members as well. Children and adolescents may be living in tense situations with little ability to make sense of what is going on around them. Rural communities lack resources for youth experiencing family stress and/or crisis. It is critical that people who work with farm kids develop the knowledge and skills to understand, support, and intervene on their behalf in times of stress. This workshop provides an overview of the stressors unique to growing up on a farm and equips attendees to support adolescents in stress.

12:30 Post Conference Board Meeting

12:30-4:00 Continuing Education Workshops

FBM – First half - Top Farmer Survey Results and Crop Issues – Rob Holcomb

The purpose of the Top Farmer research study was to identify the characteristics and tendencies of highly successful farms. As part of this project, study participants were asked to respond to an online survey. Survey responses were matched up with the producer's FINPACK data. Net farm income ratio was used to determine a benchmark for financial success. Financial benchmarks were then linked to the survey data to determine statistical significance for the producer characteristics and tendencies. Results will be reported based upon producer demographics, the five areas of risk management (production, market, financial, human resource and legal), and a section examining uses of technology.

FBM – Second half – Crop Analysis Group Report – Pauline VanNurden

In May, a small group of faculty met to review FINPACK as it relates to crop enterprising. The special sorts and output data will be discussed as well as other features that can enhance the value to the farmer and the FINBIN data for the general public.

HS – Exploring Social Identity as Teachers – Dr. Amy Smith and Brandon Roiger, University of Minnesota

We are going to focus on addressing topics related to social identity that are the foundation of teaching an equitable and inclusive classroom. Social identity is an understanding of how one's self fits into socially constructed categories. Participants will walk away with an understanding of the harmful impact of stereotypes, how to navigate implicit bias, and an exploration of how privilege and marginalization shows up in our own identities, as well as our students. Participants will receive an adapted copy of the curriculum used in the workshop to facilitate for their own students (ex: in a leadership or other agriculture class, with an FFA officer team, etc.) or other professional development opportunities.

HS – Public Land Recreational Opportunities – Shawn Linder, Ag-Ed Instructor

There are 25 million acres of public land scattered throughout Minnesota. We are going to explore the Federal, State, County, Municipal, and Industrial land available for all types of recreation, education, internships, and even SAE opportunities for your students. We will use web based GIS to find these pieces and examine the programs that are associated with these different pieces of land that are most definitely found in your back yard.

HS – Pruning Woody Plants – Theri Wasniewski, Horticulture Instructor, Central Lakes College-Brainerd – WORKSHOP WILL BE HELD AT CLC CAMPUS IN BRAINERD

Come learn something hands-on to teach your students, come learn something hands on you can use in your own back yard. We will look at the internal set up of woody plants related to pruning (anatomy and physiology). We will talk about ways we can show students how to put their knowledge of woody plants to work for them (as a future profession or in their back yards). Pruning trees vs. shrubs? What is the difference between pruning flowering and non-flowering shrubs, do they need to be pruned differently? Is it ok to sheer or hedge shrubs? Is there another way to prune shrubs than sheering or hedging? Tour the Central Lakes College campus in Brainerd, see our perfect and not so perfect pruning examples! Get some hands-on training with pruning saws and hand pruners.

**HS – Simple Hydroponics – Jeff Dirks, Horticulture Instructor, Central Lakes College-Brainerd
WORKSHOP WILL BE HELD AT CLC CAMPUS IN BRAINERD**

Hydroponics is exploding in popularity, and there are hundreds of different types of systems to choose from. Many of them require high-tech resources, and require a full-time person to oversee them. If they are not properly maintained, many of them can become a burden. It is also true that hydroponics can be a teaching tool for instructing students on the development and growth of plants, as well as enjoying the produce that is grown. This workshop will provide you with examples of hydroponics systems, as well as grow lights that can be used with those systems, without "breaking the bank" and requiring continuous attention. Take a tour of the Central Lakes College Greenhouses, see working examples of high tech and simple hydroponic models, and how you can use them in a greenhouse or in your classroom. Many of the models can be built from scratch. Come and see how you can incorporate this fun way of growing food into your classroom.

HS – AET Placement & Research Projects – AET Staff

Case study on how to manage Paid and Unpaid Placement SAE's, Research SAE's and Foundational SAE's using AET. This session would cover the other common SAE's and allow teachers to view how students can manage these SAE's as well as how to grade their work.

HS – Engaging In Agriculture – Seena Glessing and Christa Williamson, Ag-Ed Instructors
What resources exist for agriculture teachers to increase their production knowledge? How can commodity and advocacy groups enrich your content knowledge? Participants will explore resources available from various groups and how to implement them in your curriculum. Seasoned veterans share how being active and participating in commodity groups have benefited their curriculum. Learn about how to utilize farm organizations to increase your production agriculture knowledge and increase the rigor and relevance of your curriculum.

HS – Training AGvocates for AGRiculture – Natasha Mortenson, Riverview LLP
Training and BEING an advocate for Agriculture is one step away after completing this highly engaging and hands-on workshop. Learn about hot topics in agriculture, finding resources that matter and work, and having those tough conversations with others about agriculture and leaving it positive in the end. This workshop will provide you with the method for having those tough conversations with others and training your students how to have them as well.