### Conference Proceedings Maryland Agricultural Educators Conference July 10-13, 2023 Westminster, Maryland Conference held at Winters Mill High School Lodging at Best Western Westminster Hotel

#### MONDAY, JULY 10th

#### Hotel Check in with MAEC welcome table in lobby

#### **TUESDAY**, JULY 11th

#### Professional Learning: Drone Technology in Agriculture

Presenter: Jeremy Roop and Martin Cadirola, Carroll Community College

Recorder: Diane Herndon, Frederick Career & Tech Center

A basic overview was presented on the Drone Program offered at Carroll Community College. Drones are being utilized in agricultural production and research. They improve efficiency, reduce costs and increase crop yield. They are also used to apply pesticides and fertilizers in areas that are difficult to cover conventionally. Drones are exceptional in collecting and reporting data that can be shared with other ag professionals. Note: One must be licensed to commercially fly drones and cannot fly above 400 feet. Drone technology is an exciting career path in agriculture. It can be used in studying plant health by scouting fields, locating farm animals and wildlife, processing and analyzing data to make sound decisions. A lesson could be developed to map out the school area and identify plant materials. This is also a way to collaborate with area farmers and production operations.

#### **Professional Learning: SAE for All**

Presenter: Breanna Pastir, National FFA SAE Specialist

Recorder: Bridget Nicholson, Middletown High School

Supervised Agriculture Experience (SAE) is one of the three circle model of the National FFA. The purpose of the SAE for All program is for students to expand their agricultural knowledge in developing and implementing an area of agriculture. Resources can be located online at <u>https://saeforall.org</u> There are several examples with editable worksheets. It can be accessed by students, parents and educators. All students in agriculture education are encouraged to have an SAE. There are endless opportunities for student topics. The SAE program is a steppingstone for students to practice career ready skills.

#### **Professional Learning: Maryland FFA Updates**

Presenter: Terrie Shank, Maryland FFA Executive Director

Recorder: Jill Smith, UMCP Agriculture Graduate Student

The calendar of events for the Maryland FFA was distributed to each participant. It was also noted that the updated calendar of events is also posted on the mdffa.org website. State officer requests can be submitted through the mdffa.org website homepage using the jotform link. She also shared the state FFA rules and regulations of events, and a new Maryland FFA mailing address.

#### **Professional Learning- AET for Beginners**

Presenter: Russell Ewell, Programmer for The AET

Recorder: Shelby Althoff, Francis Scott Key High School

The main objective of the workshop was to allow beginning teachers the opportunity to create different types of SAE's and Learning to input data into student accounts. Participants learned how to create profiles and adding students into their classes through the system. Russell showed the group how to access free video resources to walk you through the how to's in almost every aspect of AET. They created journal entries and how to start taking inventory. Russell shared helpful hints in the planning section and managing tools for breeding and marketing livestock. There were many tips and tricks shared with the group. It was beneficial in adding new students into the system for producing successful online recordkeeping. This information is most useful to incorporate career exploration, ag literacy, management and leadership skills.

#### **Professional Learning- AET Applications for SAE Recordkeeping**

Presenter: Dr. Roger Hangagriff, Executive Team Member for The AET Recorder: Pat Beachy, Linganore High School

This workshop allowed experienced teachers to learn how to be more efficient when working through AET to become more proficient in recordkeeping and completing award applications through the National FFA. Roger walked the group through all the major tabs of AET, both as a teacher and a student. He noted that it is best to complete an entrepreneurial project within a given year. The group viewed the new state ffa degree application. Roger suggested uploading photos in landscape mode, rather than portrait and encourage to students to journal at a minimum on a weekly basis.

#### WEDNESDAY, JULY 12th

#### Professional Learning: Early Teacher Training in Agricultural Mechanics

Presenter: Thomas Mazzone, Lecturer and Advisor for Ag Leadership and Communications for the UMCP Institute of Applied Agriculture

#### Recorder: Amanda Farmer, Clear Spring High School

Teachers with less than 5 years' experience participated in a hands-on workshop on electrical wiring lesson that can be done in the classroom. They reviewed all the necessary safety procedures, supplies and tools to complete the lesson. They reviewed the sample lesson plan with a schematic drawing of the electrical circuit. Everyone got to wire a complete electrical circuit and tested to be sure it worked. Each participant received a kit of materials to take home and be able to model the lesson with their own students. Thomas noted that Black & Decker has a wiring book that is a good reference for this topic. This was an easy to follow introductory lesson for agricultural mechanics curriculum.

#### Professional Learning Tour Option #1- Clear Ridge Nursery

Presenter: Jessica and Joe Todd, Owners and Operators

Host/Recorder: Kelly Bryant, Maurice J. McDonough High School

The group toured a production nursery, covering the day-to-day operation, marketing, maintenance and expansion of the business. During the visit, which encompassed a discussion on native versus non-native trees. They went on a walking tour of the lower production fields answering many questions from the group. The nursery orders their beginning stock as plugs from wholesalers, which cuts down on time and increases vigor. This tour is useful in studying for the Certified Professional Horticulture Exam and in horticulture classes.

#### Professional Learning Tour Option #2A- Fuch's North America Spice Company

Presenter: Adam Adami, Representative of Fuch's North America Host: Aaron Geiman, Westminster High School Recorder: Stacy Eckels, Southern High School Fuch's Spice Company is a business model for professional food processing. Within the tour, they covered HACCP and GAP procedures for quality and safety in their plant. The group got to walk through the processing steps from the warehouse, formulation, mixing, packaging and research/development. Fuch's is a middle processing company that blends dry goods and spices. This tour is useful in studying Food Science Curriculum.

#### Professional Learning Tour Option #2B- Atlantic Blue Water Laboratory

Presenter: Brianna Griffin, Representative of Atlantic Blue Water Lab

Host: Aaron Geiman, Westminster High School

Recorder: Stacy Eckels, Southern High School

The tour guide walked the group through the entire water filtering and testing facility. They observed various filtering options and water testing procedures for safe and healthy drinking water. They explained that well water does not mean it is clean and safe to drink, it must be tested and monitored as public water for safety. Gloves should always be worn while handling water samples and pH should be tested on site. This information is well suited for laboratory protocols and basic laboratory procedures throughout the CASE curriculum.

#### Professional Learning Tour Option #3- Local Homestead Products

Presenter: Trevor Hoff, Owner and Operator

Host: Emily Muller, Winters Mill High School

Recorder: Sara Seiser, Middletown High School

The owner escorted the group on a tour of the entire farming operation, including discussions on management, best practices, agritourism practices and customer relations regarding preparing agriculture students to work in a farming to consumer operation. He also covered the agritourism requirements and importance of amusement insurance and regulations. A valuable field trip opportunity with students.

#### **Professional Learning- Agricultural Structures**

Presenter: Joe Linthicum, Retired Ag. Teacher and President of the MD FFA Alumni & Supporters Recorder: Jill Smith, UMCP Graduate Student

To learn more about agricultural structures within the Agricultural Mechanics CDE and curriculum, Joe introduced teachers to ideas and opportunities to use in their classroom. The participants built their own agricultural structure model using soft wood and building supplies. They learned about how to develop problem solving skills through giving instructions and how to implement a multi-day lesson on building structures. By setting parameters into the lesson, allows the students to create and think to finish a project. This was a great way for teachers to learn new ways to implement lessons related to building small and large structures as well as have teachers collaborate on problem solving ideas with their own experiences and even think about how to develop student problem solving skills in the classroom.

#### **Professional Learning- Greenhouse Irrigation**

Presenters: Art Elmers, Ryan Burnley of SiteOne; John Johnston of Senniger; Jim Mews of Netafim Recorder: Brittany Stiles, South Carroll High School

The workshop allowed the teachers to create a bench irrigation system for a working greenhouse. The group first learned how to plan to construct the system, lay out the materials needed, organize the setup, correctly measure the piping and place the system together. They learned how to use piping with compression fittings and their benefits of being reusable. They learned to be observant to arrows on the equipment and how the filter, regulator and electric valves need to be installed in a specific order. This information is valuable for teachers working with greenhouses to make them more efficient and affordable building systems with their students. Improving greenhouse conditions can maximize productivity, especially when using different containers.

#### **Professional Learning- Biological Testing**

Presenter: Aaron Geiman, Westminster High School

Recorder: Yvette Connell-Albert, Fairmont Heights High School

Various laboratory techniques were available for participants to test water quality to determine presence of bacterial agents. The group used aseptic techniques to collect biological data. They got to inoculate petri dishes using three methods and practice counting, calculating and interpreting bacterial sources. These procedures can be useful in agriscience classes and CASE curriculum.

#### Professional Learning- Agricultural Business and Marketing

Presenters: Andrea Haines, Owner of ALH Word & Image Business; Stephanie Moore, Superintendent of MD Farm/Agribusiness Management CDE

Recorder: Gabrielle Graham, Calvert High School

Marketing tells the story of a business and allows consumers to connect with company representatives and their products. Andrea presented why and how to use the seven major marketing strategies and how to establish the branding of a service/product. Stephanie gave an overview of the Farm & Agribusiness Management CDE guidelines and major components of the event on the ffa.org website. The presenters encouraged the teachers to always use professional photos and be sure websites and other social media are clear, concise and sending the right message. All workshop information can easily be applied to any agriculture curriculum.

#### THURSDAY, JULY 13TH

#### Professional Learning- Spotted Lanternfly & Pesticide Update

Presenters: Kenton Sumpter, Alex Lehmann of the Maryland Department of Agriculture Recorder: Amanda Farmer, Clear Spring High School

The Spotted Lanternfly is a very invasive species to Maryland starting in June of 2022. Measures to prevent and treat them were discussed. All specific information is found on the MD Dept. of Agriculture website. New pesticide applicators certification and training plan is under review at EPA. Licenses require a retest if lapsed for one year. The presenters encouraged us to take accurate records and report findings. Teachers with pesticide certification can spray in school greenhouses.

#### **Professional Development Recognition Luncheon**

Host: Sarah Shriner, Middletown High School and President of MATA

Recorder: Lori Mayhew, Damascus High School

Special guests and supporters of agriculture education were recognized, along with introductions of the newly elected MD FFA State Officers. Greetings were brought by Susanne Richards, Executive Director of the Maryland Agricultural Education Foundation. This program recognized accomplishments of Maryland agriculture teachers and programs across the state by the Maryland Agriculture Teachers Association (MATA).

#### Major Awards and Recognition:

Years of Service Recognition: 5 years- Dr. Stacy Eckels, Southern High School

10 years- Thomas Mazzone, UMCP IAA; Brittany Stiles, South Carroll High School

- 25 years- Aaron Geiman, Westminster High School
- 40 years- Clare Linfield, retired teacher from Carroll County

Outstanding Leadership Award: Sarah Shriner, Catoctin High School as the 2022-2023 MATA President

#### National Association of Agricultural Educators (NAAE) Awards:

Teacher Turn the Key – Rachel Summers, Urbana High School Outstanding Early Career Teacher- Hannah Schantz, North Harford High School Outstanding Teacher – Dene' Flack, Harford Tech High School Outstanding Mentor – Aimee Densmore, North Harford High School Lifetime Achievement – Doug Hering, retired teacher, Frederick Career & Tech Center Outstanding Service- The Great Frederick Fair

#### Maryland Agriculture Teachers Association (MATA) Awards:

Outstanding Classroom Hannah Schantz, North Harford High School Outstanding FFA Chapter- Amanda Farmer & Nicole Michol, Clear Spring High School Outstanding Supervised Agriculture Experience Program- Dr. Stacy Eckels, Southern High School Teacher of Teachers Awards- Aimee Densmore, North Harford High School; Sarah Shriner, Catoctin High School; Sara Seiser, Middletown High School.

#### The 2023-2024 MATA Executive Board of Directors elected:

Past President- Sarah Shriner, Catoctin High School President- Dr. Stacy Eckels, Southern High School President Elect- Sarah Welty, Oakdale High School Secretary- Patricia Beachy, Linganore High School Treasurer- Roy S. Walls, Jr. Social Media Reporter: Yvetter Connell- Albert, Fairmont Heights High School Website Reporter: Richard Stonebraker, Frederick High School Membership Chair- Amanda Farmer, Clear Spring High School Student Member- Harriett Harris

## MAEC 2023 Conference Planning Committee

**Co-Chairs:** 

Aaron Geiman & Emily Muller

#### Members:

Shelby Althoff, Tom Diffendal, Naomi Knight, Brittany Stiles

# Listed below are the teachers who participated in the conference and earned hours toward an MSDE continuing education credit

MAEC 2023 C ompleted Hours of Instruction MSDE C reditation																
Type of Profes sional Learning Activities			PL	PL	PL	Tour	Tour#2	Tour #3	PL	PL	PL	PL	PL	PL	PL	
Total Hours of Instruction		2.5	3		3	1.5		1			3		2	1	16	
			Drone,	Recor d.	Early		Tour: Fuch's	Tour: Home.			GreenH		Ag. Bus.		4 H	
Einet Mare	Lest Nerro	Calcal/Oreasiantian	SAE, FFA	Syste m	Teach. ATMS	Ridge Nurs .	Water Lab	CSA Farm	Ag Ind. Update	Agric.	Irrigatio n	Biolog. Testing	Market	MDA Pest.	Curr. Kits	Total Hrs.
		School/Organization:					Lab	Farm		Struct		resting			NILS	
	Althoff	Francis Scott Key	2.5	3	0	3.5			1		3		-	2		15
	Beachy	Linganore High	2.5	3	0		3.5		1				3	2		15
	Bromhal	Frederick County CTC	2.5	3	3.5				1	3				2		15
Kelly	Bryant	M. J. McDonough High	2.5	3	0	3.5			1			3		2		15
Yvette		Fairmont Heights High	2.5	3	0	3.5			1			3		2		15
Tom	Diffendal	Liberty High	0	0	0			3.5	1				3	0	0	7.5
	Eck els	Southern High	2.5	3	0		3.5		1			3		2		15
Kimberly	Fairbank	Liberty High	0	0	0			3.5	1				3	0	0	7.5
	Farmer	Clear Spring High	2.5	3	3.5				1	3				2		15
Jessica	Flores	WorcesterTechnical High		3	0									0	0	5.5
Aaron	Geiman	Westminster High	2.5	3	0		3.5		1			3		2		15
Gabrielle	Graham	Calvert High CTE Acad.	2.5	3	3.5				1				3	2		15
Thomas	Hawthorne	Linganore High	2.5	3	0	3.5			1		3			2		15
Diane	Herndon	Frederick CTC	2.5	3	0	3.5			1				3	2		15
Lori	Mayhew	Damascus High	2.5	3	0		3.5		1		3			2		15
Emily	Muller	Winters Mill	2.5	3	0			3.5	1				3	2		15
Bridget	Nicholson	Middletown High	2.5	3	0		3.5		1	3				2		15
Bethany	Reese	Tus carora High	2.5	3	3.5				1				3	2		15
Sara	Seiser	Middletown High	2.5	3	0			3.5	1		3			2		15
Sarah	Shriner	Catoctin High	2.5	3	0		3.5		1			3		2		15
Jill	Smith	UMD, College Park	2.5	3	3.5				1	3				0	0	13
Brittany	Stiles	South Carroll High	2.5	3	0		3.5		1		3			2		15
Rachel	Summers	Urbana High	2.5	3	3.5				1		3			2		15
Sarah	Welty	Oakdale High	2.5	3	0		3.5		1				3	2		15

# Thank you to our conference sponsors!



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Maryland Agricultural Education Foundation



Maryland Nursery, Landscape & Greenhouse Association, Inc.



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