



# Educator's Ag Institute

## Virtual Sessions for Educators and Everyone

*Earn up to twenty Act 48 hours for attending all sessions*

### Day 1 - Livestock and Genetics

#### Thursday, July 9

#### Session 1 - Pig Farm Showcase

Chris Hoffman, Lazy Hog Farm

10 – 11 a.m.                    2 Act 48 hours

*Get a behind-the-scenes glimpse of a central Pennsylvania pig farm. Chris Hoffman, the National Pork Board's 2019 Pig Farmer of the Year and Pennsylvania Farm Bureau Vice President and Friends of Ag Foundation Board Vice-Chairman will share about his farrow-to-finish farm, which includes a focus on food safety and animal well-being. This farm-to-table approach will enable you to take what you learn at Lazy Hog Farm and find new and exciting ways to incorporate biology and STEM concepts in your classroom.*

#### Session 2 - Embryology & Genetics with Eggs

Trish Zimmerman, D.H.H. Lengel Middle School

2 – 3 p.m.                      2 Act 48 hours

*Join in with hands-on classroom activities to learn about embryology and genetics with eggs. Trish Zimmerman, 2019 Pennsylvania Farm Bureau Teacher of the Year, will also share how she hatches eggs to teach her students about embryonic development. Attendees will have the opportunity to see hatched chicks and learn how this activity can be used to teach genetics in the classroom.*

### Day 2 – Soil and Hydroponics

#### Thursday, July 16

#### Session 1 - Soil Science

Melissa Hanner, NRCS Resource Soil Scientist & Rebecca Bolitiski, St. Marys Catholic Elementary School

10 – 11 a.m.                    2 Act 48 hours

*Want to create edible "soil" or learn how to identify different types of soil? Join us on an introduction to soil science with Melissa Hanner, a NRCS Soil Scientist based in Pennsylvania. We'll learn about topics such as soil layers, which you can use to explore STEM concepts with your students. You can also follow along with Rebecca Bolitiski as we make edible soil in an activity you can take directly to your classroom.*

#### Session 2 - Hydroponics

Nicole Guise, PA Friends of Agriculture Foundation Intern and Ag Educator

2 – 3 p.m.                      2 Act 48 hours

*Did you know that only 2-3% of the land on Earth is suitable for growing crops? Learn about how plants can grow without soil in a session on hydroponics. In this session, you will create a hydroponic growing system*

while showing the natural resources needed to grow plants and the nutrients necessary for growing. This lesson will provide opportunities for inquiry-based learning across all grade levels.

### **Day 3 – Dairy Day** **Thursday, July 23**

#### **Session 1 - Dairy Farm Virtual Tour**

**Joy Widerman, Jobo Holstein Farm & Brittany Snyder, Center for Dairy Excellence**

**10 – 11:30 a.m.      2 Act 48 hours**

*Have you ever wondered what it might be like to go on a virtual field trip with your class? Experience one with us as we embark on a virtual field trip of a Pennsylvania dairy farm with the American Dairy Association North East (ADANE). Jobo Holstein Farm, located in Gettysburg, Pennsylvania, milks 950 cows twice every day! We will explore topics like animal care, conservation of resources, and animal nutrition. Additionally, ADANE will be sharing about the Farmer Facebook Series and Young Minds Inspired programs. We will also be joined by the Center for Dairy Excellence Foundation. They will showcase exciting, cross curricular programs that meet Common CORE Standards for Math, Reading, and Science that are available to add dairy education to your classroom.*

#### **Session 2 - Dairy Foods 101**

**Annie Miller, PA Friends of Agriculture Foundation Ag Lab Teacher**

**2–3:30 p.m.      2 Act 48 hours**

*Ever wondered about the differences between the kinds of milk that are available and how they're turned into other foods? Join the Annie Miller as she explores the chemistry and science behind delectable dairy treat such as yogurt and cheese. We'll also discuss why dairy milk is considered the best value among types of milk. We'll take a standards-based approach to incorporating dairy education into your classroom.*

### **Day 4 – Flowers & Pollinators** **Thursday, July 30**

#### **Session 1 - Penn State Flower Trials**

**Dr. Alyssa Collins, Southeast Agricultural Research & Extension Center**

**10–11 a.m.      2 Act 48 hours**

*Join Dr. Alyssa Collins on a tour of the Penn State Flower Trials featuring over 1,000 plants of various varieties. The trials provide a living laboratory and classroom to learn about horticulture. Learn how researchers can identify the best varieties and growing conditions, commercial visitors can learn about tested plants, and visitors can revel in its beauty.*

#### **Session 2 - Buzzing about Bees**

**Cathy Vorisek, Vorisek's Backyard Bee Farm**

**2–3 p.m.      2 Act 48 hours**

*All the buzz is about bees because of their importance as both pollinators and honey-producers. Join Cathy Vorisek, "The Bee Lady", in an exciting lesson on bees and apiaries at her own Bee Farm. Cathy is a retired teacher, a wealth of resources, wisdom, and humor to share. Tune in for classroom activity ideas that connect math, literacy and science standards to bees and agriculture.*

## **Day 5 – Act 48 & MWEE Wrap Up**

### **Thursday, Aug 6**

#### **Session 1 - Act 48 & MWEE Wrap Up**

**Tammie Peffer, PA Department of Education**

**2 – 3:30 p.m. 1.5 Act 48 hours (Up to 4 available)**

*Everything we do upstream affects what happens downstream. In Pennsylvania, those downstream bodies of water include the Chesapeake Bay, Delaware Bay, and even the Gulf of Mexico. Tie your new knowledge in agriculture to standards in science, effective instruction and assessment, and hands-on activities. Tamara*

*“Tammie” Peffer, Executive Director, PA Advisory Council on Environmental Education, will lead teachers through a series of activities to learn how to implement previous session content and the Meaningful Watershed Educational Experience (MWEE) training into their classrooms.*

*Note: Participants should complete the MWEE training before their first session. You will receive 3 Act 48 hours for the initial training and up to 4 hours for attending this session.*