



### **Wednesday June 24 – Elementary, All Educators**

**9:00 AM- 10 AM Eastern Time**

**Scrambled States of Agriculture** – (Grades 3-6) – Kevin Daugherty

A fresh twist on National Agriculture in the Classroom State Reports. This is a great activity for both virtual and in class learning! Start with a state, research the state on the National Agriculture in the Classroom State Agriculture Fact page, pick a book related to agriculture from that state and then link to other books/videos and highlights about the state! Take a unique look at every state!

Kevin Daugherty, Illinois Agriculture in the Classroom, [kdaugherty@iflb.org](mailto:kdaugherty@iflb.org) Kevin Daugherty is the Education Director for the Illinois AITC Program. Daugherty holds a Bachelor's in Secondary Education from the University Illinois and a Master's in Higher Education from Eastern Illinois University. A former Junior High and High School History and English teacher, Daugherty worked for as an implementation and curriculum developer for a publishing company before joining the Illinois Farm Bureau AITC Program in 2000.

**10:30 AM – 11:30 AM Eastern Time**

**Cattle, Pigs and Turkeys – Oh My!** – (Grades Pre-K-12) – Sue Knott, Keri Sidle

Discover how Minnesota Agriculture in the Classroom utilizes agricultural animals as an exciting context for learning in STEM, social studies, and language arts. Attendees will gain hands-on experience with our favorite animal-themed activities from the National Agricultural Literacy Curriculum Matrix as well as a glimpse into animal focused events like our Facebook Live Virtual Field-trips and Summer Teacher Tours. Participants will leave with fun and engaging curricular ideas perfect for the animal lovers in their classroom!

Sue Knott (Primary Presenter), Minnesota Agriculture in the Classroom, [sue.knott@state.mn.us](mailto:sue.knott@state.mn.us) Sue Knott's agriculture roots were established on her family's farm in southwestern Minnesota. Experiences in 4-H, FFA and helping raise crops and livestock inspired her to earn a degree in agricultural education from the University of Minnesota. She taught high school agriculture classes for nine years before joining the Minnesota Agriculture in the Classroom team as Education Specialist. In this role, Sue enjoys providing professional development that empowers educators to integrate agriculture into their classroom and curricula.

Keri Sidle (Presenter 2), Minnesota Agriculture in the Classroom, [keri.sidle@state.mn.us](mailto:keri.sidle@state.mn.us) Keri Sidle is a native of Jacksonville, Florida. She discovered her passion for agricultural education while serving as an Ambassador for the College of Agricultural and Life Sciences at the University of Florida. She helped open two new agricultural education programs at public schools both in suburban areas during her 6 years of teaching. Keri relocated to Minnesota in 2014 and joined Minnesota Agriculture in the Classroom in 2016.

**AT 12:00 PM – 1:00 PM Eastern Time**

**Hands-On, Problem-Based Learning Where Students Explore and Create** – (All Grade Levels and Audiences) – Ronda Hamm

*Sponsored by Corteva Agriscience*

Come learn about FREE science-based lesson plans and resources available on a range of subjects for a range of ages. We will walk through where to find them and discuss fun ways to expand beyond the curriculum. From designing healthy ice pops to learning about plants' growth needs, each lesson plan is primed to inspire and excite students in the classroom. Each lesson plan uses relatable scenarios and fun, hands-on activities to fuel deeper student engagement in STEM, while connecting students to the exciting world of food and agriculture. Students will learn the processes of research, design, evaluation, modification, and presentation through the creation of a healthy ice pop. Students will observe seeds, match them to the fruits from which they came, and design investigations to answer questions that they generate about seeds.

Ronda Hamm (Primary Presenter), Corteva Agriscience, [ronda.hamm@corteva.com](mailto:ronda.hamm@corteva.com) Dr. Ronda Hamm received her Bachelor of Science degree in Agricultural Education at Fresno State University. She received her Master of Science and Doctorate degrees in Entomology at Cornell University. She is the Global Academic Relations manager for Corteva Agriscience. In this role, she develops and implements strategies and relationships to promote science, people, and innovations for the future of agriculture.

#### **AT 1:30 PM – 2:30 PM Eastern Time**

**Driving STEM – Super Soybean Car** – (Grades 3-5) – Leah Pratt (American Farm Bureau Foundation for Agriculture), Joanne Hogan or Rachel Hogan (Ford)

*Sponsored by American Farm Bureau Foundation for Agriculture and Ford Motor Co.*

Ever get in a car and wonder...am I sitting on soybeans? Henry Ford thought you should! Learn from the folks at Ford how you can fascinate students with how much of a car is made of renewable, recycled, and repurposed resources! Then the American Farm Bureau Foundation for Agriculture and Ford Motor Co. will walk you through how to incorporate hands-on activities so students can explore more. You will leave with a whole range of resources to engage students in history, language arts, to science and beyond.

Leah Pratt (Primary Presenter), American Farm Bureau Foundation for Agriculture, [educationdirector@fb.org](mailto:educationdirector@fb.org). Leah Pratt is an education specialist with the American Farm Bureau Foundation for Agriculture (AFBFA) where she develops new resources for K-12 educators. She graduated from California State University, Chico with a Bachelor of Science degree in Agriculture Science and a minor in Human Nutrition. She currently lives on cattle ranch in Blackfoot, Idaho.

Joanne Hogan (Presenter 2), [jhogan1@ford.com](mailto:jhogan1@ford.com) is a Senior Director at OneMagnify, a Tier 1 supplier to Ford Motor Co. for over 25 years. She is responsible for starting and administering the Ford and Farm Bureau Partnership for the last 12 years. Joanne is an Illinois Farm Bureau Member and is a familiar face around the Farm Bureau events at the Annual Meetings and YF&R events in each state. She is also responsible for administering other Affinity & Marketing Programs, such as Military Appreciation, First Responder, USAA, and other Affinity Partnerships for the Retail Marketing Department at Ford Motor Co. She graduated with her bachelor's degree from Eastern Michigan University and resides in Dearborn, MI with her husband and daughter.

Danielle Lewerenz (Presenter 2), [dani25240@hotmail.com](mailto:dani25240@hotmail.com) is an international elementary school teacher who is privileged to work with OneMagnify, a Tier 1 supplier to Ford Motor Co. at Ford Partnership events for the last four years. She has been teaching overseas for over 10 years in Japan, Morocco, and Ukraine. Currently, she is teaching second grade in Kyiv, Ukraine. She has a master's degree in education from Wayne State University and a teaching license from George Mason University. This is her first time presenting at NAITCO and she is excited to share Ford's sustainability program with teachers in America.

#### **3:00 PM – 4:00 PM Eastern Time**

**Hydroponics in Classrooms: Inexpensive Projects and Curriculum for Indoor Gardening** - (All Grade Levels and Audiences) – Melissa Sikes

Alaska Agriculture in the Classroom has been working on developing a new resource called the Alaska Indoor Gardening Curriculum. The curriculum was developed with cross-curricular activities and lessons on plant biology and practical inexpensive systems. Many teachers throughout Alaska are using this resource to enhance their STEM learning, but any

educator can use it anywhere. This past year teachers developed a modified inexpensive grow tower made with two- and five-gallon buckets and components that can be easily found and have made a video of how to put it together.

Melissa Sikes (Primary Presenter), Alaska Agriculture in the Classroom, [mel.fswcd@gmail.com](mailto:mel.fswcd@gmail.com). Melissa Sikes is the Natural Resource Education Specialist at the Fairbanks Soil and Water Conservation District in Fairbanks Alaska. She works as the state coordinator for the Alaska Agriculture in the Classroom program. She went to Unity College in Maine and got her Bachelor of Science degree in Outdoor Recreation.

#### **4:30 PM – 5:30 PM Eastern Time**

**Bringing the Farm to the Classroom through Virtual Farm Trips** - (All Grade Levels and Audiences) – Dan Toland, Virtual Farm Trips

*Sponsored by Shift\*ology Communications/Virtual Farm Trips*

Using live video chat technology, Shift•ology Communication's Virtual Farm Trips program connects students across the country, from remote parts of Alaska to the boroughs of New York City, directly with beef, dairy, pork, sheep and soybean farmers for unscripted, unfiltered and unrestricted live farm tours and conversations from the comfort of their classrooms. Participants will take a LIVE Virtual Farm Trip, learn what is involved in the program and how Shift•ology provides the structure and platform to help its partners hit the ground running with successful Virtual Farm Trip programs.

Dan Toland (Primary Presenter), Shift•ology Communications, [dan@shift-ology.com](mailto:dan@shift-ology.com). Dan Toland has more than a dozen years of experience working for and with farm organizations on agricultural advocacy and education efforts through the use of digital and social media. Over the past six years, he has grown Shift•ology Communication's Virtual Farm Trips program from a single series of small trips for one client to a packaged platform that helps state, regional and national agriculture organizations host thousands of students at a time on customized, virtual trips across the country. He has a Bachelor of Science degree in agricultural communication from graduate of Ohio State University.

#### **Thursday June 25 – Middle School, High School**

##### **9:00 AM – 10 AM Eastern Time**

**Feeding the World and Protecting the Environment** – (Grades 6-12) Tracy Baxter (Nutrients for Life) -

Our students will be challenged with providing enough food for the world's growing population with decreasing space for food production and without harming the environment. That is where soil science comes in – soil is essential to a plant's success and plays a huge role in feeding the world. In this workshop, we will explore the biogeochemical cycles that provide the nutrients that plants need using resources from Nutrients for Life. We will also explore the relationship between soil nutrients and water quality, specifically harmful algae blooms. Activities will include games, interactive web sites and case studies.

Tracy Baxter (Primary Presenter), [tbaxter@nutrientsforlife.org](mailto:tbaxter@nutrientsforlife.org) Tracy Baxter is the Florida Regional Representative for the Nutrients for Life Foundation. Prior to her role at the Foundation, she worked as a middle and high school science teacher, was a member of the Hardee County School Board and the South West Water Management District.

Dr. John Jones (Presenter 2), [jjones@4Rresearch.org](mailto:jjones@4Rresearch.org), is the director of the Foundation for Agronomic Research, a non-profit research and education foundation created to improve research, education, economic vigor, and sustainability of agriculture in North America and around the world while protecting and enhancing natural resource development. He is an alumnus of Kansas State University (bachelor's degree) and Iowa State University (master's degree and doctorate degree) and a native of Wisconsin. His research experience includes phosphorus management for agronomic and water quality benefits, soil-test calibration for nutrient recommendations, and soil pH dynamics in the Midwest. He and his wife live in Jefferson City, MO.

##### **10:30 AM – 11:30 AM Eastern Time**

**Integrating Agriculture through STEM** – (Grades 6-12) – Katie Buckley

Looking for ways to integrate agriculture into your curriculum? Look no further! In this session you will learn about some fun, hands-on activities that can be easily integrated into just about any classroom setting. Soil sampling, topography, drones, and precision agriculture are some approaches just to name a few.

Katie Buckley (Primary Presenter), LeRoy CUSD 2, [Buckleyk@leroyk12.org](mailto:Buckleyk@leroyk12.org) Katie Buckley is a teacher in the LeRoy School District in Illinois. She teaches a variety of classes including STEM, Computer Science, Algebra and Personal Finance, and provides enrichment STEM classes to students at LeRoy Elementary. She runs a weekly after school program at LeRoy Elementary. She also provides support to teachers Pre-K through twelve for STEM.

### **12:00 PM (Noon) – 1:00 PM Eastern Time**

**Virtual Field Trip: Discover the Cows, Community, and Journey of Dairy in Your Classroom** – (Grades 3-12) – Rashel Clark

*Sponsored by Dairy West*

It can be difficult for students to connect classroom concepts to the real world. Attendees will experience a live virtual field trip to a dairy farm to enhance their learning and understanding as they see how a farmer puts concepts discussed into practice. We will explore opportunities to connect the tour and STEM concepts for different age groups. How does milk get from the farm to their dinner table? Take a chance to investigate how energy transfers from the sun to the food they eat. Finally, the many career possibilities which intersect within the dairy and food industry.

Rashel Clark (Primary Presenter), Dairy West, [rclark@dairywest.com](mailto:rclark@dairywest.com) Rashel Clark is a Registered Dietitian, and completed her bachelor's degree at Utah State University, and master's degree in human nutrition from West Virginia University. She now works for Dairy West and serves as a vital link supporting nutrition science and research to educators, school food service professionals and health professionals.

### **1:30 PM – 2:30 PM Eastern Time**

**Journey 2050: Engaging Students in World Food Sustainability - NEW Updates!** – (Grades 7-12) – Tessa Matuszak

*Sponsored by Nutrien, Ltd.*

Journey 2050 is a free, STEM program that engages grades 7-12 in discussions about feeding the world. Lesson plans are provided. NEW resources tied to the educational gaming platform include a lesson on technology and innovations in agriculture, a project-based-learning-focused summary, and a service learning unit. Students virtually farm and build a career avatar. Download Journey2050 from the App Store before the workshop if possible.

Tessa Matuszak (Primary Presenter), National Agriculture in the Classroom Organization, [programs@naitco.org](mailto:programs@naitco.org) Tessa Matuszak joined National Agriculture in the Classroom Organization (NAITCO) in 2019 as its program manager to oversee the rollout of educational gaming platforms Journey 2050 and Farmers 2050. Before joining NAITCO, she served as a 4-H program leader in Sonoma County, California, worked as a program manager for Sonoma County Farm Bureau and worked as a 4-H educator for Cornell Cooperative Extension Service in Erie County in New York. She has bachelor's degree in dairy science from California Polytechnic State University and a master's degree in career and technical education from State University of New York

### **3:00 PM – 4:00 PM Eastern Time**

**Climate Change, Carbon Hoofprints, and Bananas in Our Breadbasket?** – (Grades 6-12) – Andrea Gardner and Bekka Israelsen

This session will model how to engage students in the science of climate change using the carbon cycle and agriculture (food) as a context for studying the causes, implications, and possible solutions for feeding a growing population in a changing climate. Will "Meatless Mondays" reduce our carbon footprint? Should we plan on growing bananas instead of wheat in America's breadbasket? Explore how climate change can foster critical thinking and address an authentic world problem.

Andrea Gardner (Primary Presenter), National Center for Agricultural Literacy, [andrea.gardner@usu.edu](mailto:andrea.gardner@usu.edu) Andrea Gardner is an Education Specialist for the National Center for Agricultural Literacy. Prior to this position she was a high school agricultural science teacher. Her lesson plans have been adopted and published as state-wide curriculum in two Utah courses as well as numerous lesson plans posted on the National Agricultural Literacy Curriculum Matrix.

Bekka Israelsen (Presenter 2), Utah Agriculture in the Classroom, [bekka.israelsen@usu.edu](mailto:bekka.israelsen@usu.edu) Bekka Israelsen is the Pre-K–12 Education Specialist for Utah Agriculture in the Classroom. She graduated from Utah State University with a

bachelor's degree in Agricultural Education and a master's degree in Career and Technical Education. Prior to working for Utah AITC, Bekka spent three years in the classroom as a high school agricultural science teacher and FFA advisor. She now develops elementary and secondary curriculum for Utah teachers, and presents various preservice and in-service workshops statewide.

**4:30 PM – 5:30 PM Eastern Time**

**I Have a Plan! Developing Project-based Learning Plans for Agricultural Literacy** – (Grades 3-12) – Dr. Debra Spielmaker and National Center for Agricultural Literacy Team

Explore how to develop Project-Based Learning (PBL) plans that promote an awareness of agriculture and agricultural careers using the seven research-based essential design elements. Participants will use a PBL template and resources from the National Agricultural Literacy Curriculum Matrix to develop PBL plans for their educational setting.

Debra Spielmaker (Primary Presenter), National Center for Agricultural Literacy @ Utah State University, [debra.spielmaker@usu.edu](mailto:debra.spielmaker@usu.edu) Debra Spielmaker is a Professor at Utah State University in the School of Applied Sciences, Education, and Technology. In addition to her faculty role at Utah State University, she serves as the Team Leader for the National Center for Agricultural Literacy. She taught agricultural science for seven years in Utah and Montana and directed the Utah Agriculture in the Classroom program for 20 years.

Andrea Gardner (Presenter 2), National Center for Agricultural Literacy, [andrea.gardner@usu.edu](mailto:andrea.gardner@usu.edu) Andrea Gardner is an Education Specialist for the National Center for Agricultural Literacy. Prior to this position, she worked as a high school agricultural science teacher. Her lesson plans have been adopted and published as state-wide curriculum in two Utah courses as well as numerous lesson plans posted on the National Agricultural Literacy Curriculum Matrix.

Lynn Wallin (Presenter 2), National Center for Agricultural Literacy, [lynn.wallin@usu.edu](mailto:lynn.wallin@usu.edu) Lynn Wallin is an Education Specialist for the National Center for Agricultural Literacy at Utah State University. Prior to her work with NCAL, she was an Education Specialist for Utah Agriculture in the Classroom and taught grades 1, 2, 3, and 4 in Utah and Arizona. She received a Bachelor of Science degree in Elementary Education from Brigham Young University and a Master of Education degree from Utah State University.