

# Academy Workshops 2018

## DRAFT

### **Condensed Dairy Science**

Food Science, Animal Science

Doug Sahr, Academy for Sciences & Agriculture, St Paul

This workshop focuses on the variety and complexity in the world of Dairy. We will explore how many people are involved in getting milk from the farm to your table in just a few days. We will also be sampling milk qualities and cheese variety and discovering some of the many options we have to pick from.

*Doug Sahr has been a teacher of Agriculture for 7 years. While teaching he has served as an FFA advisor, Manager of the Miracle of Birth Center at the MN State Fair and FIRST robotics coach as well as helping out with the Summer Ag Academy at Inver Hills for the third year. As a son of a dairy farmer, Doug has always appreciated what farmers do and how much work they undertake to get food to our tables.*

### **Small Animal Care & Handling**

Animal Sciences

Brad Nord, School of Environmental Studies, Apple Valley

Over half of MN households own at least one pet. The companion animal industry includes everything from veterinary care and retail stores to breeders, educators, nutrition, genetics, and more. This class will teach you how to care for, select, and handle small animal species. Expect to see and handle several small animal species while learning the basics of their care.

*Brad Nord currently teaches agriculture in the animal sciences and has been teaching at the School of Environmental Studies for over 20 years. His past includes growing up on a hog farm in southern MN, teaching with raptors and reptiles at the Iowa 4-H center, supervising a petting farm at a residential camp, and working as a summer educator at the MN Zoo. He likes to share with others his fondness of animals and enjoys assisting students find their own interests and career path. In his spare time he likes reading, games, martial arts, outdoor activities, and spending time with his family and friends.*

### **Veterinary Techniques**

Animal and Veterinary Sciences

Dan Foss, Champlin Park High School

In this session you will learn how to administer medication using 3-4 different methods. You will also learn how to perform a variety of suture techniques on animal tissue. Learn some skills and information in the Veterinary and Animal Science Fields.

*Dan Foss teaches Agricultural Science at Champlin Park High School. Prior to teaching at CPHS, Mr. Foss taught in the Princeton Public Schools. Mr. Foss has been teaching Animal Science in some capacity for more than 25 years. Mr. Foss has his Bachelor of Science degree from the University of Minnesota and a Master's degree in Leadership from St. Cloud State University. Mr. Foss lives in Brooklyn Park with his wife and three children.*

## **Whitetail 101**

Wildlife Management, Conservation

Steve Hinrichs, Plainview-Elgin-Millville High School

There is no other mammal in Minnesota that captivates our interest than the whitetail deer. Deer are part of a \$500 million dollar industry in Minnesota! Why are whitetail deer so interesting to people? This class will tell you why! We will learn about the deer's unique digestive system, how their glands help in reproduction as well as warning them of predators; and we can't forget about their antlers and what a trophy buck really is! Whitetail 101 will have a nice mix of classroom instruction as well as laboratory and hands-on learning

*Steve Hinrichs has been an ag teacher & FFA advisor since 1997. He started at Forest Lake High School, and since 2004 has been at Plainview-Elgin-Millville High School. He teaches classes in Wildlife Management, Animal Science, Horticulture, and Welding. Mr. Hinrichs is an avid hunter and lifelong outdoorsman.*

## **Soil Science**

Natural Resources, Conservation & Sustainability

Ed Terry, Randolph School

Soil is the giver of all life! It is one of our most precious natural resources and is disappearing at an alarming rate with housing, industry, and public uses. Understanding soil is vital to the future of man-kind. We will discuss soil texture, soil structure, soil types, and fertility. Lab activities will be incorporated into the class.

*Ed Terry has just completed his 46th year of teaching agriculture (6 in Farmington and 39 in Randolph), including plant and soil science, animal science, forestry and conservation, and many ag mechanics classes. He farms, and his farm has been recognized as River Friendly. He was a dairy farmer until 2004 and now has a beef cow/calf operation, raises feeder cattle, corn, soybeans, and alfalfa.*

## **Animal Health**

Animal Sciences

Kristy Storbakken

Good husbandry practices include continuous assessment of animal well-being. This includes monitoring for parasites and other infectious diseases. In this lab, you will learn commonly used techniques to monitor for parasites, as well as protocols for basic urinalysis, hematology and basic microbiology.

*Kristy Storbakken grew up on a family dairy farm in Northern Wisconsin and loved the farming lifestyle. She currently lives in Princeton, MN with her husband, 5 children, 1 cat, and 2 chinchillas. She attended the University of Wisconsin - River Falls for Broad Area Agriculture and Agriculture Education. She taught High School Agriculture in Princeton, MN for 10 years before taking family leave. She taught mostly in the Animal Sciences, but also taught Food Chemistry and Game Animals.*

## **Planting for Pollinators**

Horticulture, Entomology, Sustainability  
Pam Koenen, Alden-Conger School

Bees, butterflies, hummingbirds and other pollinating insects and birds are an endless and fascinating study. There are a variety of plants that are beautiful and easy to grow to attract a multitude of these creatures into a container garden. During this session we will look at a number of plants and learn what insects and birds they will attract. Participants will design and plant a container garden with plant species that will attract pollinators to their surrounding landscape

*Pamela Koenen has been an agricultural education instructor for 26 years. She has spent most of that time at Alden-Conger School -- a small, rural district in southern Minnesota. She has a background in dairy, beef, horses and swine. Her school has a greenhouse and has raised bedding plants, poinsettias and recently tomatoes for the school lunch program. In her spare time, she is an avid gardener with a large perennial garden. Her home landscape and plants have been specifically designed to attract a variety of pollinators. Her other hobbies include crocheting, decorating cakes, and riding her motorcycle.*

### **The Buzz on Entomology**

Wildlife, Conservation  
Katie Talbott, Inver Hills Community College

Who helps safeguard the world's crops? Who helps protect livestock and public health against disease? Who looks out for the future of our native plants and insects? Entomologists! Learn about the fascinating (and lucrative!) world of entomology as we work on a bumble bee survey on behalf of the University of Minnesota's Bee Atlas. You'll also learn how you can use a smartphone to help scientists save our bees! We will spend part of the workshop outside doing field work, so be sure to wear close-toed shoes and long pants.

*Katie Talbott is an incoming PhD student at Indiana University, and has worked at the University of Minnesota, Inver Hills Community College, Minnesota Zoo, Tinker Air Force Base in Oklahoma, the Sternberg Museum of Natural History, and the Kansas Wetlands Education Center. She studied biology and English in college, and then researched lizard behavior for her Master's degree. She lives in St. Paul with her giant Maine Coon cat and enjoys hiking, kayaking, knitting, and wildlife photography.*

### **The Forests Around You**

Forestry  
Leanna Cernohous, St. Croix Central

Get to know the forests around you by identifying trees, and knowing what is good to be there, or what is not good to be there. You'll leave with a sample of the forest, to help you on your journey in your neighborhood!

*Leanna Cernohous is dual licensed in Agricultural Education and Special Education. She enjoys the outdoors, spending time with her family and running. Leanna tries to be outside as much as possible through gardening, hunting, fishing, taking walks, riding horses, whatever she can do to be outside! Her favorite subjects to teach are Natural Resources, Food Science, Animal Sciences and Life Skills.*

## **Electricity Basics**

Engineering

Ben Johnson, MACCRAY High School, Clara City

Learning Basic Electricity: From flipping the light switch to plugging in your cell phone charger. We often take for granted all the benefits that electricity provides for us. Come and learn the basics of home wiring and how we transport electricity throughout the house. In this workshop you will learn how to wire outlets, switches and light receptacles. We also talk about fuses, wire sizes, electrical boxes and other common components used in wiring.

*Ben Johnson has been teaching agriculture for 4 years. Previous to this he had 14 years of experience in the Dairy Industry. Besides teaching, Ben enjoys gardening throughout the summer. Ben and his wife run Sunrise Hill Farm, providing people with CSA shares (Community Supported Agriculture) and selling at local Farmers Markets. They also currently raise Boer goats and have an Australian Shepherd.*

## **Career Assessment Workshop**

College & Career

### **Summer Academy 4-H Activity Coordinators**

The career workshop will explore careers in agriculture, food, and environmental sciences. You will take an interest assessment quiz and participate in small group discussion with others that share similar career interests. A value assessment quiz will help you further explore potential careers.

## **Resume Writing and Interviewing**

College & Career

Leanna Cernohous, St. Croix Central

Have you had to write a resume yet? Are you confident you did a good job? How about an interview? Was it fun, were you nervous? We will prepare you in both areas so you can be confident in what you are doing! A confident person is a good candidate, and we'll have fun building your skills to write a solid resume, and prepare you for a great interview!

*Leanna Cernohous is dual licensed in Agricultural Education and Special Education. She enjoys the outdoors, spending time with her family and running. Leanna tries to be outside as much as possible through gardening, hunting, fishing, taking walks, riding horses, whatever she can do to be outside! Her favorite subjects to teach are Natural Resources, Food Science, Animal Sciences and Life Skills.*

## **The 4-Cs Framework for the College-search Process**

College & Career

Aaron Salasek, Director of Outreach and Recruitment, Inver Hills Community College

Selecting a college can be one of the most confusing - and overwhelming - processes a student and family goes through. How does one pick their ideal college? What are the questions one should ask? Can I afford college, and if so, how do I make it all work with my personal life, career aspirations, financing, and so on? This presentation by Inver Hills Community College's Director of Outreach and Recruitment conveys a simple structure by which students can assess their fit factors for their ultimate college of choice: culture, coursework (i.e. majors options), cost, and continuing with next steps.

*Aaron Salasek's career experiences consist of volunteerism through AmeriCorps, teaching at the university level while studying the philosophy of education, and – for the past eight years – advising students with access to higher education at two-year public community and technical colleges as well as four-year private institutions. He has worked on many areas of critical student services' programming, and is involved in both the state and national professional organizations for admissions counselors, focusing on areas of applied ethics and admissions policy. He is delighted to be the Director of Outreach and Recruitment at Inver Hills Community College, where he and his staff can serve students and families to the best of their abilities!*

## **Academy Staff**

Conservation Department; a wildlife technician at Tinker Air Force Base in Oklahoma; a curator at the Sternberg Museum of Natural History; an interpreter at the Kansas Wetlands Education Center, and a teaching assistant at Fort Hays State University. She studied biology and English in college, and then researched lizard behavior for her Master's degree at Fort Hays State University. She lives in St. Paul with her giant Maine Coon cat and enjoys hiking, kayaking, creative writing, birdwatching, and wildlife photography. She also enjoys spending time on her aunt's mohair goat farm, helping process mohair fiber, and selling knitted goods.

### **Anja Johnson**

*4-H Program Coordinator*

*Dakota County, University of Minnesota Extension*

Anja Johnson has worked with the 4-H Youth Development Program with the University of Minnesota for the past 10 years and has been with Dakota County for eight. Anja works with over 1200 youth in the largest county 4-H program in Minnesota.

Anja graduated in 2007 from North Dakota State University in Animal and Range Sciences with a minor in Child Development. She earned her masters degree in Youth Development and Leadership from the University of Minnesota in 2016. Anja has an extensive background and passion for animals especially beef cattle, goats and horses.

Anja is married and has three children (Owen 6, Sierra 3 and Derick 12 months). In her spare time she enjoys spending as much time as possible outdoors with her family, especially going to her childhood farm near Northfield, MN, riding her horses and playing with goats (45 to be exact!!). She also enjoys the quiet time at their cabin in northwestern Wisconsin.

### **Kristin Digiulio**

*Inver Hills Biology Faculty*

*Coordinator for Outreach & Advancement, Agricultural Science*

Kristin's lifetime passion for agriculture began on her family's farm in rural New England, and continued as she studied animal science in high school and at the University of Connecticut. Her interest in science and policy brought her to Washington DC, where she received a Master's degree from Georgetown University. While in DC, Kristin worked as a policy analyst at the Center for Food and Nutrition Policy, and planned international scientific symposia for the Ceres Forum.

Kristin moved to the Midwest to pursue her doctorate. As a USDA fellow in Agriculture and Applied Economics at the University of Minnesota, she completed coursework for a minor in Marketing at the

Carlson school. She also completed coursework and preliminary exams in Conservation Biology. After lecturing in both Applied Economics and Biology at the U of M, Kristin began moonlighting off-campus, and found a new passion: teaching community college students. Her career took a 180 degree turn, and since 2005 Kristin has been teaching Biology to students throughout the Twin Cities metro.