



## Science

### Florida 4H20 Ambassadors

**Tues. 1:15 – 3:15 pm**

*Heather Kent, NorthWest RSA; Dr. Amy Shobe, Soil and Water Science; Georgene Bender, SouthCentral RSA; Ben Knowles, Jackson County; Brent Broaddus, Hillsborough County; Dr. Paula Davis, Bay County*

Water is one of the most important emerging issues to our state. The 4H20 Ambassadors curriculum has recently been adapted and piloted in Florida.

Participants will receive an overview of the curriculum, experience activities, and learn how to incorporate this curriculum into a variety of 4-H program delivery modes.

This curriculum is perfect for agents and volunteers who are interested in expanding the 4-H science initiative in their county with an emphasis on the environment and natural resources.



### Bed Bugs and Book Bags: Youth Enrichment Curriculum

**Tues. 1:15 – 3:15 pm**

*Dr. Rebecca Baldwin, Department of Entomology and Nematology; Erin Harlow, Commercial Horticulture Agent, Duval County; Corraine McNeil, Department of Entomology and Nematology*

*Bed Bugs and Book Bags* is a fun, interactive 4-H curriculum designed for 3<sup>rd</sup>-5<sup>th</sup> grade aged students.

Workshop participants will learn about bed bug identification, prevention, and control. Presenters will go into depth about how to use the curriculum. Participants will then have the chance to use the curriculum through hands-on activities and discover how it can be incorporated into 4-H clubs, school enrichment programs, and day camps.

### Hatching with my Peeps

**Tues. 3:45 – 5:15pm**

*Crystal McCazzio, Putnam County; GERALYN SACHS, St. Johns County; Stephanie Conner, Clay County*

Are you interested in implementing the embryology project but fear all the guidance and maintenance involved with the project? Come and learn about new ways to get the most out of the embryology project while providing a great experience and allowing the teachers to work independently as all they need is in the new supplemental embryology curriculum. You will also get ideas for evaluation and sample evaluation tools.

### Weather and 4-H Climate Variability

**Weds. 8:30am – 12:30pm**

*Heather Kent, NorthWest RSA; 4-H Science Team*  
Weather and climate variability is a current and relevant topic for today's youth, but one that many people are not comfortable teaching. This session will cover the basics about weather and climate and dispel many myths that have been made popular by recent films and media coverage. Participants will receive an overview of a teaching toolkit that can be used in a variety of delivery modes, and will build capacity for science programming related to weather and climate issues. In addition, participants will learn about opportunities for a mini-grant program for youth to conduct climate related service projects in their local communities or schools.

### Explore Agriscience...It's All Around Us

**Weds. 8:30am – 12:30pm**

*Xiomara Diaz, Marion County; Nancy Gal, Marion County*

This workshop will empower faculty, staff and volunteers to help middle school youth utilize science-based applications in agriculture and food safety as well as influence their attitudes toward careers in agriscience. Milk will be the featured food through the supply chain. Participants will increase their knowledge of agriscience and become more confident in their ability to help youth explore educational and career opportunities in this field.

### What is Phenology and How 4-H Clubs Can Get Involved

**Weds. 3:15 – 5:15pm**

*Sherri Kraeft, Wakulla County; Will Sheftall, Leon County; George Kish, USGS*

Phenology is "the science of appearance". Scientists who study phenology are interested in the timing of specific biological events (such as flowering, migrations, and reproduction) in relation to changes in season and climate. Phenologists attempt to learn more about the abiotic factors to which plants and animals respond by making observations of specific plant and animal species throughout the year. By incorporating 4-H youth and adults, participants can become citizen scientists.

### Adventures in 4-H Marine Education: Building Life Skills and Ocean Science Literacy

**Weds. 3:15 – 5:15pm**

*Karen Blyler, State Environmental Science Coordinator*  
This hands-on workshop provides an overview of the 4-H State Marine Ecology Event (MEE), its goals and objectives, and how county faculty can help leaders and youth prepare for it. Attendees will participate in a fun "mock MEE" activity plus learn about additional marine science activities that can be used to help youth prepare. The workshop will include a discussion of life skills youth might practice as a result of participation in the MEE. Helpful resources, organizations, and contacts in marine education will be shared.



## **Organizing and Managing 4-H Shooting Sports Programs in your County**

**Weds. 3:15 – 5:15pm**

*Jerry Culen, FY&CS; Laura Cash, Volusia County; Gus Koerner, Brevard County; Albert Fuller, Levy County*

This session will introduce participants to the State and National Shooting Sports Program as well as help faculty develop and manage 4-H Shooting Sports Programs within county. The intent is to familiarize county faculty, county directors and volunteers with the 4-H Shooting Sports guidelines, curriculum, equipment loan program, youth events and grant opportunities at the State and National levels. This session will also review training opportunities, distribute training manuals and review discipline specific materials.