Agriculture Adventures Teacher Training

Food for Thought - Annual 4-H STEM Challenge

Description: "The 2024 STEM Challenge was developed by 4-H educators from LSU AgCenter, North Dakota State University, Penn State Extension, and University of Nebraska–Lincoln. This year's kit will provide fundamental knowledge on food security, how people are impacted locally and globally, and how youth can co-create more food secure communities."

Website: https://4-h.org/programs/stem-challenge/

Junior Master Gardener

Description: No garden needed for this interactive training utilizing Junior Master Gardener curriculum! Ever suck a bug to study insects or make mud pies to evaluate soil texture? This session will focus on the *JMG Teacher & Leader Guide* provides elementary teachers with the tools to teach the world of gardening with eight chapters of novel, hands-on and proven lessons. The curriculum also helps develops life skills, includes career exploration and provides opportunities for students to culminate the JMG experience with service-learning projects. As students complete areas of study, they can earn different recognition certifications including designation as Certified Junior Master Gardeners.

Pollinators - Bees and Butterflies

This session will be led by the writer of this curriculum, Liz Driscoll (NCSU Extension - 4-H Specialist Crop & Soil Sciences, Entomology & Plant Pathology, Horticulture)

Busy World of Bees

Description: The Busy World of Bees is crafted to engage youth in celebrating bees and their pollinator allies and build an understanding of the benefits that bees and other pollinators provide to humans, as well as the fact that all bees need our help to do their work. In a series of seven lessons, youth will discover that the bee is one of nature's wonders. They will learn that bees, both native bees and the European honey bee, help produce delicious and healthy food that humans have been eating for millenia. Youth will also explore the diversity and differences within habitats and garner further

understanding of what honey bees, native bees, and other pollinators need to grow and thrive.

Busy Bees contains seven engaging lessons. Below are brief summaries of the lessons and a sampling of activities, assessments, and worksheets contained within the curriculum.

Hive Helpers

Description: Every spring and summer, youth and adults alike enjoy sweet-smelling flowers and listening to the buzzing sound that comes from the rapidly beating wings of busy bees. Through a series of seven lessons and multiple experiential activities, youth will learn how critical bees are to our agricultural industry and native ecosystems. They will explore different types of bees, their structures, and functions, how they forage for food, pollinate plants, and the ways bees share information. Youth will study native bees and the honey bee and discover the significant role they play in production of delicious and healthy food that humans have been eating for centuries. The curriculum concludes with an overview of how people can help bees. Youth will learn how to provide nesting habitats, use best management practices in beekeeping, and building native bee homes

Winged Wonders

Description: E.O. Wilson, renowned naturalist, once called butterflies “the flowers of the air.” Beautiful with their brilliant colors, graceful flight, and benign behavior, butterflies enhance our landscapes and gardens. They are also indicators of a healthy environment and healthy ecosystem. Butterflies play a role in pollination and serve as part of the food chain for other organisms. Butterflies serve as a gateway to understanding the natural world and a visual reminder for the need for conservation of all living things around us.

In this curriculum for youth ages 6-8, youth will observe the wonders of the natural world unfolding in front of them by raising painted lady butterflies from larva through adulthood. Youth will experience the mystery of the butterfly life cycle while engaging in hands-on activities that explore concepts of insect structures and functions, compare insect behaviors and life cycles, and demonstrate the role everyone can play in environmental stewardship.