

Science on the Green 2019 Workshop List & Course Descriptions

Water Biodiversity	Earth's Surface Systems	Habitat & Vermont Ecosystems	Conservation	Meet a Professional
Water Quality? Ask the Bugs!	The Incredible Journey	Day in the Life of a Forester	What's Your Water Footprint	Game Warden Dog Demonstration
Let's Go Fishing	The Importance of Dirt	Tree Identification	Recycle Rally and the 3Rs	Wildlife tracking
Hands-on Hatchery Truck	Shoreline Erosion	Invasive Plants and Insects	Interactive River Demonstration	Trail Building



Water Biodiversity

Water Quality? Ask the Bugs!

Students will conduct a simulated stream bioassessment and view live bug specimens.

Phenomena can address standards: MS-LS2-3, MS-LS2-4, MS-LS2-5

Lead scientists: Lindsay Miller and Laura Dlugolecki

Let's Go Fishing

Students will learn about fishing regulations, fish identification and how to cast in a fun, hands-on way.

Phenomena can address standards: MS-ETS1-1, MS-LS4-3

Lead biologist: Corey Hart

Hands-on Hatchery Truck

Hop aboard one of Vermont Fish & Wildlife Department's fish hatchery trucks, see some of the live fish on board, and learn the science behind how we raise and stock fish in Vermont, what we do to promote fisheries and fishing in Vermont, and why it matters to all Vermonters.

Phenomena can address standards: MS-LS1-4, MS-LS2-1

Lead biologist: Adam Miller



Earth's Surface Systems

The Incredible Journey

An interactive game to simulate the movement of water through the water cycle.

Phenomena can address standards: MS-ESS2-4

Lead scientists: Lindsay Miller and Laura Dlugolecki

The Importance of Dirt

Soil occurs at the interface of the Earth's rocks, air, and life. It purifies water, forms habitat for organisms, and provides the food we eat. Through playing with dirt, students will discover how soil forms, what it is made of, and why it is important.

Phenomena can address standards: MS-ESS2-2, MS-LS2-5, MS-ESS3-2

Lead scientist: Grahame Bradley

Stabilizing Shorelines

See the shorelines for all their benefits and values in a hands-on activity exploring the impacts of tree loss, erosion, and sedimentation.

Phenomena can address standards: MS-ESS2-2, MS-ESS2-6

Lead scientist: Ryan Colarusso



Habitat and Vermont Ecosystems

Day in the Life of a Forester

What do foresters do besides walk in the woods? Explore some of the things foresters do every day including measuring trees, reading maps, and other fun surprises.

Phenomena can address standards: MS-LS2-5, MS-LS1-4

Lead forester: Dan Singleton

Tree Identification

Learn some fun tricks for identifying Vermont's most common trees with hands-on activities.

Phenomena can address standards: MS-LS1-5

Lead scientist: Rebecca Roy

Invasive Plants and Insects

Through fun games and hands-on exploration learn some cool ways to identify and deal with invasive plants in your community and around your home. // Have you heard about Emerald Ash Borer? Learn about this and other invasive insects and learn how to survey trees in your community and at your school.

Phenomena can address standards: MS-LS2-2, MS-LS2-5

Lead ecologists: Ginger Nickerson and Elizabeth Spinney



Conservation

What's Your Water Footprint

Did you know the average American uses 100 gallons of water a day? In this activity, students will be presented with a pile of 100-gallon jugs and ask to share what they use water for during the day. Students will also participate in the Common Water activity to learn about aquifers in a hands-on relay activity.

Phenomena can address standards: MS-ESS3-3, MS-ESS3-4, MS-LS2-5

Lead scientist: Ashley Lucht

Recycle Rally and the 3Rs

Where does stuff go when you're done using it? Learn the basics of waste management and compete with classmates to test your knowledge of how to reduce waste and what can be recycled or composted.

Phenomena can address standards: MS-ESS3-1, MS-ESS3-3, MS-ESS3-4

Lead scientists: Emma Stuhl and Anne Bijur

Interactive River Demonstration

The river flume model will be used to demonstrate conflicts that occur between managing development, roads, and other infrastructure with rivers, and opportunities for protection and restoration.

Phenomena can address standards: MS-ESS3-2, MS-LS2-5

Lead scientists: Kim Jensen and Staci Pomeroy



Meet a Professional

Game Warden Dog demonstration

Meet Game Warden K9 Moose and see him in action in a quick demo. Followed by a talk about what Game Wardens do.

Phenomena can address standards: MS-ETS1-1

Lead Game Warden: Jenna Reed

Wildlife Tracking

Vermont Fish & Wildlife Department will be leading the walk. No special skills are necessary for participants – just the curiosity to witness stories wildlife leave behind. From the tracks of a fox catching a ruffed grouse in the to a mouse scurrying along whipping its tail behind, Vermont's landscape is a great place to discover signs of wildlife.

Phenomena can address standards: (*Transferable Skills*) Self direction, Responsible and Involved Citizenship, Informed and Integrative thinking, (*Crosscutting Concepts*) Patterns, Cause and Effect, System and System Models, (*Science and Engineering Practices*) Analyzing and Interpreting Data, Asking Questions and Defining Problems, and Obtaining, Evaluating and Communicating Information.

Lead scientist: Ali Thomas

Trail Building

Learn the art and science of trail building with hands-on activities.

Phenomena can address standards: MS-ETS1-1, MS-ETS1-2

Lead forester: Walter Opuszynski