Chris Goforth, Citizen Science

North Carolina Museum of Natural Science

Podcast length: 16:17



LESSON PLAN

SYNOPSIS

The Walking Classroom's Laura Fenn talks with <u>Chris Goforth</u>, who is the Senior Manager of <u>Citizen Science</u> at the <u>North Carolina Museum of Natural Science</u> and is studying to become an aquatic entomologist. Chris explains how a childhood fear became a passion and career, what citizen science is, and how everyone can get involved.

VOCABULARY

Review key vocabulary (included definitions are limited to the context of today's podcast)

- o **entomology:** (noun) the study of insects
- o **swarm:** (noun) a large group of insects, especially flying ones
- o **citizen science**: (noun) the study of the world by everyday people who live in it
- o **PhD, Doctor of Philosophy:** (noun) a degree that certifies an individual is an expert in a particular field

QUESTIONS FOR THOUGHT & DISCUSSION

- 1. Chris Goforth explained that citizen science means everyday citizens help researchers achieve scientific goals by collecting, processing and analyzing data. Is citizen science a good idea? It is important for citizens to get involved in scientific research? Why or why not?
- 2. Chris Goforth talked a lot about how her interest in studying insects turned into a career in entomology. What passions do you currently have? Can you think of a job in science that might be related?
- 3. Chris Goforth found that studying insects was a passion and it developed into her career as an aquatic entomologist. She explained that some people thought she was weird and tried to convince her not to pursue her passion. Is it important to be true to yourself regardless of what others think? Why or why not?

BOOK SUGGESTIONS

Consider reading aloud or making some of these titles available to students to reinforce and extend some of the concepts covered in today's podcast.

Something Stinks by Gail Hedrick

When dead fish start washing ashore, seventh grader Emily Sanders convinces her classmates to help investigate in this Outstanding Science Trade Book for 2014.

Citizen Scientists by Loree Griffin Burns

Readers are encouraged to get involved in scientific studies and helping gather data through vivid photos and tips for how to get started.

The Frog Scientist by Pamela S. Turner

(Part of the Scientists in the Field Series)

This book follows the life of a young man who has always had an interest in that leads him to present day where he is an amphibian scientist investigating the decline in frogs along with ordinary citizens in the United States.

A Dragonfly's Life by Ellen Lawrence

This book explores the life cycle of a dragonfly. Reader will learn about the anatomy, hunting habits and metamorphosis of the dragonfly.

EXTENSION ACTIVITIES

The following activities are ways to build on and extend some of the topics discussed in the podcast. We strongly encourage you to always preview videos prior to showing them to your students.

National Geographic's Project Noah

Projectnoah.org

Project Noah is attempting to document wildlife and allow everyone to be involved in citizen science. All participants needs is a mobile phone to capture photos of nature.

Citizen Scientists http://bit.ly/1CsaHSc

Lesson Plan from Science NetLinks

After reading and discussing the book <u>Citizen Scientists</u> by Burns, students are encouraged to look into a citizen scientist project they are interested in learning more about.

The Frog Scientist 1: The Mystery of Disappearing Frogs http://bit.ly/1UG51Ku Lesson Plan from Science NetLinks

Student work in small groups to answer a series of questions to help them better understand that scientific investigations involve the collecting of evidence, logical reasoning, and the development of a hypothesis.