



Y-CITYSCI: A Youth-Led Citizen Science Network for Community Environmental Assessment
Introduction to Nature of Science and Citizen Science: Lesson 7
Grade Level: Middle school
Duration: 1 hour

Guest Scientist Part 2

Next Generation Science Standards

Disciplinary Core Idea ESS3.C: Human Impacts of Earth Systems

Science and Engineering Practice 8: Obtaining, Evaluating, and Communicating Information

Objectives

- 1) Students meet an environmental scientist and discuss the concepts of that scientist's research.
- 2) Students will recognize the tools used to conduct that research and their purpose.

Material

- Soil sampling tools
- Guest scientist that specializes in soil research

Activities

Bellringer: Discuss class expectations when we have a guest and give a brief introduction for the guest scientist. (5 minutes)

Guest Lecture and Activity: Have the guest introduce themselves, their research, and the scientific tools and instruments they use during their research (such as soil sampling tools). Have them give a demonstration of how to use them. Break students into groups and go outside to practice using the tools. (45 minutes)

Discussion: Have class return and discuss what they liked and did not like about using the tools. Have students write down ways that soil data can be used to inform them of the soil quality in their community. Discuss the ways being aware of soil quality in a community can be useful to its community members. (10 minutes)

