

Solomon Family Insectarium

BACKGROUND FOR EDUCATORS

Overview of Student Worksheets: INSECT SMACKDOWN!

Using worksheets, students explore the ecological roles of insects and how these roles affect other organisms in their ecosystems.

- **Reference (p. 1):** Students use the map to find the eight live insects (Worksheet Part 1) and the three areas (Worksheet Part 2), as well as to learn about different ecological roles and the insects' ecosystems.
- **Worksheet Part 1 (p. 2):** Students visit and observe eight live insects in the Insectarium. In a March Madness-style "Insect Smackdown" bracket tournament, students determine which insect could survive in a student's chosen ecosystem.
- **Worksheet Part 2 (p. 3):** Students visit three areas of the Insectarium to further investigate their chosen insect champion's ecological role in its own natural ecosystem.

These observations help students experience a **natural phenomenon**—that insects have a variety of different physical traits and diets. This phenomenon can serve as an anchoring point in exploration and discussion as the students explore the **investigation question**: How do the ecological roles of insects affect other organisms in the ecosystem?

Extension Ideas

Back in the classroom, students research an insect in their school's environment that performs the same ecological role as their insect smackdown champion (decomposer, herbivore, or predator). Additionally, students can research insect decline to investigate what would happen if that insect disappeared: How would the absence of the insect impact other organisms in their school's environment? How would it affect humans? What could be done to protect insects? Students can then construct an argument for the importance of maintaining biodiversity.

Correlation to Standards

This activity supports the following Next Generation Science Standards:

Disciplinary Core Ideas	LS2.A: Interdependent Relationships in Ecosystems Organisms are dependent on their environmental interactions both with other living things and with nonliving factors.
Crosscutting Concepts	Stability and Change Small changes in one part of a system might cause large changes in another part.
Science and Engineering Practices	Obtaining, Evaluating, and Communicating Information Critically read scientific texts to determine the central ideas and/or obtain scientific information to describe patterns in and/or evidence about the natural world.