

ACTIVITY GUIDE

TINY SLIMY CARBON KEEPERS

Protecting urban ecosystems maintains natural balances in the carbon cycle and reduces city contributions to climate change. Participants become salamanders and eat organisms that disrupt the carbon cycle in the forest's leaf litter zone.

IN THIS KIT

- Facilitation guide
- 1 poster, Salamanders of Pennsylvania
- 1 Carbon cycle graphic
- 3 question signs: What's the point of this activity?
- 7 salamanders on magnetic spoons/sticks
- [15+] invertebrates on colored chips
- 1 large plastic container
- Multicolored fabric leaves
- *New York Times* article: "Salamander's Hefty Role in the Forest"

BIG QUESTIONS

- What roles do plants and animals play in the carbon cycle?
- How do salamanders regulate carbon in Pittsburgh's forest ecosystem?

HOW TO SET UP

- 1) Fill plastic container with leaves and scatter invertebrate chips throughout. Set out salamander sticks.
- 2) Display posters and question signs.

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FACILITATION GUIDE

(This works best if children are directed to the activities, while caretakers are engaged in conversation and display information. This script is written for one visitor at a time but can be adapted for groups.)

- Do you know what a salamander is? Do you know what salamanders eat?
(Wait for responses, guide discussion towards leaf box with invertebrates.)
- When trees are growing, they pull carbon from the air and hold it in their leaves. The carbon stays in those leaves when they fall to the ground. Little invertebrates that live on the forest floor (like insect larvae) eat the leaves and release the stored carbon. If there are too many, too much carbon will be released! Luckily, they are kept at a healthy level by other animals that eat them. You're going to be one of those—a salamander!
(Hand participant a salamander stick, demonstrate how to "catch" invertebrates in the leaf litter)
- To conclude the experience for a participant, point them to the 3 question signs: What's the point? [A] Do we need more salamanders? [B] Do we need bigger, stronger, and faster salamanders? Finally, [C] Biodiversity is important, even in urban areas.
- Did you know that salamanders are in trouble? What are the habitat needs for salamanders and how can the city of Pittsburgh provide proper places for these important carbon keeping creatures?

FINISHED KIT



ABOUT CUSP

CUSP helps urban communities explore climate impacts and solutions through active engagement with local examples.

