



Create a Critter: Build Your Own Invasive Species



~Caregiver Instructions Page~

Objective – Understand what an adaptation is and how they allow invasive animals to successfully invade an ecosystem. Use this knowledge to create an imaginary “super invasive” animal.

Audience and Time – 1 or more participants; ages 8+; 20-30 minutes

Background – *Invasive species* are plants or animals that **are not native to where you’ve found them**, and **causes harm to things we value**, like the environment, human health, and the economy. All animals need the right combination of water, nutrients and space to survive and reproduce. Organisms are constantly competing for these necessities and have evolved strategies, or adaptations, to obtain these precious resources. **An adaptation is a trait or behavior that helps an organism to better survive and reproduce in its environment.** For example, invasive rusty crayfish can breed when they’re one year old, and can lay up to 575 eggs! This adaptation greatly increases their likelihood of successful reproduction. The invasive spiny water flea is another invasive species with several interesting adaptations. Its barbed tail means that no local predators want to eat it; it also makes for an effective dispersal tool as the spiny water flea attaches itself to fishing lines and other equipment and hitches rides to new locations.

It is important to stress to student(s) that *all* plants and animals have adaptations.

Supplies You Need to Collect Ahead of Time

- Paper and colored pencils
- Create a Critter worksheet (next page), printed single sided (so they can draw on back)
- Optional:** Arts and crafts supplies ex. pipe cleaners, construction paper, tissue paper, scissors, tape, glue, paper towel rolls, etc.

Activity

- Step 1. Have a quick discussion with the student(s) about the definition of an invasive species. And then discuss the definition of adaptation, asking them to give some examples of adaptations. You can share some specific examples of adaptations that invasive animals, like rusty crayfish, have that make them so successful.

You may want to ask them guiding questions during this discussion, such as:

What do animals need to survive?

How might some animals get more of that thing that helps them survive?

- Step 2. Have student(s) design their own invasive “critter”, incorporating specific adaptations. This could be done in a variety of ways depending on grade level, time and materials available, and whether this is in person or virtual instruction.

The worksheet provided can be a good starting point.

- Student(s) draw their critter or build a 3D model
- Have them include at least 5 adaptations from the worksheet
- Have them give their critter a name

- Step 3. Report out: Have student(s) show their creations, and explain how these adaptations give their invasive “critter” an advantage, highlighting their favorite adaptation

CREATE A CRITTER!

WORKSHEET

You are going to invent your own invasive critter! Think back to our discussion on the adaptations that make invasive animals so successful at taking over habitats. Remember, all animals are competing for water, nutrients, and space. What will make your invasive critter the most successful at obtaining these precious resources? Fill out the work sheet then draw and label your animal. Make sure you include at least 5 adaptations.

Choose from the following adaptations and characteristics or make up your own!

Habitat: Where does it live?

lake pond stream river

How does it compete with other animals?

fast growing effective reproduction out-eats competition other

How does it protect itself?

armed hard shell bad taste poisonous hairy other

How does it reproduce?

early in its life lots of eggs other

How many offspring does it have?

1-10 11-100 101-1000 1001-10,000 10,000+ other

How does it spread itself or find new habitat?

floats in the current attaches to rocks or fishing equipment swims other

What does it look like?

color and shape:	
size and texture:	
claws barbs or shell:	
Exoskeleton, endoskeleton, or no bones:	
Other characteristics:	

NAME of your invasive critter: _____

Draw your animal in its habitat on the back of this paper. Label the different adaptations and characteristics that make it a super invasive.