



Outdoor Biology Instructional Strategies

ADAPTATION-PREDATOR-PREY

BACKGROUND

Communities of plants and animals always include predators and prey. Predators have adaptations, enabling them to capture and eat their prey. In this activity these adaptations are referred to as **predator devices**.

A predator device is only one type of animal adaptation. An **adaptation** is any special feature of an organism that improves its chances of surviving and reproducing.

Create predator devices that can catch and pick up prey. Be careful not to injure any living plants or animals.

MATERIALS

Toothpicks
Popsicle sticks
Rubber bands
Glue
Scotch tape
String

Pins
Paper fasteners
Cardboard
Wire
Pipe cleaners
Natural materials found at study site.

ACTION

Take the group to any outdoor study area, such as a field, stream, woodlot, lawn or vacant lot. Assign study areas. Ask the participants to locate any materials in their plot which might be “prey” (food) for animals living in, or passing through the area. (Seeds, eggs, roots, vegetation, insects, slugs, worms, mice and other organisms may be prey).

When prey have been isolated, have participants try to build simple devices analogous to the claws, beaks, and jaws of likely predators. Use simple materials such as those on the materials list, and whatever can be found “on location” at the study site.

If you wish to provide more direction for participants, distribute an Action Card to each. Every participant can then try to build a predator device to meet the challenge on his card.

- Make a predator device that could catch or pick up an egg.
- Make a predator device that could catch a flying insect.
- Make a predator device that could dig up roots.
- Make a predator device that could pick up leaves
- Make a predator device for getting at animals that live underground.
- Make a predator device that a meat eater would use.
- Make a predator device for breaking nuts and eating the nuts.

Whatever approach is used, participants will enjoy demonstrating their devices to the group after finishing construction.

WHAT DO YOU THINK?

Why are there so many different kinds of predator devices?

What would happen if every animal had the same predator device?

What adaptations do prey have so as to avoid being eaten by predators?

FOLLOW-UP

Have everyone look for predators in the study site and decide what kind of prey they are adapted to eat.

WHAT TO DO NEXT

Invent an Animal

Animal Movement in Water

Who Goes There?

**ACTION CARD
PREDATOR PREY**

Make a predator device for breaking nuts and eating the meats.

**ACTION CARD
PREDATOR PREY**

Make a predator device for getting at animals that live underground.

**ACTION CARD
PREDATOR PREY**

Make a predator device that could catch or pick up an egg.

**ACTION CARD
PREDATOR PREY**

Make a predator device that a meat eater would use.

**ACTION CARD
PREDATOR PREY**

Make a predator device that could catch a flying insect

**ACTION CARD
PREDATOR PREY**

Make a predator device that could dig up roots.

**ACTION CARD
PREDATOR PREY**

Make a predator device that could pick up leaves.