Disappearing Act

Science Film Festival — Knowledge Through Entertainment

Visual Theory | Perception | Camouflage

Science Film Festival Films

Hawkeye – Adventure in Busuanga

Learning Goals

- To compare what you see when a camouflaged figure remains still to what you see when the figure is moving.
- To understand the basic principles of camouflage.

Explanation of Scientific Principles

Most animal species in the world have developed some sort of natural camouflage that helps them find food and avoid attack. The specific nature of this camouflage varies considerably from species to species. There are several factors that determine what sort of camouflage a species develops: Camouflage develops differently depending on the physiology and behavior of an animal. For example, an animal with fur will develop a different sort of camouflage than an animal with scales.

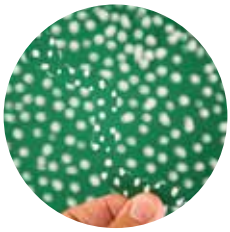
An animal's environment is often the most important factor in what the camouflage looks like. The simplest camouflage technique is for an animal to match the "background" of its surroundings. For most animals, "blending in" is the most effective approach. You can see this sort of camouflage everywhere. Deer, squirrels, hedgehogs and many other animals have brownish, "earth tone" colors that match the brown of the trees and soil at the forest ground level. Sharks, dolphins and many other sea creatures have a grayish-blue coloring, which helps them blend in with the soft light underwater.

Explanation of Connection to the Film

The film explores animals in "Busuanga", the home to more than a hundred animals in the Philippines that roam in the 3 760-hector "Calauit Safari Park". Amongst the animals covered in the film, are several who deploy camouflage techniques.

Materials

- Scissors
- Two pieces of dark blue, black or green construction paper
- A piece of clear plastic the same size as the construction paper
- Optional: Wrapping paper or magazine picture with a dense, repeating pattern



Preparation

1. Cut out an animal shape from one of the pieces of construction paper. Leave a projecting rectangle of paper to serve as a handle.
2. Use correction fluid or metallic marking pens to make a random pattern of dots on both the animal figure and the second piece of construction paper. The second piece of paper will act as the background for the figure.

1

View the animal cut-out against the background from an arm's length away. It should be very difficult, if not impossible, to detect the shape of the animal. If you can see the edges, move about two meters away and have a partner hold the animal and the background together.

2

Place the cut-out so you can use the handle to move the animal while it is under the glass or plastic. Notice that this movement makes it easier to detect the presence of the animal and to identify its shape.