



Aquarium Webcam Resource Kit
Lesson 2 “Kelp Forest Habitat”
6th- 8th Grade

Next Generation Science Standards:

- **MS-LS2-1** Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
- **MS-LS2-2** Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
- **MS-PS1-3** Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.
- **MS-LS1-6** Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

Supplies:

- Kelp Forest Habitat video
- Ocean Ranger Kelp Forest worksheet
- Computer & projector to show Blue Cavern Webcam:
<http://www.aquariumofpacific.org/exhibits/webcams>
- Build-a-fish program at: <http://www.aquariumofpacific.org/teachers/buildafish/>

Lesson Activities:

Step 1: Watch “Kelp Forest Habitat” Video

Pre-video Prompts

- What is kelp? What is a kelp forest?
- Where can you find it in the world’s oceans?

Post-video Prompts

- How do animals use the kelp forest?
- How do people use kelp?
 - Kelp is used as an emulsifier, meaning it helps bind ingredients together. Kelp is sustainably harvested and used in hundreds of products such as medicine, make-up products, food such as ice cream, and personal care products like toothpaste.
- What types of organisms live in the kelp forest?
- How could you study an animal using the webcam?

Step 2: Blue Cavern Webcam & Activity Sheet

Ocean Ranger Kelp Forest Worksheet

- Students will have an opportunity to use an ethogram, to collect more information about a specific animal's behaviors
 - Choose an animal to observe & draw.
 - Use observations to fill out an ethogram.
 - Look for any special characteristics of the animal.

Step 3: Build-a-Fish

- As a class use the Build-a-Fish program, starting with a kelp forest habitat.
- Decide what the fish eats, where it lives in the kelp forest (bottom, mid-water, or canopy), and who eats it. Based on this information think about adaptations to help them live in their habitat.
- Think-Pair-Share about the fish they observed in the webcam and some observations about its adaptations. Can they make predictions about what it eats, who might prey on it, and where it lives in the kelp forest?