

Kelp Forest Camouflage

Relay/Roleplay Game

KNOWLEDGE

- Become familiar with local forest and a few organisms that live in kelp forests.
- Bring attention to challenges faced by animals in this habitat as ecosystem shrinks and fragments through deforestation and changes to habitat from human use; urchin – otter – kelp forest chain
- Understand importance of camouflage for organisms survival

ACTIVE

- Players will get some exercise by running to central tree and back to a hiding place within view.

TIME	GROUP SIZE	LOCATION	GRADE LEVEL	EQUIPMENT
As long or short as you'd like.	4+	Outdoor well forested area	Any	Red ribbon or outdoor flagging tape (optional) *Remember to remove all tape after gameplay ends!

DEBRIEF/REFLECTIVE COMPONENT

- How did the 'urchins' impact the availability of kelp 'trees' in the kelp forest?
- Does this happen in real life? What could be consequences for species that require kelp forest habitats?

HELPFUL TIPS

Tricks for spotting people:

While the "it" person has his/her eyes open they can do the following:

- Numbers – hold up a certain number of fingers and all the hiding players must call out that number. If they call the wrong number they are out.
- Shake bush, knock a tree – all players must shake a nearby bush, or knock on a nearby tree.
- Animal noises – all players must make a loud animal noise.

OCEAN LITERACY PRINCIPLES

1 – The Earth has one big ocean with many features.

d. Although the ocean is large, it is finite, and resources are limited.

5 – The ocean supports a great diversity of life and ecosystems.

d. Ocean biology provides many unique examples of life cycles, adaptations, and important relationships among organisms (symbiosis, predator – prey dynamics, and energy transfer) that do not occur on land.

e. The ocean provides a vast living space with diverse and unique ecosystems from the surface through the water column and down to, and below, the seafloor. Most of the living space on Earth is in the ocean.

6 – The ocean and humans are inextricably interconnected.

d. Humans affect the ocean in a variety of ways. Laws, regulations, and resource management affect what is taken out and put into the ocean. Human development and activity leads to pollution (point source, non-point source, and noise pollution), changes to ocean chemistry (ocean acidification) and physical modifications (changes to beaches, shores, and rivers). In addition, humans have removed most of the large vertebrates from the ocean.

g. Everyone is responsible for caring for the ocean. The ocean sustains life on Earth and humans must live in ways that sustain the ocean. Individual and collective actions are needed to effectively manage ocean resources for all.

Setup

1. Find well forested area and pick a “central” tree.
2. Start with leader being “it” -- a predator, e.g., orca. This person must touch the central tree for the entire game. They are searching for food in a kelp forest.
3. Leader closes eyes and calls out “food for (pick a number)!” and count down from that number.
4. During count down all players must touch the tree and run into the forest to find a hiding place.
5. When leader reaches 0, they open their eyes. This ‘orca’ can move around tree but must stay touching, while trying to spot players hiding in the ‘kelp forest’ around them.
6. When spotted, found player is out and must sit in common “out” area.
7. Once orca/leader thinks they have found everyone possible for round, they close eyes and call “food for (number smaller than previous)!”
8. Remaining players will run back to central tree, touch it, and re-hide. Game continues until no one left.
9. If you’d like to make the game more challenging, get a ‘sea urchin’ another leader to start designating trees with flagging tape for “removal” – ie, urchin is eating the kelp holdfast and reducing the habitat to hide/camouflage in. These trees can no longer be chosen by players, illustrating the effect of deforestation/fragmentation in kelp forest habitat.