

# Seaweed Reproduction Phenology Site Definition

## Field Guide

### Task

To measure the beach aspect, beach slope, locate the longitude and latitude of your site, describe the dominant size of the beach substrate (rocks) and take photos.

### What You Need

- GPS receiver
- [GPS Protocol Field Guide](#)
- [GPS Data Sheet](#)
- [Seaweed Phenology Site Definition Sheet](#)
- [Documenting Your Hydrology Study Site Field Guide](#) (Hydrology Investigation)
- Compass
- Ruler in millimeters
- Camera
- Clinometer

### In the Field

1. Fill out the top section of the *Seaweed Phenology Site Definition Sheet*.
2. Draw a map of the site following the instructions in the *Hydrology Investigation, Documenting Your Hydrology Study Site Field Guide*.
3. Locate a place on the beach where you will sample.
4. Use the GPS receiver to find the latitude, longitude and elevation following the *Basic GPS Protocol*.
5. Stand perpendicular to the slope of the beach with your eyes facing the water. Measure the direction with the compass (1-360 degrees). Be sure to enter the true and not magnetic direction (aspect). 360 degrees is used for true north.
6. Work with another student whose eyes are at approximately the same height as yours. Stand several meters apart in a line perpendicular to the water's edge. The student closer to the water should site the eyes of the other student through the straw of the clinometer. Record the angle (slope) on the *Seaweed Phenology Site Definition Sheet*.
7. Estimate the size of the rocks that are dominant at the site using this table. Use the ruler to measure the longest axis of some of the rocks.

Category	Length of longest axis
Boulders	large >1000 mm
	medium 500-1000 mm
	small 256-500 mm
Cobbles	64-256 mm
Pebbles	16-64 mm
Gravel	2-16 mm

8. Take photos of the beach in the four cardinal directions: North, East, South, and West. Use the compass to determine direction. Use true North not magnetic north.
9. Provide map and photos to collaborating schools or post on your school's website.