Photo points

Taking photographs during sampling can be useful to document habitat conditions that may change over time. Habitat conditions include natural (sediments/vegetation) and constructed parameters (bulkheads/docks). They may change depending on planned activities such as plantings of vegetation and construction of shoreline armoring, and unplanned activities such as sediment and log movement due to winter storms and landslides.

Materials

- Digital camera, and tripod if possible
- Compass (or smartphone version) and transect tape
- GPS is useful for establishing locations
- Scalable reference (e.g., stadia rod, transect, or quadrat)
- Copy of previous photos, if applicable

Sampling Summary

- Annual photo points at exact locations and compass bearings
- Panorama photos of the entire site
- Photos related to other protocols, such as transect and quadrat locations, or cobble cam techniques for sediment sizes
- Photos useful for plant, algae, and invertebrate identifications

Scale of Effort

$$ Cost – medium, depending on materials, smartphones can substitute for other gear

$ People – low, 2-3 people can take photos

$ Fieldwork time – low, 1 day, once a year or during other sampling

$$ Processing time – medium, downloading and labeling photos

$ Technical expertise – low, use of digital camera and compass

Additional Resources

Reports that have used this method: Toft et al. 2010 (e.g., Figs 36-37)

Also see Ch. 8 in the Marine Shoreline Design Guidelines for more guidance on photo points

Suggested citation: Shoreline Monitoring Toolbox. Washington Sea Grant.
Website: shoremonitoring.org

Methods

Establish exact locations for photo points where key habitat conditions are visible and record the compass bearing of photo direction, camera height, and zoom or other photo details to allow future re-establishment. Document locations by relating to stable features, recording Lat/Long with GPS, or using a compass and transect tape to triangulate bearing and distance to stable features. Many smartphones have compass/GPS capabilities that can be used in place of other gear. Try to document habitat conditions such as vegetation, driftwood, beach topography, and shoreline armoring if present. Place a scalable reference in the area if it will help make qualitative measurements, such as a stadia rod, a known length of transect or size of quadrat. Take photos annually on a similar date. Daytime low tides in May-August allow documentation of the exposed intertidal beach. More frequent photos allow better documentation of episodic events such as winter storms and movement of logs. A panorama photo can be useful to capture general features of the entire site. Photos should be taken during other protocol sampling, such as at (1) transects looking from beginning to end and vice versa, also looking away from the transect to document adjacent conditions, (2) quadrats from above, (3) characteristics during invertebrate sampling (e.g., vegetation surrounding insect fallout traps). Photos can also be very useful to verify identifications of plants, algae, invertebrates, and other taxa of question.

Data to record in the field

Date, time, site name, location, compass bearing, and any other details pertaining to the photo.

Processing

Download and label each photo by using a standard labeling convention, such as: Site_Date_Habitat_photo#.jpg (e.g., Seahurst_6-11-14_dunegrass_4.jpg). Include in the label any other unique descriptors, such as transect elevation or quadrat number. Create a spreadsheet that includes the photo label and related information, such as location and compass bearing. Make a back-up and store where others can access. Photo points over time can generate qualitative metrics of parameters such as vegetative growth, log movement, general sediment and algae types, and presence and type of shoreline armoring or landscaping.