

EELGRASS MAPPING AND MONITORING FIELD REFERENCE GUIDE

Access the
full Handbook:

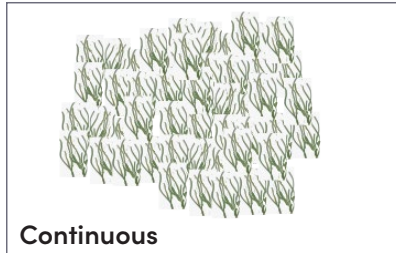


This Field Guide provides a quick reference of terms, classifications, and steps for mapping and monitoring eelgrass in the field. Refer to the full Mapping and Monitoring Handbook for more details.

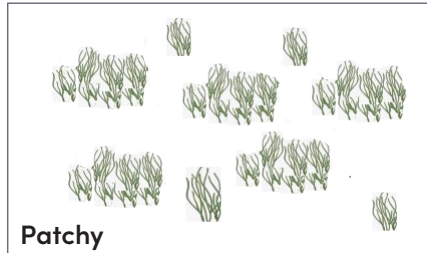
Distribution:

Continuous: Eelgrass is in one bed; there may be some bare patches within the bed.

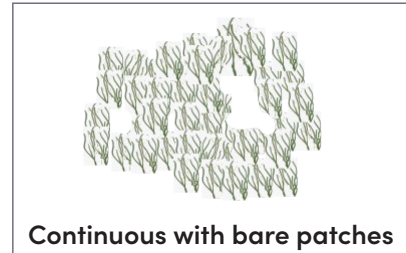
Patchy: Area contains isolated groups or patches of eelgrass.



Continuous



Patchy



Continuous with bare patches

Form:

Fringe: A narrow band in a narrow depth range, like a necklace along the shore.

Flat: A more expansive bed that covers a wide area outwards from the shore.

Tidal range:

Intertidal = eelgrass area located between the high and low water mark, exposed at low tide

Subtidal = eelgrass always under water, even during low tides it's below the water

Tide height: The height of the tide at a given time.

Substrate type:

Mud = fine, mucky

Mud/Sand = mixture of mud and sand

Sand = coarse grainy

Gravel = thumb sized rocks

Cobble = fist sized rocks

Boulder = large, heavy rocks

Bedrock = solid rock base, not broken into boulders

Shell hash = broken shells

Unknown: difficult to say with confidence

Percent cover of eelgrass:

<10% not much eelgrass, mostly bare sediment (mud, sand etc.)

11 – 25% more eelgrass, still more bare sediment than leaves covering the ground

25 – 50% almost as much eelgrass as bare sediment

51 – 75% more than half the area of the bed covered by eelgrass

>75% very little or no bare sediment

The images below show percent cover within a 0.25 m² area. The percent cover you record is for the entire bed, if it's all the same then record only the primary, if it varies record secondary (next most common range) and if present tertiary.



<10%



11 – 25%



26 – 50%



51 – 75%



>76%



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METHODS TO SURVEY THE PERIMETER OF AN EELGRASS BED

STEPS FOR A BOAT WITH A DROP CAMERA

Step One

Approach the bed from a longshore direction.

Step Two

Record a way point (x) as soon as eelgrass shoots more than about $1/m^2$ are encountered, measure and record depth, time, and tide height if available.

Step Three

Travel across the bed until you reach the opposite edge $<1 \text{ shoot}/m^2$, record a GPS point, measure and record depth, time, and tide height if available. This completes your first transect T1.

Step Four

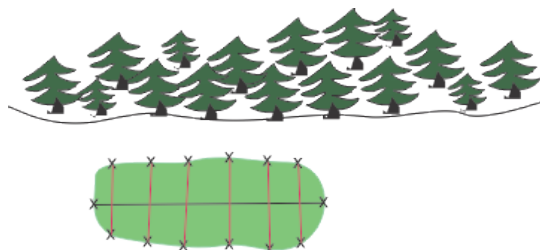
Head into deeper water and locate eelgrass bed edge near the end of T1, record waypoint. measure and record depth, time, and tide height if available.

Step Five

Travel towards the shore and record a waypoint once shoot density is $<1 \text{ shoot}/m^2$, measure and record depth, time, and tide height if available.

Step Six

Continue running transects across the bed until you reach the other side. The accuracy of your map will increase with the number of transects you survey.



STEPS FOR A DIVER, SNORKELER, KAYAKER

Step One

Snorkeler or free diver and kayak approach eelgrass between at about 1 and 2 m CD.

Step Two

Snorkeler or free diver drops a weighted float when eelgrass is first seen ($>1 \text{ shoot}/m^2$).

Step Three

Snorkeler or free diver follows edge of bed and drops a weighted float when direction changes. Kayaker moves to first float and takes a GPS point directly over the float.

Step Four

Snorkeler or free diver continues to follow edge of bed and drops a weighted float when direction changes, until they reach the first float. The accuracy of your map will increase with the number of points you record. Kayaker follow the person in the water recording a point at each float.

Step Five

Snorkeler or free diver swims throughout the bed slightly above eelgrass leaves checking percent cover and substrate composition.

