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Eelgrass Mapping and Monitoring on the Sunshine Coast- Dianne Sanford, SCWG

The importance of eelgrass

For people

- Carbon sink – carbon is sequestered in the substrate and in plants. The Blue Carbon value of eelgrass beds is currently being investigated.
- Substrate stabilizer and wave buffer.
- Oxygen provider
- Indicator of ocean health
- The leaves act as a trap for suspended materials that are brought to the seagrass meadows with the currents. Thus, sea- grasses clear the water of these materials.

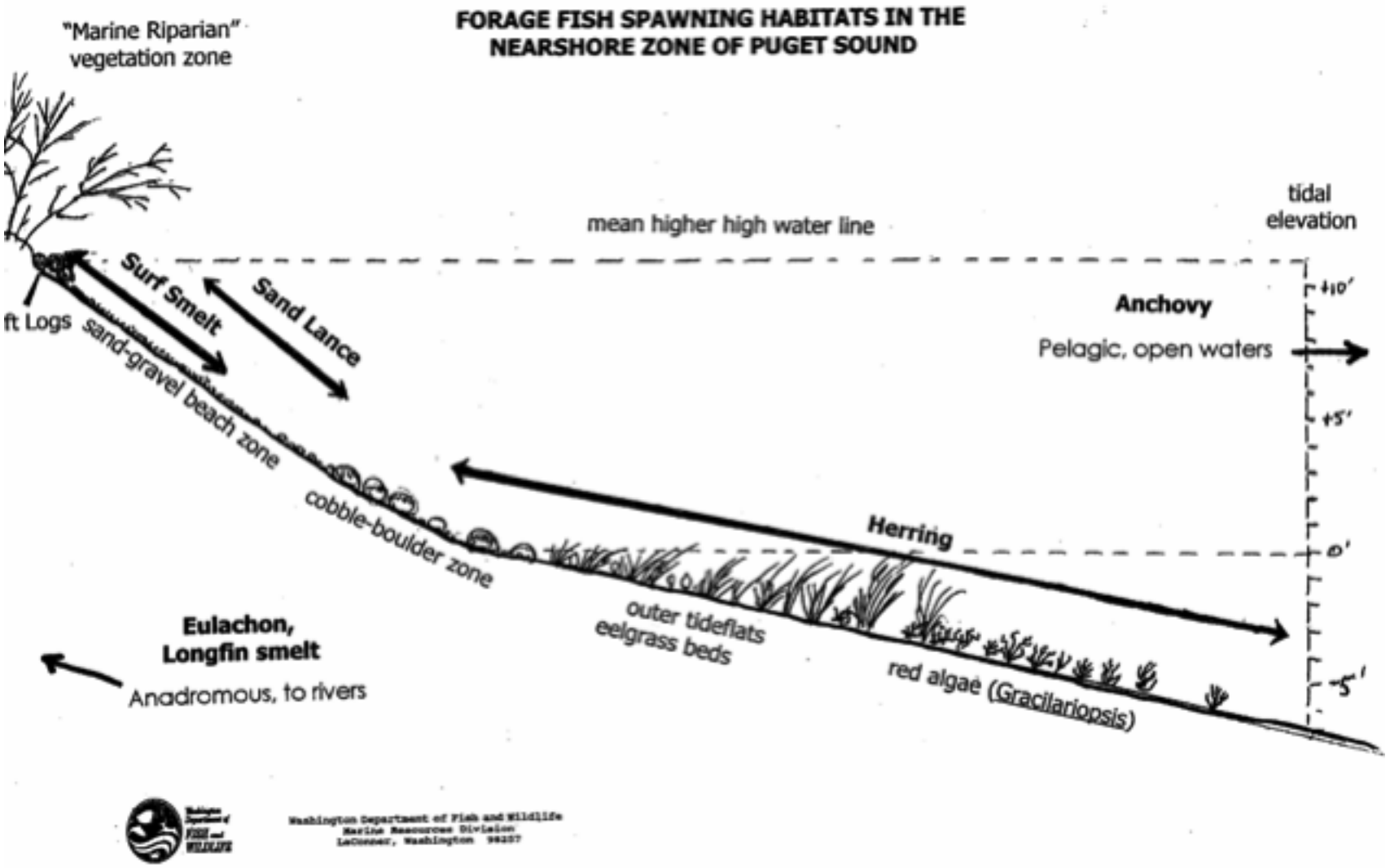
For ocean life

- Feeding, breeding, and nursery habitat for marine species
- Marine corridor for safe movement of sea life.
- Transition zone to salt water for salmonids.
- Oxygen provider.

Vulnerability of eelgrass

- Shading weakens and eventually kills eelgrass, a true photosynthetic plant. Shading prevents photosynthesis, and examples of shading are docks and swim floats.
- Mooring buoys cause scouring in a circular pattern around their anchorage, causing fragmentation of eelgrass beds.
- Pesticide and herbicide run-off from land kills or weakens eelgrass beds, as does dredging.
- Fragmenting beds (breaking the continuous nature of a bed) weakens the overall vitality of the eelgrass bed.

Sketch courtesy of Dan Pentilla, Washington State Fish and Wildlife



Pacific Sand Lance *Ammodytes hexapterus*

Juvenile salmonids depend on eelgrass for food and shelter before heading further out to sea.

Eelgrass Provides

- Nursery Areas for many species
- Protection from predation
- Protection from sun and rain
- Oxygen for us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W
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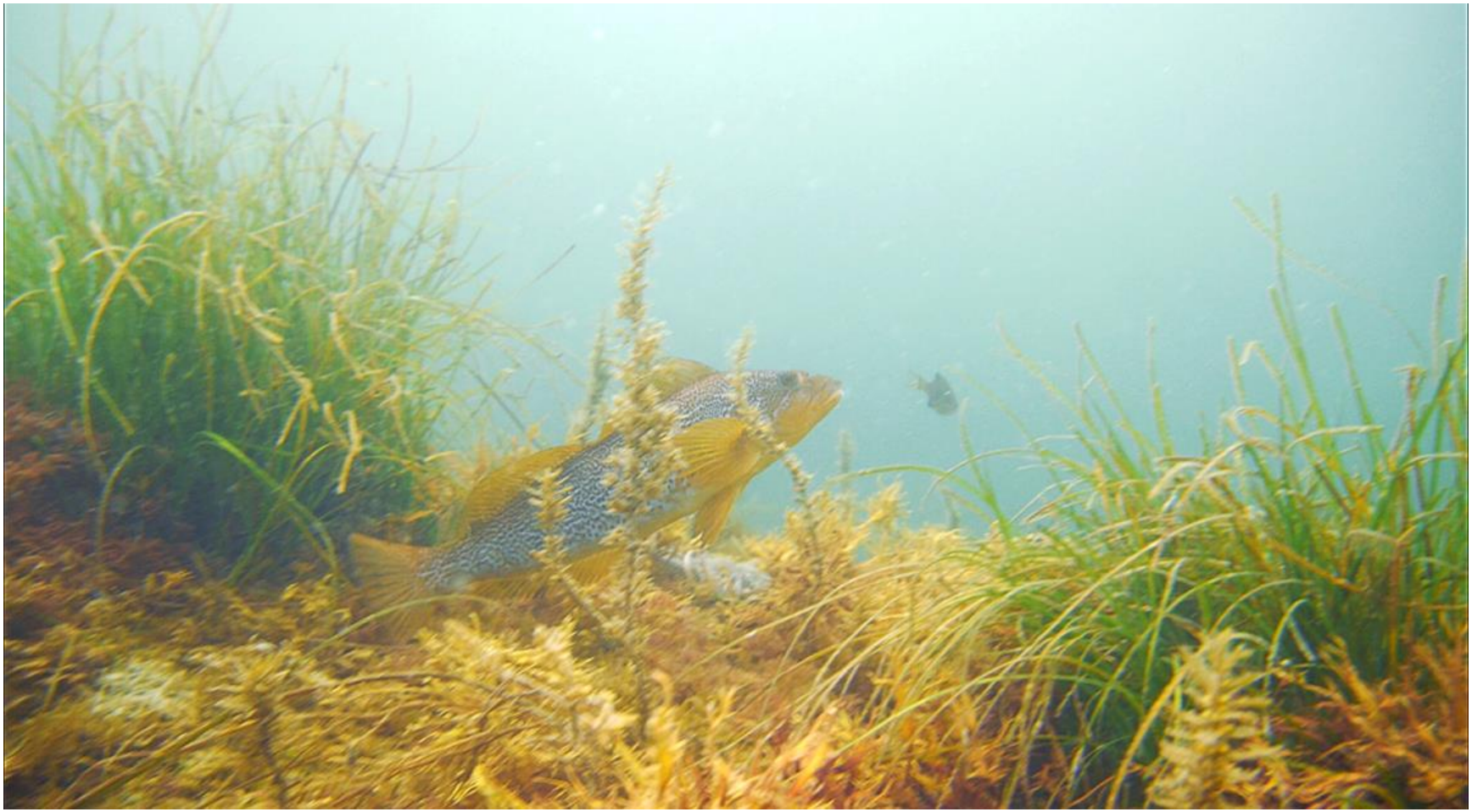
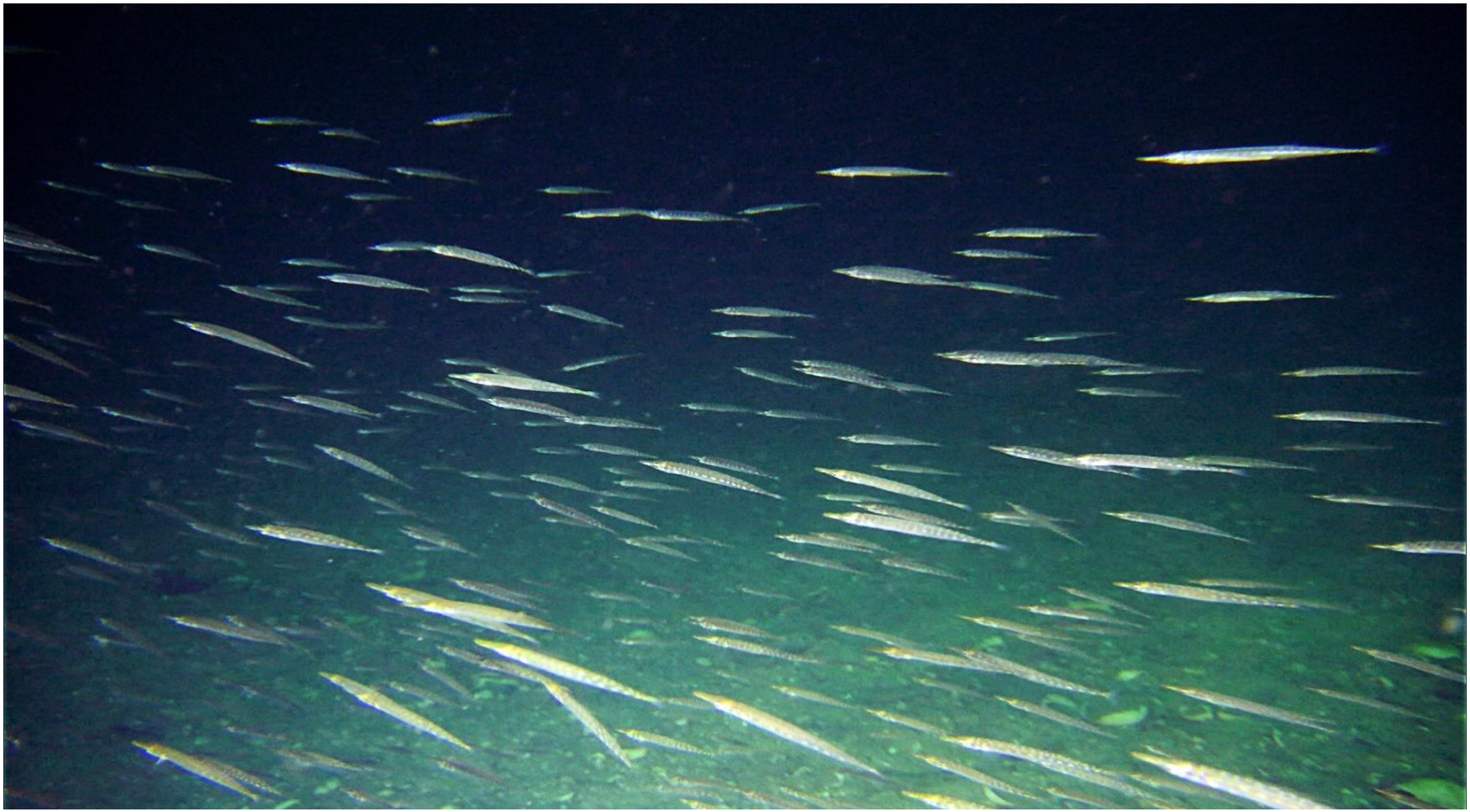
S
Fringing
Continuous
Flat
Continuous
Fringing
Continuous
Flat
Continuous
Flat
Patchy
0 50 100 200
Meters
Gibsons Harbour
Eelgrass Survey
June, 2013
September, 2013
July, 2005

Kelp Greenling in Eelgrass



Gibsons Harbour December 2013

photo by Sarama



Armours Beach – continuous fringing eelgrass. Zostera marina

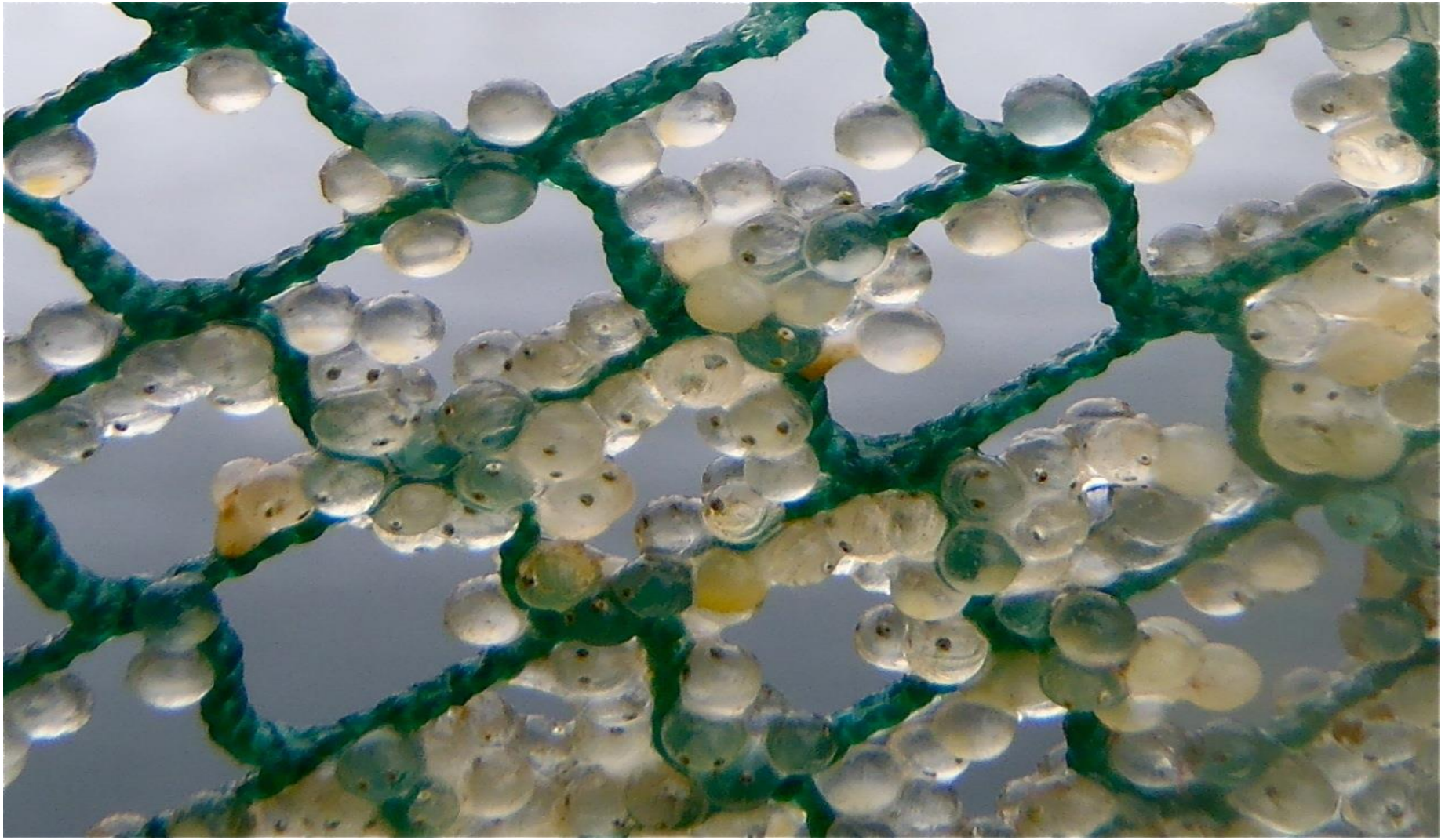
View from Hopkins Landing – there is continuous fringing eelgrass along low tide level as far as the Government Dock.

Herring spawn – the gap. Eelgrass is also used by herring for spawning.

photo by Bob Vohenka

Eyed Herring eggs

photo by Jonn Madsen



Spider crab hiding near eelgrass bed

photo by Sarama

References and Resources

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