



Reading Comprehension Questions – Answer Key

Answer these questions after you finish the *Seagrass Ecology Reading*.

1. If you found a plant living underwater in Yaquina Bay, how would you be able to tell if it is a seagrass or a type of algae (like kelp)?

Algae do not have veins in their leaves, they don't have roots, and they don't produce flowers or seeds.

2. What adaptations do seagrasses have that land plants do not? How do these adaptations allow seagrasses to thrive underwater?

Seagrasses do not have stomata. These holes allow air to enter the leaves of land plants, but this not work underwater. Seagrasses have aerenchyma, which allow pockets of air to form inside the plant for photosynthesis to occur. Students may also mention rhizomes, although some land plants do have them (like spider plants).

3. Seagrasses have two ways of reproducing. What are they, and how do they work?

Seagrasses can reproduce sexually by flowering. Seagrasses can also reproduce asexually by sprouting new stems and leaves from their rhizomes.

4. This article gives many reasons why seagrasses are essential for a healthy marine ecosystem. Explain why we should care about seagrasses, mentioning at least two reasons.

Answers will vary. They may include how eelgrass stabilize the sediments, absorb nutrients that would otherwise cause algal blooms, provide food for benthic organisms, and provide habitat for juvenile fish and shellfish.

5. Is *Labyrinthula zosterae* the sole cause of seagrass wasting disease? Why or why not?

Answers will vary. Students may argue yes, stating that the disease would not exist without this protist. They may also argue no, that the protist only causes mass die-offs when the seagrass is already stressed due to warm temperatures or low salinity.

6. Besides seagrass wasting disease, which threat to seagrasses do you think is the most serious? Why?

Answers will vary. Students may discuss global climate change in general or warmer water specifically, removal of fish, fertilizers & other pollution, or dredging and other forms of physical damage.