

Algae/Aquatic Plant Web-quest

Instructions: Follow the links and answer the questions (a, b, c...) associated with each link. Use separate paper.

1. Go to <http://botany.si.edu/projects/algae/introduction.htm>
 - a) As represented in the fossil record, how old are algae?
 - b) Describe three benefits of algae to the ecosystem.
 - c) Describe one negative impact that algae may have on an ecosystem.

2. Click on the “Algae links” on the page you have visited. Once there, click first on “The Harmful Algae Page” and answer:
 - a) What are HABs?
 - b) Why are “red tides” a less useful name for the phenomenon?
 - c) Describe three negative impacts of HABs.

3. Click on the “back” button to go back to the “Algae links” page.
 - a) Click on the “Introduction to Phaeophyta” link. Describe two ways in which the Phaeophyta differ from land plants.
 - b) Go back to “Algae links”, then to “Introduction to Rhodophyta”.
 - i) How are rhodophytes used in Asia?
 - ii) Explain the importance of rhodophytes to Pacific atolls.

4. Now let’s look at vascular plants... go to http://www.sms.si.edu/IRLspec/Seagrass_Habitat.htm
 - a) What are SAVs?
 - b) From what group of organisms did seagrasses evolve?
 - c) Compare and contrast seagrasses and terrestrial (land) plants.
 - d) Click on the “closer examination” link. Use this information to contrast seagrasses and algae.
 - e) Describe several ecological and economic functions of seagrasses.
 - f) Discuss two “non-anthropogenic” threats to seagrass communities.
 - g) Describe two anthropogenic (man-made) threats to seagrasses.

5. Emergent plants, like we saw in Flagler County, are also important to the marine environment. Go to http://www.fnai.org/PDF/NC/Salt_Marsh_Final_2010.pdf
 - a) Describe the zones that are typical of the salt marsh.
 - b) Identify five species of plants that are common in salt marshes. How would these differ from terrestrial or freshwater plants?
 - c) Scroll down to “natural processes” on this document. Describe the two major environmental factors that influence salt marsh vegetation.

6. Now go to <http://www.dep.state.fl.us/coastal/habitats/mangroves.htm>
 - a) Describe the three mangrove species common to Florida.
 - b) Discuss two reasons why mangroves are ecologically important, and two reasons why mangroves are economically important.
 - c) Describe anthropogenic threats to mangroves and mangrove swamps.