

Module 1 ~ Silent Invaders (MS/HS)

Submersed Plants Reading Activity



Name: _____ Class Period: _____ Date: _____

Directions: Read the passage and use the information you've learned to answer the questions below in complete sentences.

Submersed plants are large plants (known to scientists as “**macrophytes**”) that grow primarily below the water's surface. Macrophytes are plants that can be seen with the naked eye (in contrast to microphytes, plants which cannot be seen with the naked eye).

Unlike emerged plants, **submersed** plants grow entirely underwater and cannot survive out of water. Some submersed species are **rooted in the soil**. Others are **free-floating** plants that float free in the water below the surface and move wherever wind and water currents take them. Some have branches and leaves that reach and spread across the water just below the surface, or flowers that float on the surface. Other submersed plants have flower stalks that stick out up to six inches above the surface of the water. Some species like **coontail** make small flowers that bloom underwater, while other species' flowers bloom at the surface of the water.

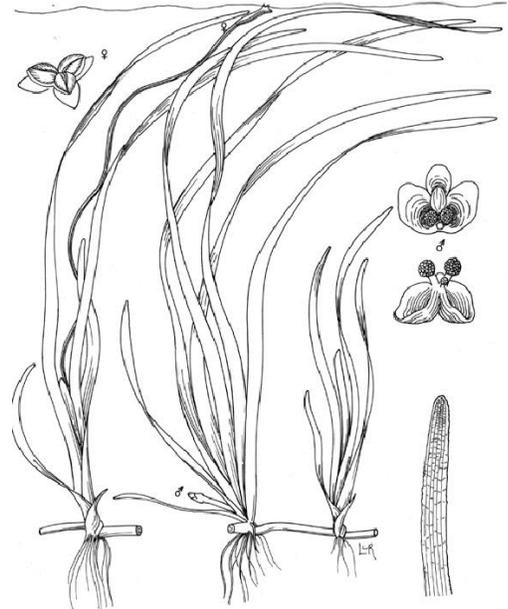
Eel grass and hydrilla are two other examples of submersed plants found in Florida. Eel grass is a native aquatic plant that grows up from roots in the muddy soil or sand at the bottoms of rivers, lakes, streams and springs. Eel grass provides excellent **habitat** (places to live) for a wide variety of aquatic animals such as fish, snails, and turtles – just to name a few. On the other hand, **hydrilla** (a fast-growing, **free-floating, invasive plant**) may seem like nice fish habitat when it first shows up in a lake or river. However it grows and reproduces very fast, so it doesn't take long for it to completely cover the surface of the water. When it does, it causes negative impacts like preventing other plants and organisms from getting the sunlight and/or other nutrients they need to survive. Our state government spends millions of dollars every year to control invasive hydrilla in our lakes, springs and rivers.

Some researchers are trying to learn more about how certain types of submersed plants can help a lake ecosystem. Submersed aquatic plants perform several functions; they provide food and habitat for wildlife populations, such as fish, waterfowl, or **invertebrates** (animals that do not have spines in their bodies, such as snails, insects and crayfish). Submersed plants can have a powerful effect on the chemical cycles in aquatic ecosystems by adding or removing chemicals or nutrients that either help or hurt other plants and animals living in and around water bodies.

Submersed plants can also help keep the water clean and clear, and help keep the mud or sand of the bottom in place by holding onto it with their roots.

Submersed plants may increase or decrease dissolved oxygen levels in the water, depending on their numbers and the amount of sunshine they get. Over time, they may also contribute to the filling-in of water bodies such as lakes, ponds, swamps and marshes. As the plants die and decay on the bottom, dead plant parts accumulate in layers and begin to make the lake, pond, or marsh shallower.

Submersed plants occur in almost all Florida water bodies, from rivers and streams to lakes, ponds, and springs. Taken together as a whole, these plants are one of the most important parts of our natural Florida aquatic ecosystems.



Florida Invasive Plant Education Initiative • <http://plants.ifas.ufl.edu/education>
A Collaboration of the UF/IFAS Center for Aquatic and Invasive Plants
and the Florida Fish and Wildlife Conservation Commission / Invasive Plant Management Section

