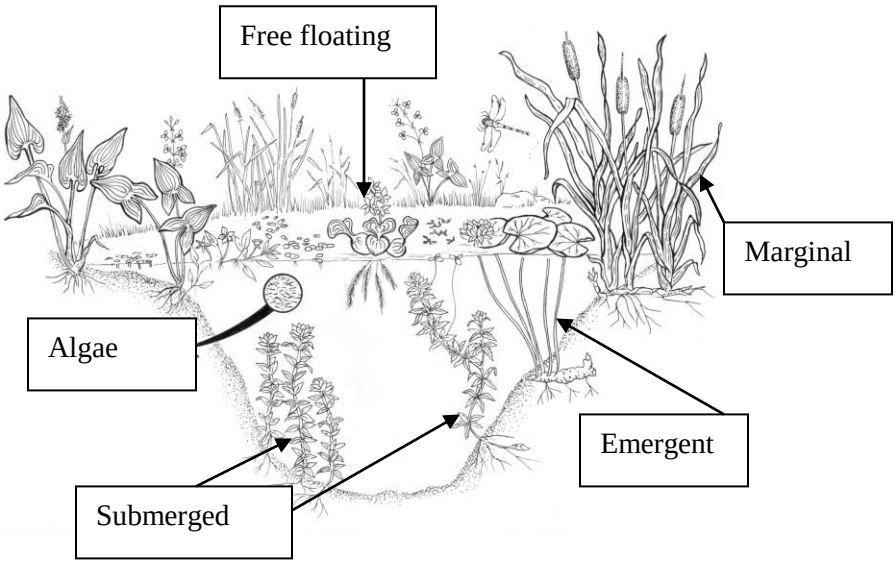
Common Aquatic Plants of Howard County

Aquatic plants are a beneficial and necessary part of the ecology of lakes and ponds. Without them, most other organisms could not survive. Aquatic plants keep the water oxygenated, provide food, cover and nesting sites for wildlife, absorb excess nutrients, aid in the removal of suspended sediments from the water column and stabilize the shoreline and pond bottom.

The County receives numerous inquiries regarding vegetative growth in and around ponds, mostly during the growing season (April-September) and particularly when excessive amounts of aquatic plant growth reach levels that are aesthetically unappealing to residents. The purpose of this guideline is to help citizens of Howard County correctly identify aquatic plants they may observe in their community ponds and encourage greater tolerance for aquatic plants and understanding of the role they play in pond ecology and the maintenance of water quality.

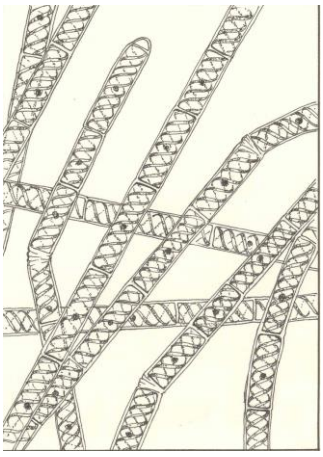
Categories of Aquatic Plants

There are five categories of aquatic plants.



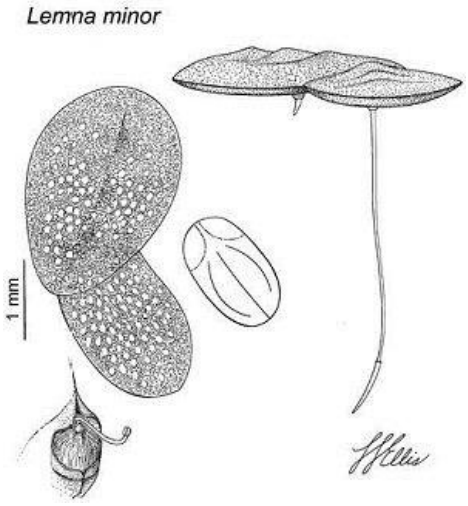
They include:

1. **Algae** are non-vascular plants that are found throughout the water column in three basic forms: microscopic, filamentous (strand-like), and macrophytic (visible with the eye.



2. **Free-floating** plants are vascular plants whose roots are not anchored in the sediment so the plants are floating on the water surface. Duck weed, water meal, water fern, and water hyacinth are examples of free-floating aquatic plants.

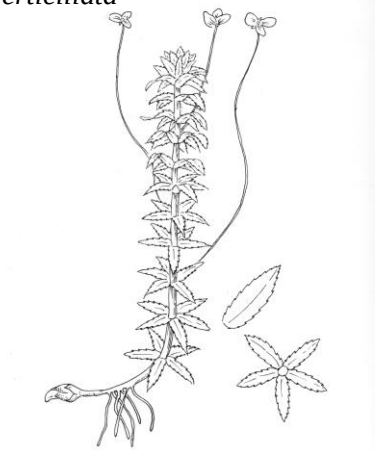
Duck Weed



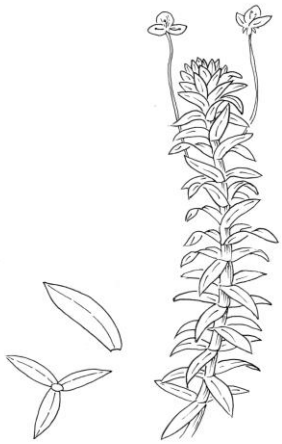
Water Hyacinth
Eichhornia crassipes

3. **Submerged plants** are vascular plants that are rooted in the sediment and found completely submerged underwater and lack rigid structure. Examples include Hydrilla, Brazilian elodea, and water milfoil.

Hydrilla
Hydrilla verticillata

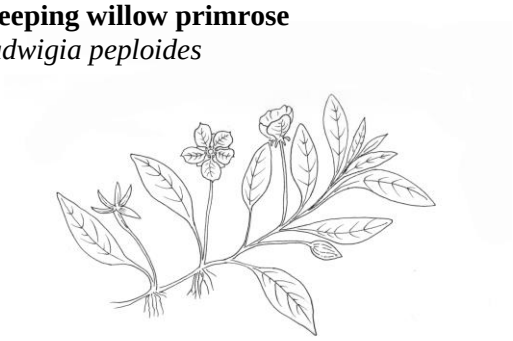


Brazilian elodea
Egeria densa

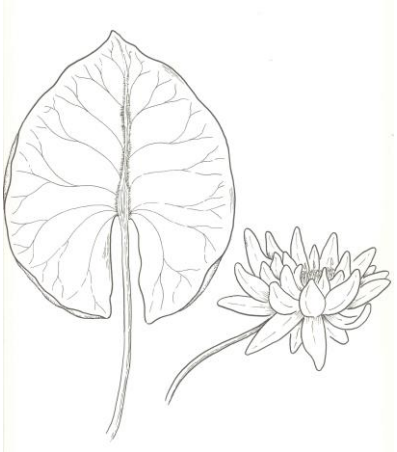


4. **Emergent plants** are vascular plants that are rooted in the sediments, found floating at and extending above the surface of the water, and have rigid structure. Examples include pickerel weed, creeping willow primrose, and water lily.

Creeping willow primrose
Ludwigia peploides



Fragrant Water lily
Nymphaea spp.



5. **Marginal plants** are vascular plants that are rooted in the sediments, found along the fringes of a pond typically in less than two feet of water and have rigid structure. Examples include cattail, sedges, rushes, and reeds.

Cattail
Typha spp.

Unfortunately, aquatic plants can spread to "nuisance" levels and can interfere with aesthetics and pond uses such as recreational pursuits like boating and fishing. Abundant overgrowth of aquatic vegetation is generally attributed to excessive nutrients (particularly nitrogen) present in the water. How does the extra nitrogen get in the water? Sources of nitrogen include the atmosphere (air & rain), storm drains, runoff from impervious surfaces in the watershed such as streets, sidewalks, and rooftops, over land surface runoff from lawns, and ground water recharge. It is difficult, if not impossible, to single out the sole source contributing to the excess load of nutrients. It is the combination of all sources.

What Can a Homeowner Do to Help?

Water quality is important to everyone and there are some key land stewardship practices that homeowners can implement on their own property to contribute to the protection of our precious water resources.

The Alliance for the Chesapeake Bay and the U.S. Fish and Wildlife Service teamed up to create an environmental education initiative called BayScapes. BayScapes are environmentally sound landscapes benefiting people, wildlife and the Chesapeake Bay. BayScaping advocates a "holistic" approach through principles inspired by the relationships found in the natural world. Some examples of how a homeowner can protect water resources include:

- Controlling runoff from your yard by installing a rain garden or rain barrel,
- Replacing lawn areas with alternative landscapes,
- Providing mulch cover over bare spots in your yard,
- Aerating your lawn,
- Recycling water to your garden and yard.

More detailed information can be found at the Alliance for the Chesapeake Bay website www.allianceforthebay.org/ or the U.S. Fish & Wildlife Service website www.fws.gov/chesapeakebay/BayScapes/bswhy/bs-why.html.