Hydrilla Invading Swift Creek Reservoir

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No it is not a B-movie monster. Hydrilla is a non-native, invasive submerged aquatic plant that poses a serious threat to water environments such as Swift Creek Reservoir. The plant is native to Africa and was introduced to the USA via imports to Florida for aquarium owners. Presumably some got thrown out into local waterways and spread from there. It is now well established in the United States, especially the south where millions are spent every year in management and control efforts. Virginia's Department of Conservation and Recreation (DCR) indicates that hydrilla is increasingly found in Virginia's waterways and water bodies and currently is resident from the Potomac River in the north to Lake Gaston on the North Carolina border.

Hydrilla stems can grow up to 25-30ft. long and it has several advantages over native species of aquatic plants. It can thrive with less light than native species of water plants, is more efficient in taking up nutrients and can crowd-out the natives due to rapid growth. It also can reproduce through numerous means, especially through simple vegetative reproduction which means small pieces stuck on the underside of boats and on boat trailers can easily be transported to new waterways and water bodies where it can start growing anew.

It grows into dense mats that interfere with water-based recreation activities such as boating, swimming and fishing. It also alters fish and wildlife habitat so that some species can no longer survive as well and favors other species including many invertebrates and mosquitoes. It also provides great nursery habitat for small fish. It can limit boat movement, clog propellers and rudders, shade out native plants and thereby reduce biodiversity, reduce oxygen levels in the water and degrade water quality by making the bottom stratum of the water column somewhat lefeless. It also thrives in a wide range of water depth, flow, temperature and water quality conditions…an ideal invasive mess.

There are numerous management practices for managing hydrilla ranging from chemical herbicides (some effective and some not so effective) to manual removal (a stop-gap measure as it simply grows back) to biological control through introduction of triploid sterile grass carp (a non-native fish species) that feed upon the vegetation (requires a permit from DGIF, and they can be very effective, but their populations have to be managed also). Each control method has advantages and disadvantages and are effective to one degree or another, but the bad news is that they all require human resources (knowledge, muscle and active management) which in turn requires financial resources.

What we can do: Hydrilla is in Swift Creek Reservoir (mainly on the Brandermill side) and will now likely be spread to all areas of the lake by the movement of boats. We really can't do anything about that. However, we can help to limit the spread of hydrilla to other streams and lakes by having all boaters examine and clean the underneath sides of their vehicles, boats and trailers when leaving the lake to make sure that hydrilla fragments are removed.

The WCA Board of Directors and Community Manager Julie Walker spoke at length to county officials about the need for immediate action in this matter when they met with them last month. The county has contracted with a consultant for a study and action plan. The BOD will continue to monitor and press for swift action on this issue. Stay tuned for more information about how you can help!

For more information, including plant identification of hydrilla go to:

http://www.invasivespeciesinfo.gov/aquatics/hydrilla.shtml

http://www.invasive.org/species/subject.cfm?sub=3028

http://www.dep.state.fl.us/lands/invaspec/2ndlevpgs/pdfs/hydrilla.pdf

http://www.ecy.wa.gov/Programs/wq/plants/weeds/hydrilla.html

Images from www.invasive.org