

The Floating Gardener

A Publication Provided by The Magothy River Association

Divine Providence – A Letter from the Editor

In the short time since the concept of water gardening was first introduced to the community, homeowners and businesses alike have discovered that floating gardens are a beautiful and easy way to improve the environment. Floating gardens are constructed of Styrofoam within a frame and have from one to several 'ports', in which plastic baskets filled with native plants are suspended. The design was originated by Steve Ailstock, director of Anne Arundel Community College's (AACC) Environmental Center; Mike Norman, technical specialist; and Bruce Lenderking, a former student. As the plants grow in their baskets at the surface, their roots filter sediment to improve water clarity and absorb excess nutrients caused by runoff, making them a powerful antidote to deadly algal blooms. In addition, they contribute oxygen to the environment that's essential for life in our waterways and, as a bonus, these plants and their roots provide food and a natural habitat for creatures both above and below the water's surface.

As a result of its popularity, the floating garden project has outgrown the available greenhouse space at AACC. Enter the Providence Center, a nonprofit organization that serves adults with intellectual and developmental disabilities in Anne Arundel County. The Environmental Center at AACC and the Providence Center have a long history of working together on environmental ventures, so this new partnership between the Magothy River Association (MRA), AACC and the Providence Center seems like it was, well, providential!

Floating gardens are now produced by growers at the Providence Center, who earn a paycheck for their work. They assemble the frames and grow a number of different plant varieties that are best suited to various locations in the rivers, because of the level of sunlight, salinity, etc. Nathan Ullrich, horticulture manager at the Providence Center, was quoted recently in *The Severna Park Voice* about the project. "This is a wonderful enterprise for our growers and for Providence Center. Not only does it build on our experience with native plants and advance our work to improve the environment, the project will help develop skills and independence for everyone working on the gardens." For the full article, see <http://www.severnaparkvoice.com/community/greener-shoreline-initiative-improves-health-local-rivers>

A floating garden can be purchased fully assembled for \$150 or as a kit for \$100. They are easy to assemble and customers can choose from a variety of plants. At the end of the season, participants can recycle their old plants and purchase new plant baskets for \$10. Without the exchange, new baskets are \$15 each. To purchase a floating garden contact Nathan at nnullrich@providencecentere.com



Upcoming Events

September 5 & 6

Marylanders Grow Oysters!

Oyster spat pick up for participants
Eagle Cove/ Cape St Clair

October 4

Magothy River Association
Annual Meeting & Members'
Picnic

Gibson Island – more info TBA

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Here, a grower demonstrates construction of the float, then assembles the completed garden by adding baskets of native plants grown in Providence Center's greenhouse. This floating garden is now ready for launch!



Providence Center's Greenhouse and Garden Center is located at 370 Shore Acres Road in Arnold and also provides items year-round to the public: poinsettias for the holidays, annuals, perennials and vegetables for spring/ summer, native bay grasses, and a selection of other native plants - most grown pesticide free!

GSI – Greener Shoreline Initiative

The floating gardens are part of a larger undertaking at Anne Arundel Community College known as the Greener Shoreline Initiative (GSI), a multi-faceted effort to replace habitat and lost native shoreline in Chesapeake tributaries.

This holistic approach to restoration includes trays containing underwater grasses (aka SAV's) and the floating gardens with their emergent native plants, as pictured above. A third strategy will feature shoreline planting, using native grasses and other plants to re-create a natural shoreline that responds to changes in weather and tides and combats erosion.

Underwater grasses (SAV) Tray



Shoreline Plantings



Emergent Botany 101

The plant varieties in your floating gardens have probably reached maturity at different times. As the summer is winding down, switchgrass and goldenrod will begin to reach their peak and make a beautiful display in our area. To read more about these plants and others, you can explore via the two reference sites. <http://plants.usda.gov/java/> & <http://www.wildflower.org/explore>



Photo courtesy of Michael Norman



Photo courtesy of the Lady Bird Johnson Wildflower Center

Plant Profile

Scientific Name: *Panicum virgatum*

Common Names: Switch grass, Panic raide

Plant description: *Panicum virgatum* is a native warm season grass that grows in all regions of North America, with the exception of the west coast. The plant tolerates sun to part shade and can grow in either moist or dry sandy to sandy loam soil conditions. Switch grass is most prominent in the central plains, seasonally moist open areas, and high brackish marshes where it forms dense stands. *P. virgatum* grows 3 – 6' tall and forms dense clumps of stiff, erect stems. Switchgrass has a deep fibrous root system – nearly as deep as the plant is tall, making it useful in preventing erosion. Flowering stalks of open reddish-purple seed heads occur from July through August, with mature seed development in mid-September to late October. Switch grass stands are important for both food and habitat for many wildlife species, and are excellent for erosion control and reclamation projects. It is also currently being used for ethanol production in the biofuel industry.

Plant Profile

Scientific Name: *Solidago sempervirens*

Common Names: Seaside Goldenrod, salt-marsh goldenrod

Plant description: Seaside goldenrod is a fall-flowering native perennial native to eastern North America and parts of the Caribbean. It is a drought and salt tolerant wetland variety that colonizes moist soil, sand dunes, grassland, and transitional areas. *S. sempervirens* can grow to a height of 6' tall; it has an alternate leaf arrangement of succulent, oblong, entire, leaves that extend from a basal rosette of evergreen leaves to the tip of the flowering stem. Flowering occurs from August through October with an abundance of dense bright yellow flowering heads. The benefits of seaside goldenrod are many, it serves as an important dune stabilizer and nesting habitat in secondary dune environments for a number of shore birds. It's a vital resource for over-wintering, gall producing parasitic wasp species. Additionally, fall migrating monarchs rely on it as a major food source, and numerous native butterflies, insects and birds utilize it for food and shelter.

Gardeners' Forum:

Check out the state of the art AFDS (automatic fertilizer delivery system) on the new SAV trays!



The snazzy wire duck covers, designed to keep waterfowl and other animals from feasting on the tender new underwater grasses, make a perfect roosting spot and duck toilet! Feathers and poop add a concentrated dose of organic nutrients to the contents of the basket and encourage the growth of algae, blocking sunlight to the grasses and... you know the rest of that story.

To keep the growing grasses healthy, it's a good idea to remove the duck cover occasionally and scoop out algae and other organic matter that has collected on the surface of the water in the tray. Don't forget to re-secure the cover when you're through.

Anything you'd like to share about your floating garden? Send questions, comments and photos to: mrafloatinggardener@gmail.com

Coming Next Month:

Water gardening and Living Shorelines around Maryland
More on the AACC Greener Shoreline Initiative
Emergent Botany 101 (continued)
Gardener's Forum