



Maryland
Green Registry
MEMBER

The Maryland Green Registry promotes and recognizes sustainable practices at organizations of all types and sizes. Members agree to share at least five environmental practices and one measurable result while striving to continually improve their environmental performance.

Patriot Land and Wildlife Management Services, Inc.

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Wildlife Management, Habitat Enhancement, Ecological Restoration

Member since April 2010

Management and Leadership

Environmentally Preferable Purchasing

Native species vegetation and soil media are purchased from local nurseries and suppliers whenever possible because the importance of matching local environments is paramount in habitat enhancement and wetland creation.

Patriot is also beginning to use peat composted from livestock manure, which eliminates the use for natural peat, and is much more environmentally sustainable.

Environmentally Preferable Products and Services

One of Patriot's main products and services is the sale and installation of BioHaven Floating Islands. These 100% recycled plastic islands are impregnated with marine foam to give buoyancy, are planted with natural vegetation (native species, wetland, ornamentals, etc.) and are anchored in a body of water. Because of their fibrous matrix design, significantly more amounts of surface area are utilized for microbial colonization and subsequent nutrient uptake. Research has shown that a 250 square foot BioHaven is capable of uptaking as many nutrients (nitrates, phosphates, ammonia, heavy metals) from a water body as 1 acre of natural wetlands. Over time, the BioHaven vegetation flourishes at its own pace, constantly watered, creating critical riparian edge habitat for wildlife above and below the waterline, while removing unwanted nutrients and providing beauty for all to enjoy. They also have applications within wastewater treatment plants in effluent ponds to provide significant nutrient

removal, as well as to help sequester carbon dioxide and methane.

BioHavens follow an emerging design discipline called “Biomimicry”, where Nature’s best models and processes are studied and emulated to solve human problems. BioHavens are eligible to provide USGBC LEED credits through the “Innovation in Design” category.

Patriot also provides whitetail-deer management services to a variety of clients, including local farmers, HOAs, private landowners, etc. The economic damage of whitetail deer is at the forefront of issues for farmers and homeowners alike. In many instances, overpopulation and crop damage is so severe in areas that farmland is no longer economically sustainable for farmers, a problem being taken seriously within the Agricultural Reserve of Montgomery County. Patriot also manages the Farmers and Hunters Feeding the Hungry (FHH) deer donation program in Montgomery County, which has donated over 800 deer in the last five years (300 deer in 2009) with meat going to local soup kitchens and food pantries. Venison from one deer can be used to make meals for close to 200 people.



Environmental Restoration or Community Environmental Projects

In September 2009, Patriot installed 1600 square feet of BioHaven Floating Islands in the Anacostia River in Washington, DC, directly across from the Washington Nationals baseball stadium at Diamond Teague Waterfront Park. These islands were planted with native wetland species and were implemented to provide critical nutrient removal as well as create beautiful aesthetic features for park patrons to enjoy. These BioHavens have the capability to remove as many nutrients as 6.4 acres of natural wetlands.

Patriot will be attending the 2010 Maryland Municipal League Conference to present the benefits and variety of uses of BioHaven Floating Island biomimetic wetlands within communities to improve water quality and habitat, with Diamond Teague Waterfront Park being our case-study.

Energy



Energy Efficiency

A living fenceline of 6-foot tall Leyland Cypress trees were recently planted along the west end of the office in order to provide a wind barrier to reduce energy costs. Our exterior security/accent lights are solar powered and we have replaced our appliances (refrigerator and AC) with energy-efficient ones. These measures have on average reduced utility costs by about 20%.

Waste

Solid Waste Reduction and Reuse

Whenever possible, Patriot sends documents and other materials to clients via email instead of paper mail. Through the use of email we eliminate the use of 280-400 pieces of inkjet brochure paper per month. This equates to a savings of \$50 and nearly 100 pounds of paper per month. The use of email also saves us roughly \$90 per month in ink, and all our used cartridges are recycled at the store of purchase.

Patriot's website is also very helpful in reducing paper use because it is designed to be navigated by a variety of different clients with different needs.

Recycling

In order to support Patriot's water quality and habitat enhancement initiatives utilizing BioHaven Floating Islands, a recycling program is currently being developed. This program will empower communities to use their recycled bottles (which BioHavens are made of) to offset the cost of purchasing and installing a BioHaven in their community's common-area water body, like a pond or lake. This initiative is designed to get the entire community involved in understanding the importance of environmental conservation, and allow them to have ownership of their successes in water quality and wildlife habitat improvement.

Other

Professional Associations and Licenses:

- *Mid-Maryland Quality Deer Management Association founding members*
- *Maryland Farm Bureau "Young Farmers" member*
- *Montgomery County - Stormwater Facility Maintenance Contractors*
- *Maryland Department of Natural Resources - Wildlife Damage Control Operator/Deer Cooperator*
- *Maryland Department of Agriculture - Commercial Pesticide Applicator*



Help build a greener, more sustainable Maryland through voluntary practices that reduce environmental impacts and save money.

Learn more at www.green.maryland.gov/registry

