

Stewardship News

The Guardians of Chesapeake Bay

By Marc Imlay

The Chesapeake Bay Watershed has been heavily urbanized. As a result most natural areas are relatively small, and are surrounded by cities, highways, and agriculture. It consists of islands of nature in a sea of development. Its ecological history includes the full range of mid-Atlantic temperate climate habitats. Maryland was 80% contiguous forest and 20% open in pre-colonial times. Most of Maryland and much of Virginia and Pennsylvania, as well as the District of Columbia are in the watershed ranging from the marine environment, upstream to the Piedmont and the eastern end of the ridges and valleys of the Appalachian Mountains. There are shale barrens and serpentine barrens, limestone caves, and the northernmost bald cypress swamp in America, Battle Creek Cypress Swamp in Calvert County, Maryland.

GUARDIANS OF THE BAY

Fortunately there are literally hundreds of environmental groups working very hard to save the remaining areas from development and rescuing the protected areas from non-native invasive species, erosion and pollution.

The Anacostia Watershed Society (www.anacostiaws.org) complements wetland restoration, native tree planting, stream bank stabilization, non-native invasive species control, and water quality monitoring with advocacy and environmental education in the local schools. We have dramatically rescued the 150-acre Little Paint Branch Park in Beltsville Maryland, a biological gem with a Virginia Magnolia wetland of special concern, from over 20% coverage of Japanese stiltgrass, English ivy, oriental bittersweet, multiflora rose, Japanese and bush honeysuckle, and mile-a-minute vine to less than 15% in just one year.

The Chapman Forest Foundation (www.chapmanforest.org),

Maryland Native Plant Society (www.mdflora.org) and

Sierra Club (www.marylandsierraclub.org) with many other groups rescued 2,400 acres of mature forest with over a mile of unspoiled Potomac River shoreline from the largest housing development in Maryland. Geologists have surveyed the unique natural area and have observed that the unusual geological formations constitute conditions favorable to unusual assemblages of plant and animal life. Acidic conditions on the gravel terraces defer to highly calcium-rich (calcareous) pockets in lower areas. Shells in fossil-laden marine clays contribute to these calcareous areas. These conditions overlay a relatively undisturbed tract, including ravines so steeply sloped that past clearing was hindered, so that a

broad assemblage of flora and fauna persist, including many state rare, threatened, and endangered species.

Botanists have verified that acid-soil loving plants indeed coexist in close proximity with calciphilic (calcium-loving) communities, so that communities unusual for the coastal plain thrive here, including the largest Maryland population of the state-endangered, calciphilic, glade fern and a dozen 1-2 foot diameter sassafras trees. Malacologists have identified a unique assemblage of snails that includes three "limestone" species rare or unexpected on the coastal plain.

Save Crow's Nest (www.savecrowsnest.org) In Northern Virginia across the Potomac River from Chapman Forest is striving to save Stafford County's 3,800-acre Crow's Nest peninsula which includes one of the last stands of old-growth forest in the Mid-Atlantic region. A 600-year-old pin oak, alive when Capt. John Smith explored the area, flourishes there. It contains some of the rarest forest communities on earth. The undeveloped shoreline is home to one of the largest heron rookeries in the Chesapeake Bay region. Bald eagles nest in the trees. In addition, the peninsula is at a strategic location that provides considerable protection for the seafood industry of the Chesapeake Bay.

The Alliance for the Chesapeake Bay (www.alliancechesbay.org) is a regional nonprofit organization that fosters partnerships to protect the bay and its rivers. For example it is sponsoring invasive plant removal projects in Kish Creek in Lewistown, and Canoe Creek State Park in Harrisburg, Pennsylvania. Dozens of other projects include bay-scaping with native plants including underwater grass planting, coastal cleanup, cover cropping to reduce nitrogen release to the Bay, and wetlands restoration.

The Greenbelt Homes Inc. housing cooperative in Greenbelt, Maryland has a great program to rescue the woodlands first established by the First Lady, Eleanor Roosevelt, from a cover that was 60% English Ivy and Multiflora Rose. People can walk to downtown Greenbelt rather than drive, and there actually is a greenbelt around the town circa 1940's. Old Greenbelt has 85.6 acres of stewardship forest, as well as other wooded parcels, and is actively involved with urban forestry management. Regular work sessions for the removal/eradication of non-native invasive plant species and tree plantings are scheduled throughout the year. Also scheduled are bird counts and native landscaping seminars and guided hikes. For more information on GHI Woodlands Committee activities, contact Matt Berres, Landscape Specialist, mberres@ghi.coop or 301-474-4161 ext. 132.

Belt Woods, near Bowie Maryland includes 45 acres of virgin forest with ancient tulip poplar trees and light-gap openings, pit and mound topography, accumulation of downed and standing dead wood, and soils containing a rich organic layer. The density of breeding birds remains among the highest observed on the East Coast. Contact maureenfine@earthlink.net.

Arlingtonians for a Clean Environment (www.arlingtonenvironment.org) leads regular weekly projects to preserve Arlington County, Virginia, natural areas in partnership with Virginia Cooperative Extension, and Arlington Parks, Recreation and Community Resources including storm-drain marking, backyard wildlife habitats and native plants, and RIP, Remove Invasive Plants.

These examples are just a small fraction of thousands of excellent programs striving to preserve and restore native communities in the Chesapeake Bay. For more information contact the organizations

cited, other organizations such as the Chesapeake Bay Foundation, the native plant societies and Sierra Club chapters in the other states within the watershed and governmental natural heritage agencies.

Location map of Chesapeake Bay Watershed (64,000 sq. miles)

