

## 2002-2012 Highlights of Special Events, Habitat Restoration Projects and Garden Tours at the Chesapeake Ecology Center

Beginning in 2002, the Chesapeake Ecology Center (CEC) has provided on-the-ground environmental education and restoration sessions, and received tremendous volunteer assistance from students of all grade levels and adult volunteers from near and far. The CEC has worked with numerous volunteers who've planted over 2,700 native trees and shrubs and countless herbaceous perennials throughout the 10-acre Adams Academy Middle School campus, where the CEC is based. We've held garden tours, rainscaping tours, and countless volunteer days. We have also provided numerous presentations and workshops on habitat restoration, conservation landscaping/rainscaping, and native plants. In addition to weekday educational volunteer sessions with Adams Academy students, countless weekend volunteer sessions with Master Gardeners, college students, and many other adult groups have been held. Volunteers have installed a large riparian forest buffer, tree groves, several rain gardens, xeriscapes, meadows, bayscapes, and more, and helped with garden care. Through our on-going environmental education and on-the-ground habitat restoration initiatives, the campus has evolved into a premiere Native Plant Demonstration Garden Center over the last decade.

The CEC is very grateful for the funding we have received over the years from our members, the Chesapeake Bay Trust, Constellation Energy, National Fish and Wildlife Foundation, Spring Creek Foundation, and Unity Gardens. We have also received tremendous assistance from the Maryland Department of Natural Resources, Anne Arundel County, the City of Annapolis, and other entities.

Since 2002, dozens of community and school groups have volunteered at the CEC at Adams Academy. Notably, Anne Arundel County Master Gardeners have partnered with us each year since 2003 and have provided tremendous assistance with a variety of conservation landscaping projects, sessions with Adams Academy students, garden tours, and special programs! In addition to Master Gardeners, just a few of the additional groups include: Blacks of the Chesapeake; Anne Arundel Community College students; University of Maryland students; Naval Academy Midshipmen; Cigna and Kohl's employees; and—arranged by the World Trade Center Institute—we've worked with several groups of international environmental professionals from countries all over the world, who have toured the grounds as well as volunteered to work on the gardens. Throughout the years, our primary focus in working with Adams Academy students has been environmental education through outdoor experiential learning; and through these activities, both students and teachers have provided tremendous assistance!

Spread out throughout the 10-acre campus, the **30 Native Plant Demonstration Gardens and Sites are a tremendous resource for the school and a public resource (after school hours and all day during the summer). They are teaching gardens, not only for the school, but the entire community—and even international visitors.** This resource would not be possible without the volunteer participation and assistance of Adams Academy's administration, teachers and students, and numerous volunteers from Anne Arundel County and beyond. Notably, the CEC has a special focus in working with Adams Academy students, and is a great resource for the school and these special groups of at-risk students that transition into and out of the school from the entire county, and comprise a new group each year. In the spring and fall, on-the-ground environmental education sessions with students are provided; and students earn their Service Learning hours via these activities.

To assist in outdoor educational sessions, we've installed an Outdoor Classroom at the CEC which is continuously in use. We have held countless sessions on managing stormwater runoff, the care entailed and the long-term environmental benefits of different landscaping arrangements, as well as aesthetic

benefits. And the gardens are being used more each year for educational purposes. For example, not only are Adams Academy teachers and students using the gardens more each year, environmental organizations send their new staff members to the CEC to learn about native plants and garden designs. We hold scheduled garden tours for volunteers and a variety of groups, including tours for: teachers and students, Master Gardener Advanced Training Classes, garden clubs, and during our annual September Garden Open House. Many individuals take self-guided tours with the aid of kiosks and plant signs installed throughout the campus.

We have provided technical assistance to many groups and schools, e.g., Crofton Library, Bates Middle School, Germantown Elementary, Mills Parole Elementary, Sunset Elementary, and the Town of Highland Beach, just to name a few. And we provided numerous conservation landscaping and rainscaping presentations to garden clubs and other groups, as well as exhibits. In addition to the Adams Academy/CEC grounds, we've installed rain gardens at several locations throughout Anne Arundel County, and most recently at [Quiet Waters Park](#) and the [Maryland Department of Natural Resources](#).

As part of the RainScaping Campaign, the CEC installed a **RainScaping Education Station and Rain Garden at the 340-acre Quiet Waters Park**. The RainScaping Education Station (RES) is a faux house frame with examples of rainscaping techniques, including: a small green roof, a gutter and downspout directed to a rain barrel, a gutter and downspout directed to a rain garden, permeable pavers, and signage. The signs are attached to faux windows and inform visitors about what they can do to clean up our waterways, and directs them to visit [www.RainScaping.org](http://www.RainScaping.org) for more information. Next to the RES, volunteers installed a 300 square foot rain garden.



## RainScaping Campaign

Primarily active 2008-2013, the CEC spearheaded and worked with 53 non-profit partners to implement the RainScaping Campaign (RC) to reduce polluted runoff and clean up waterways throughout Anne Arundel County. The RainScaping Campaign, with its 53 partners, implemented a county-wide PSA/Ad and social marketing campaign, aimed at private property owners, who own 64 percent of the land in Anne Arundel County (pop. 537,656). Without a new landscaping paradigm among county residents to reduce polluted runoff, the County will not meet its TMDL requirements.

Highlighting —**RainScaping...Beautiful Solutions to Water Pollution!**, the RC has produced outstanding rainscaping PSAs/Ads, signage, and educational material; and has distributed rainscaping messages via television, print, and web PSAs/Ads, advertising via social media and networks, posters, brochures, outdoor RainScaping Education Stations and other signage—all of which directs visitors to [www.RainScaping.org](http://www.RainScaping.org) for additional information. As a result of extensive marketing and educational efforts, including over 160 presentations and exhibits, we estimate that rainscaping messages have reached at least 10 percent of Anne Arundel County residents, based on in-depth surveys and Google Analytics website reports.

**2002, View of Barren Turf Grass at Adams Academy/CEC**



**July 3, 2003, Rooftop View at Adams Academy/CEC, Shortly After Planting Two Rain Gardens That Were Formerly Asphalt Swales**



2005, Aerial View of the Adams Academy/CEC Campus



2010, Map of CEC Native Plant Demonstration Gardens and Sites



**Our Initial Project...**  
**November 20, 2002, NAACP Freedom Grove Dedication Ceremony  
and Groundbreaking Ceremony for the Chesapeake Ecology Center**

The NAACP Freedom Grove, a Riparian Forest Buffer (NAACP Freedom Grove) is a living memorial that recognizes and honors the Anne Arundel County NAACP, while restoring and protecting the health of College Creek, which it borders. The installation of the Freedom Grove helps to broaden the constituency of environmental stewards that are working to restore and protect the Chesapeake Bay and its tributaries. By working with a traditional civil rights and social justice organization, we promote a more inclusive approach to environmental restoration and protection efforts. Centered in the grove, is a commemorative plaque displayed on a large boulder that lists local NAACP presidents. The Freedom Grove Dedication and CEC Groundbreaking Ceremony was held on November 20, 2002, and attended by over 200 invitees. Former County Executive Janet Owens and several other dignitaries attended and made remarks.

The trees and shrubs that were planted, as part of a living memorial, also create a riparian forest buffer, designed to provide protection for College Creek from stormwater runoff from upland parking lots and the Adams Academy school building. The installation of the NAACP Freedom Grove was spearheaded by Blacks of the Chesapeake, and was the CEC's initial groundbreaking installation. It was a tremendous, collaborative effort between the CEC; Anne Arundel County NAACP; Blacks of the Chesapeake; Anne Arundel County Public School System; Adams Academy's administration, teachers and students, who helped plant the Freedom Grove; Maryland Department of Natural Resources; the Chesapeake Bay Trust; and several community residents.



**November 2002, Adams Academy Students  
Learn About Native Plants While Volunteering**



**October 25, 2003, Volunteer Day with  
80 Midshipmen and 20 Additional Volunteers**



**2003, Initial Planting of the Former Asphalt Swale Rain Garden**



Throughout 2003, Site Preparation and Planting of the BayScape Garden, Rock 'N Rain Garden (after removing asphalt), & Sweetbay Magnolia Rain Garden



**November 10, 2003, Adams Academy Students Learn About Habitat Restoration While Helping Plant the Sweetbay Magnolia Rain Garden**



**May 11, 2004, Adams Academy Students and Teachers Install the Catch-All Rain Garden in the Back of the School Building**



## April 16, 2005, Adams Academy Students and Teachers Install the River Birch Rain Garden



## November 3, 2005, Dedication of the Bertina A. Nick Rain Garden

The Bertina A. Nick Rain Garden is a garden oasis that honors the late Bertina A. Nick and symbolizes the life and vitality Bertina brought to the greater community. The planning and dedication ceremony was a great team effort and a truly multi-generational event, involving Adams Academy students, Glenwood seniors, and all ages in between. The moving tribute honored Bertina A. Nick for her contribution to Adams Academy and the greater community. The dedication ceremony was attended by over 100 people, including several members of Bertina's family, and several dignitaries who made remarks.



## **August 24, 2006, Environmental Grant Award Ceremony with U.S. Senator Paul Sarbanes, U.S. Senator Benjamin Cardin, and Other Dignitaries**

Adams Academy/CEC hosted the official announcement of the 2006 Chesapeake Bay Small Watershed Grants. Speakers included U.S. Senator Paul Sarbanes, U.S. Senator Benjamin Cardin, Rebecca Hanmer, former Director of the Chesapeake Bay Program, as well as Vince Leggett and Zora Lathan. Over 100 individuals attended the outstanding program and toured the gardens.

Notably, U.S. Senator Benjamin Cardin and his staff have visited Adams Academy/CEC on three occasions. On April 30, 2004, he visited Adams Academy/CEC and gave a half-hour talk to a very receptive 8th grade class about what it means to be a politician and how one makes decisions as a politician compared to decision-making as an individual, and how the two types of decision-making may sometimes differ. The students thoroughly enjoyed the discussion! After meeting with students, he toured the gardens outside for a full hour along with Zora Lathan, Thistle Cone and Vince Leggett, who described the benefits of the conservation landscaping and the participation of students in creating the gardens.



## **October 27, 2006, CEC Rain Garden Workshop, Including Rain Garden Installation with 35 Master Gardeners**



### **April 22, 2007, Earth Day Tree Planting with Governor Martin O'Malley**

The CEC's on-going restoration initiatives have included many partners. For example, in 2007, the CEC, DNR, the City of Annapolis, and over 100 middle school students and teachers from Adams Academy and Bates installed the Oak Grove, a large expanse in the front of the school, planted with Oaks, Hickories, and Black Gum trees, covering 15,580 square feet. Installation took place on April 22, 2007, when we held an Earth Day Tree Planting with Governor Martin O'Malley and several other dignitaries. The Earth Day Tree Planting, organized by the CEC, DNR, and the City of Annapolis, in honor of the 37th Annual Earth Day, was a very special occasion thanks to the participation of Governor Martin O'Malley—who joined us and helped plant trees for over an hour! Numerous volunteers participated; and the Adams Academy principal, teachers and students were grateful and thrilled to have had this event at their school.



### **May 3, 2007, Volunteer Day with 40 Cigna Employees from Several States Throughout the Country**



## **2007, 2008, 2009, Adams Academy Students Learn About Habitat Restoration While Removing Invasive Species and Reforesting at Adams Academy/CEC**

The Invasive Species Removal/Reforestation Project at Adams Academy, arranged by the CEC and implemented by Anne Arundel County's Forestry Program, began in the summer of 2007. The extensive work conducted by Ashton Manor Environmental (formerly Greenskeeper Environmental, and the landscape contractor hired by Anne Arundel County) over several days in 2007, 2008, and 2009, has transformed the forest buffer and greatly enhanced the on-going restoration projects at Adams Academy/CEC. As part of this multi-year effort, Adams Academy students and volunteers have participated by learning about native plants and have helped plant approximately 1,600 native trees and shrubs in the riparian forest buffer along the tidal headwaters of College Creek and in the Shade Garden, covering approximately 5 acres (of the 10-acre campus).



## **October 1 & 2, 2007, Adams Academy Students and Teachers Plant Trees and Shrubs and Remove Several Bags of Trash from the Shade Garden**

Formerly, the Shade Garden was not only full of invasive plant species, it was also a huge trash dump site covering almost an acre, largely hidden by the thick vegetation. Beginning in 2007, and largely completed on Make A Difference Day 2009, several groups of volunteers including Adams Academy teachers and students, Girl Scouts, Master Gardeners, and others collected 40+ large trash bags of bottles and all kinds of debris, and three truck-loads of automobile and other metal parts.

During the week, we worked with Adams Academy students: the first group of 12 students planted native trees and shrubs in the riparian forest buffer; and the second group of 17 students removed several bags of trash and metal items by the old B&A railroad track in the Shade Garden.



### **November 3, 2007, State of the College Creek Watershed Public Forum**

Beginning in 2006 and throughout 2007, the CEC spearheaded the more than year-long College Creek Watershed Assessment, in which the Maryland Department of Natural Resources (DNR) was a major participant, along with Friends of College Creek. On November 3, 2007, the results of this extensive initiative were highlighted at the well-attended “State of the College Creek Watershed Public Forum,” held at Adams Academy/CEC. The general consensus was that the Forum was a great success! Approximately 60 community residents and others attended, thanks to extensive advertising and an article by Pam Wood in the Capital-Gazette Newspaper. The agenda format—of brief presentations, poster session, then reconvening for the final community input session—worked very well; and we still had a good size crowd and lots of citizen input during the open session with citizens at the end of the program. This initiative resulted in identifying major impacts to the College Creek watershed and restoration remedies called for and identified by community members—particularly increasing the tree canopy. Speakers included Frank Dawson, Assistant Secretary, Chesapeake Bay Program, DNR; Dr. Peter Bergstrom, NOAA; and several other outstanding speakers. Adams Academy students provided posters for the program; and Principal Jeff Tillar attended and made remarks. The Public Forum included posters by Adams Academy students.



**The next two pages are some of the images from the College Creek Watershed Assessment**

# Problem Areas



5-15-07 trash by outfall in upper portion of College Creek

✓ 10-2-07 students remove several bags of trash from Adams Academy grounds



9-25-07 several bags of bottles and cans were removed from Adams Academy grounds



9-23-07 Beth Santin and Girl Scouts remove trash from Adams Academy grounds



✓ 10-2-08 Ricky Meyer loads up truck with trash, metal parts...



10-2-07 students remove several piles of trash from Adams Academy grounds



9-14-07 invasive species along Poplar Trail



9-24-07 street cave-in at Glenwood Senior Housing



9-14-07 invasive species along Poplar Trail



8-4-07 sea of impervious surface at Navy Stadium

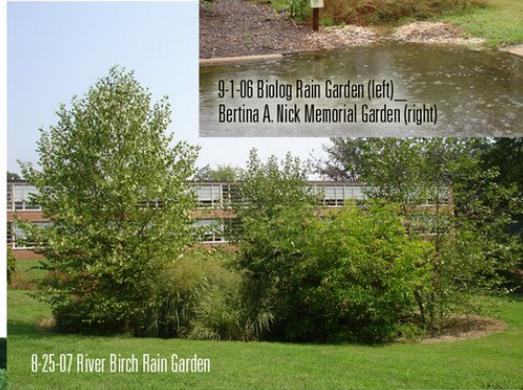
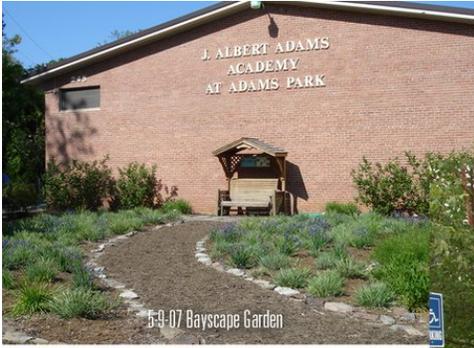


∧ 9-22-07 retaining wall at Brewer Cemetery, erosion occurring below



9-30-07 Graul's Market and parking lot, no stormwater mitigation

# Chesapeake Ecology Center



### **November 3, 2008, Volunteer Day with Adams Academy Students and Teachers**



### **November 27, 2008, Adams Academy Students and Teachers Learn About Habitat Restoration While Installing the Berry Patch Rain Garden**



### **April 2, 2009, Volunteer Day and Videotaping by Maryland Public Television**

Our first major volunteer day of the 2009 season was a huge success! In addition to Maryland Public Television staff, three CEC volunteers were joined by enthusiastic volunteers including: nine students, three teachers, and principal Jeff Tillar, from Adams Academy; four landscape crew members from Ashton Manor Environmental (formerly Greenskeeper Environmental); and seven Anne Arundel County Master Gardeners.

We got off to a great start with Anne Arundel County Master Gardeners dividing up and working with small groups of students. Activities included working on gardens spread out over approximately three (of 10) acres in the front of Adams Academy. Jeff Schwartz, owner of Ashton Manor Environmental, joined us and generously donated services by having his landscape crew help out. Students had the opportunity to learn about the environmental amenities at their campus, and they enjoyed themselves—not to mention, they were a real help!

Maryland Public Television (MPT) filmed all of the various activities and they conducted several filmed interviews with volunteers on the topics of: rainscaping, including the value of rain gardens and other native plant installations, and the tremendous value of volunteer assistance. MPT aired the eight-minute

segment, along with Zora Lathan appearing on-air, during their two-hour Chesapeake Bay Volunteer-A-Thon on Sunday, April 26, 2009. Notably, the following April in 2010, Maryland Public Television rebroadcasted RainScaping at the CEC for the 2-hour Chesapeake Bay Week Volunteer-A-Thon. It can be viewed at <http://www.youtube.com/watch?v=4bE8KcVRL-0>.



**June 4 & 11, 2009, Garden Tours and Volunteer Days with International Visitors from Several Countries**



**June 13, 2009, Volunteer Day with Master Gardeners**



**October 2009, Thanks to Adams Academy Students, Teachers, and CEC Volunteers, "Make A Difference Day" Turned Into "Make A Difference Week"**



**November 4, 2009, 24 Adams Academy Teachers Participated in a Tour of the Adams Academy/CEC Native Plant Demonstration Gardens and Sites**



**Earth Day, April 22, 2010, Adams Academy Students Installed an Eco-Art Project in the Butterfly/Dragonfly Garden**



**May 11, 2010, Volunteer Day with Three Classes of Adams Academy Students, Teachers, and Master Gardeners**



**September 18, 2010, Annual CEC Garden Open House and Garden Tours**



**October 30, 2010, Naval Academy Midshipmen and Master Gardeners Install Glenwood Street Rain Garden and Work on Catch-All Rain Garden**



**October 2010 & 2011, Adams Academy and CEC Exhibits at Annapolis Cluster Schools Events at Truxtun Park Recreation Center and at Annapolis High School**



# RainScaping Signs Installed Throughout Anne Arundel County



**Spring 2011, Master Gardener Volunteers  
Install the Highbush Blueberry Rain Garden**



**Spring and Summer 2011, Completed Highbush Blueberry Rain Garden; Adams Academy Students and Teachers and Master Gardener Volunteers**



Spring 2011, Master Gardener Volunteers Transform the Xeriscape Garden



## Spring 2011, Adams Academy Students Learn About Habitat Restoration While Working on Gardens



**October and December 2011, Adams Academy Students Learn About Habitat Restoration While Making a Brush Pile for Wildlife Habitat**



**2011 and 2012, Master Gardener and CEC Volunteers Transform the Sweetbay Magnolia Rain Garden**

In November and December of 2011, and in the spring of 2012, volunteers worked on sprucing up and making alterations to the Sweetbay Magnolia Rain Garden, located along the length of the parking lot. On June 16, 2012, Master Gardener Volunteers completed most of the work on the Rain Garden.



**May 19, 2012, Master Gardener and CEC  
Volunteers Transform the BayScape Garden**



**June 1, 2012, Adams Academy Received Green School Certification**



**June 6, 2012, CEC Garden Tour for 32 Master Gardeners for their  
Landscape Design for Water Management Advanced Training Class**



## August 25, 2012, Volunteer Day with Master Gardeners

The former Butterfly Garden has been scaled back. This garden has undergone a metamorphosis, and is now the Dragonfly Garden!



## September 15, 2012, Annual Garden Open House and Native Plant Sale

It was a lovely day...we couldn't have asked for better weather or better volunteers, and we had a good turnout for our annual Garden Open House and Native Plant Sale, which also marked the CEC's 10th Anniversary! The first two photos were shot on September 12th of Master Gardeners helping prepare for the September 15th event.



Rain Gardens at the CEC



**Gardens at the CEC in Early Spring...a Virtual Tour Along  
the Path to the Outdoor Classroom and Forest Buffer**

