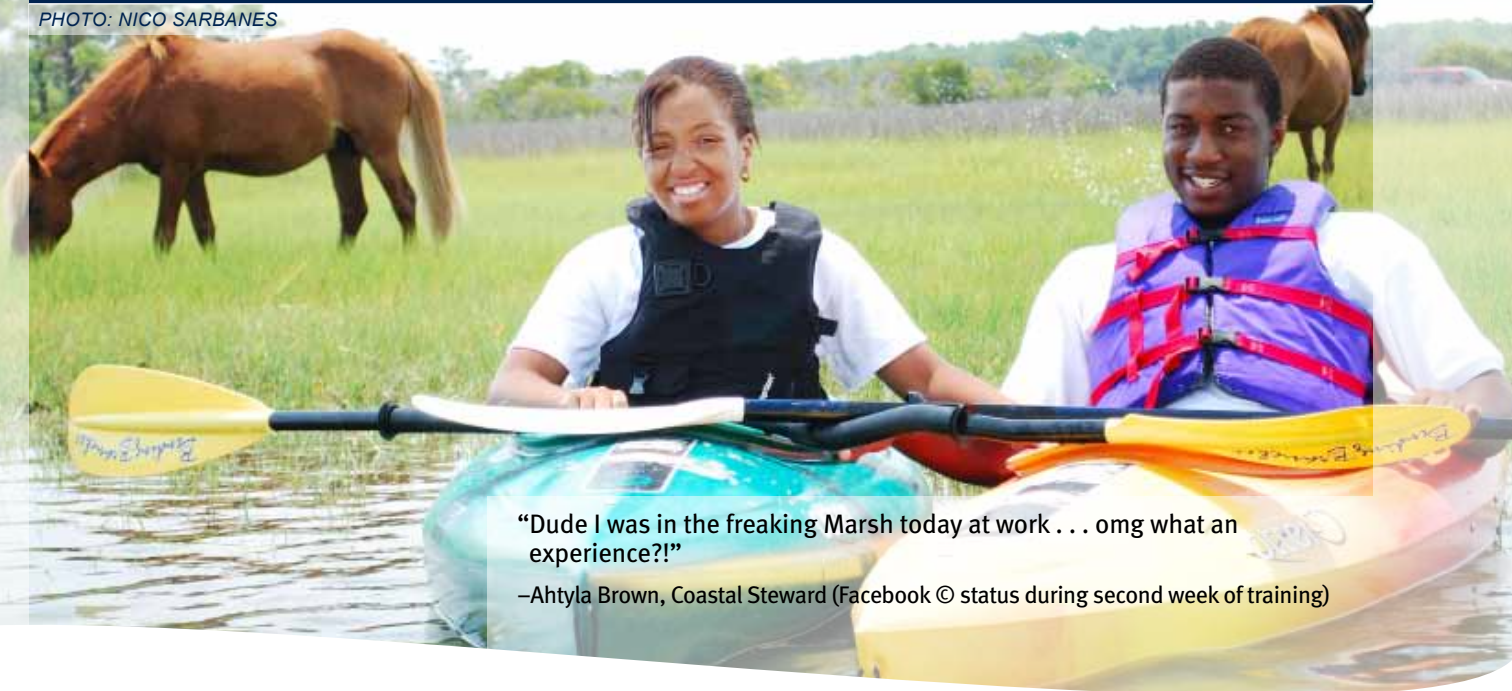


# Case Studies

Coastal Stewards Kayak to Assateague Island with Wild Horses

PHOTO: NICO SARBANES



“Dude I was in the freaking Marsh today at work . . . omg what an experience?!”

—Ahtyla Brown, Coastal Steward (Facebook © status during second week of training)

## Coastal Stewards Program: Diversifying Environmental Education

CARRIE SAMIS

This past summer, the Maryland Coastal Bays Program (MCBP), a National Estuary Program located on the Eastern Shore of Maryland, hired 17 Coastal Stewards, ages 15 to 23. The Coastal Stewards program is made possible through a unique partnership program of the MCBP, Assateague Island National Seashore, and Assateague State Park. Having completed its third year, the program has been making a difference since its beginning, but there have also been struggles along the way.

### Background

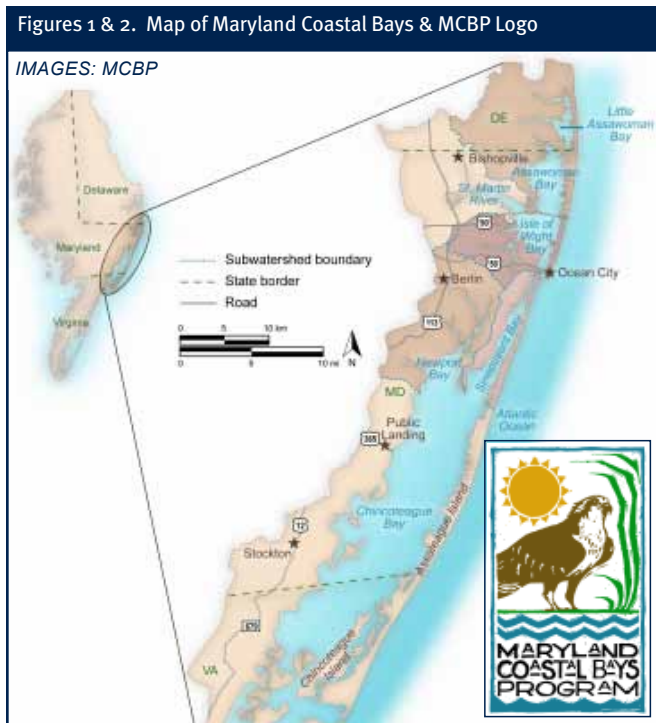
Children are growing up ever-more disconnected from nature. Nationally, nearly half of youth age five and under are children of color. According to U.S. Census data (2010), Maryland is quickly becoming a minority-majority state. Nearly 46% of Marylanders are people of color. The Maryland State Department of Education recently reported that Maryland students now represent that minority-majority. African American communities are concentrated in cities, such as Baltimore, and on the Eastern Shore. In Worcester County, several towns, including Berlin, Pocomoke, and Snow Hill, have communities of color representing 30 to 45% of the local population, and the Eastern Shore is one of the poorest regions of the state. The long-standing local history of people “working on the water” is quickly fading, as commercial fisheries for blue crabs and oysters, necessarily, endure

increasing regulations due to populations dipping to critical levels. Agricultural communities, including farms and large chicken feeding operations, which are concentrated on the Eastern Shore, are also under pressure from development and increasing regulations. Identifying and communicating best practices for development, agriculture, and commercial fishing, as well as preserving large tracts of land, are critical to maintaining the quality of the coastal bays watershed (Figure 1).

Environmental organizations have been largely ineffective at engaging minorities. In 2007, the Yale School of Forestry & Environmental Studies published *Diversity and the Future of the U.S. Environmental Movement*, edited by Emily Enderle. In it, Marcelo Bonta, with the Center for Diversity & the Environment, and Charles Jordan, with the Conservation Fund, warn, “In ten years, if we find ourselves in a similar place, facing the same diversity issues as today, then we have failed miserably and the sustainability and relevance of our movement will be gravely at risk.” It doesn’t take a scientist to conclude that there are potentially debilitating ramifications for environmental-related organizations whose staff, boards, volunteers, and support groups are not representative of the local population.

Too many environmental organizations, which exist to protect biological diversity, fail to fully recognize the value

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Within the first year, the LEAP partners along with Assateague State Park and Assateague Island National Seashore were providing year-round programming for high school students enrolled in the Upward Bound program at UMES. Upward Bound partners, including graduate students from UMES, work with local high school students from the Lower Eastern Shore, to provide marine and estuarine science programs, hands-on outdoor experiences, and exposure to future career possibilities in science, education, and outreach (Figure 3).

The MCBP recognized a need to reach out to minority communities within the coastal bays, watershed, and surrounding region, and developing a multi-agency MOU with a minority-serving institution was a critical step early in the process. The formal partnership has since resulted in extended, year-round programs, one-day annual events, and the multi-day green jobs symposium “Get Out. Get Green. Get Paid.” Most importantly, the MOU fostered trust and confidence among partners, now working closely together to address common goals.

of cultural diversity. As a National Estuary Program, the MCBP (Figure 2) focuses on the watershed—and everything and everyone within it. Recognizing that diverse points of view will help the MCBP realize our mission to protect the coastal bays, we strive to create a culture within our organization that inspires respect and understanding of the value of biological and cultural diversity in and around our coastal bays.

### History

Much of the MCBP’s work revolves around building relationships. We are building relationships to benefit not only the coastal bays but also the communities within our watershed. Relationship building, to better engage minorities, began more than a decade ago. Then in 2007, the MCBP partnered with the U.S. Environmental Protection Agency (U.S. EPA), Maryland Department of the Environment, and Maryland Department of Natural Resources, and signed a Memorandum of Understanding (MOU) with the historically black University of Maryland, Eastern Shore (UMES). The MOU with UMES was the result of more than a year of planning and strategizing conducted by the Minority Outreach and Involvement Steering Committee at the MCBP, with significant leadership from the U.S. EPA.

The MOU established a model partnership called Linking Environmental and Academic Programs (LEAP). LEAP partners worked together to generate funding and start new programs, which were designed to link students with scientific and technical experts and to provide meaningful learning opportunities and field experiences.

### Coastal Stewards: Getting Started

Armed with partnerships and the successes of the Upward Bound program, the MCBP, along with Assateague Island National Seashore, Assateague State Park, and Delmarva Low-Impact Tourism Experiences, created the Coastal Stewards program because we wanted to expand upon the environmental and cultural work-related experiences available to local students.





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The Coastal Stewards program (Figure 4) began in the spring of 2009, with a commitment from the National Park Service (NPS) to provide funding for supplies and staff support. We started planning to hire a crew of students for the 2009 summer without knowing how we would pay their wages. We wrote grants and extensively networked. We knew we had a strong program, but we needed more funding.

We were feeling a bit discouraged, but then federal stimulus money was funneled through Maryland to our local Work Force Alliance, a state agency with regional offices throughout Maryland, specifically to provide workforce development opportunities for youth. The stimulus funding from the American Recovery and Reinvestment Act of 2009 would pay for Coastal Stewards' student wages. The partnership received the funding, recruited and hired 11 students, and started the 2009 summer program within two weeks. As soon as the summer ended, we started to seek funding for the next year. Again, we wrote grants, networked, made our case, and even had encouraging results to share from our pilot year.

In late 2009, the MCBP's Policy Committee voted to establish a Diversity Advisory Committee, further formalizing our commitment to deliberate inclusivity. The committee has representatives from the U.S. EPA, the National Association for the Advancement of Colored People (NAACP), UMES, Salisbury University, Maryland Department of Natural Resources, Assateague Island National Seashore, NPS, local government agencies, and citizens. The Diversity Advisory Committee is responsible for institutionalizing minority outreach and participation within the MCBP and building upon existing projects and programs, such as the Coastal Stewards program, designed to foster greater participation by minorities in natural resources and the environment (Figure 5).

The MCBP gained experience and formalized our diversity programming, but obtaining full funding in 2010 for Coastal Stewards remained challenging. We secured funding for supplies and training, but it was not until the last minute that we had the money to pay student wages—again. This time the money came from the Maryland Department of Natural Resources, a LEAP Partner, but for fewer students.

This past year, the third year of the program, we were fortunate to receive funding from the U.S. EPA. Knowing that we had secured funding several months ahead of time, rather than only a couple of weeks, allowed us to recruit more effectively, plan more, and focus on enhancing the program.

Seeking and seizing every opportunity we could to promote the program helped tremendously. Because the partners included local non-profit, state, and federal agencies, we had access to, and could accept, funds from multiple sources. Not relying on a sole funding source worked to our benefit. Showing buy-in and funding support from multiple sources was a testament to confidence in the program and lessened the burden on already cash-strapped agencies and organizations with shrinking budgets. We leveraged support in any way we could.

We knew the program was working. We were seeing results. We felt a strong sense of professional and personal commitment to our Coastal Stewards. The determination of the staff representing the primary partners was unflagging.

A funding promise from the U.S. EPA for 2012 will allow us to further fine-tune the program. The U.S. EPA is now the major funder for Coastal Stewards. Financial support for the program from U.S. EPA Headquarters and strong staff support from both Headquarters and EPA Region 3 has enabled us to grow and enhance the program significantly. We are confident that strong support from the NPS and the Maryland Department of Natural Resources will also continue.

## Program Activities and Contributions

Since the Coastal Stewards' inception, a group of young people from the Eastern Shore of Maryland has received training, developed new skills, been mentored by leaders in the field, learned about our shared cultural heritage,



## Diversifying Environmental Education

Figure 6. Coastal Stewards Help Band Royal Terns



developed new relationships with peers, become more environmentally literate, earned a paycheck in a green job, and made overwhelmingly positive contributions that benefit local people and our coastal bays.

During the first three summers of the program, Coastal Stewards joined forces with other local volunteers and organizations to improve local habitats—planting more than 3,000 native plants, removing invasive species, and installing fencing to protect nearly two miles of dunes on Assateague Island. Coastal Stewards have also worked to improve water quality—constructing 60 rain barrels for installation; removing hundreds of stakes during the final phase of a successful marsh restoration project along Isle of Wight Bay; helping to maintain a bioretention site adjacent to Chincoteague Bay, buffer zones along Sinepuxent Bay, and a rain garden at the historic Germantown School; and removing an estimated five tons of marine debris and trash along our coasts.

Additionally, our Coastal Stewards have contributed to scientific data collection—participating in the National Aquarium’s annual dolphin count, working with the Maryland Department of Natural Resources to band more than 1,500 brown pelicans on islands in the Chesapeake and coastal bays and nearly 200 royal terns in the coastal bays (Figure 6), and documenting reptiles and amphibians in Worcester County for the Maryland Herp Atlas. All of these projects support terrestrial and aquatic wildlife monitoring programs, which help scientists better understand the range, distribution, reproduction, and migratory patterns of species of concern.

This past summer, Coastal Stewards continued to assist with projects designed to help improve water quality in the coastal bays—planting marsh grasses to stabilize the shorelines and provide habitat, helping to maintain planted bioretention buffers that absorb nutrients and runoff, and cleaning up debris from our waterways and adjacent land. The Coastal Stewards also constructed 20 more rain barrels, which will collect rainwater that can be used to water gardens, and labeled storm drains this past fall in order to remind residents and visitors that whatever goes into drains eventually flows to our bays.

In addition to fieldwork, Coastal Stewards conduct educational programs and support MCBP outreach activities, engaging more than 10,000 visitors and residents each summer. Our Stewards share their passion for and knowledge of local ecosystems, encourage conservation efforts, and facilitate connections to nature for young and old, alike. Coastal Stewards also attend local cultural events such as Blessing of the Combines (Figures 7 and 8), the Tawes Crab and Clambake, and Maryland Coast Day. These events are important because they celebrate cultural heritage and ways of living that depend upon preserving local traditions, maintaining green spaces and healthy waterways, and living in a sustainable way.

### Successes

From the beginning, MCBP wanted to create the Coastal Stewards program to pipeline young minority students into green jobs. It is working. Nature is inspiring, but so is a paycheck from a green job. Several of our former Coastal Stewards have earned positions with the National Park Service, the Maryland Park Service, the Maryland Civic Justice Corps, and the Maryland Conservation Corps.

Figure 7. Sign at the Eastern Shore



Figure 8. Coastal Stewards at Blessing of the Combines Event





## Diversifying Environmental Education

Figure 9. Maryland Governor with a Coastal Steward

PHOTO: CARRIE SAMIS



When we first signed our MOU with UMES, we hired a summer intern, Nick Clemons, from UMES. He worked with our science coordinator and assisted with education and outreach activities during his internship. The following summer, he enrolled in graduate school at UMES and secured a seasonal position with our partner, Assateague Island National Seashore. Now, Nick has a Master's degree in Natural Resource Science and is a full-time employee with the National Park Service. He continues to work with the Upward Bound Marine and Estuarine Science Program and helps to manage the Coastal Stewards program. He is an incredible role model for the students engaged in our programs.

We continue to receive positive feedback about and success stories from this program. Clarisse Young, one of the youngest Coastal Stewards, is excited about the variety of experiences the program offers. On the third day of training, she and her fellow Coastal Stewards met Maryland Governor Martin O'Malley (Figure 9) and kayaked with him to visit Skimmer Island, the site of recent restoration work and a critical nesting area for two state-endangered species—black skimmers and royal terns. Danielle Miller, a senior at Snow Hill High School, says, "This job has helped me develop my personality and open up to new people. It's also helped me learn more about the local environment. Now, I plan to major in biology and chemistry." Joriee Dorman, a senior at Bowie State University, just returned for her third summer as a Coastal Steward. "Being a Coastal Steward has been so much more than a job. My entire perspective has changed: about our world, how I view the environment, and what I can do to make an effective change in my community," she says. "Being a Coastal Steward has affected me personally. I never knew all of the opportunities that environmental education could offer. I'm seriously considering a career in environmental education now."

The program strives to offer a connection to the local environment that could appeal to anyone, not just biology or environmental science majors. While a few Stewards are pursuing degrees in science, other Coastal Stewards are studying history, education, business, and psychology. Stephen Castaneda, a senior at Hampton University, is a music major. He has noticed that many local, young African Americans do not go outdoors much, except when they play sports. He hopes to change that. He now recognizes the importance of all people feeling a sense of connection with nature and becoming more environmentally literate. "Everyone must assume some responsibility for caring for our natural resources," he says.

### Lessons Learned

Before becoming involved in Coastal Stewards, many of our students were unfamiliar with the estuary. We quickly realized their employment was a summer of firsts. Our Stewards did not learn about the local coastal bays in school, and they had never been to Assateague Island. Some had never been to the beach, even though they lived only 20 to 30 minutes away from the coast. They had never been in a motor boat, had never kayaked (Figure 10), and few had ever been fishing. We learned that an important part of our program was simply providing access. We were also surprised to discover minimal exposure to nature is not specific to urban areas. Our Coastal Stewards, who live in a very rural region, had little understanding of, or experience in, local environments.

We have realized that environmental stewardship can be inspired by a simple moment or opportunity within a range

Figure 10. Coastal Stewards Ready to Kayak

PHOTO: JIM RAPP



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of experiences. For some of our Stewards, we need to offer the occasion to spend more time outdoors. For other Stewards, we need to wade into the marsh and walk through the woods together. For some, we need to extend an invitation to visit the beach, which, just a few decades ago, their grandparents and great-grandparents were prohibited from enjoying. And for others, we need to share something more tangible, such as a reusable shopping bag, a reusable water bottle, an energy-efficient light bulb, or a delicious homemade, locally-harvested meal.

We have also learned that some of our Coastal Stewards are already committed, passionate, and caring for our environment, but benefit greatly from a reminder that people matter, too. Communities, culture, and individuals of all backgrounds matter, care, and can make a difference. We are all inextricably linked to the natural world, but people may care about nature and the environment for very different reasons. We help empower our Stewards by encouraging them to focus on the fact that many people care and that their differing reasons are okay. The program creates an atmosphere conducive to the enthusiastic sharing of an appreciation for nature, while also teaching people skills and providing resources that can help people make a difference.

Most groups that review, fund, or demonstrate interest in our program are interested in the population of students involved in the program. One might quickly label them minority, underserved, at-risk, disadvantaged, and/or underrepresented. The younger students attend area high schools, all of which are fed by Title I elementary schools—the poorest in the state, in the most underserved region of Maryland. Most of the older students attend historically black colleges and universities. As the MCBP's Educational Coordinator, the more I become involved with the students, the less comfortable I am labeling them as a group and lumping them into those categories. As I have become more culturally aware and personally invested in the lives of our Coastal Stewards, I see them as individuals, not statistics. Each of us faces a unique set of challenges as we navigate our lives. Rarely, if ever, do we fully understand the struggles of another person. We can, however, strive to recognize, acknowledge, and nurture the strength and talent that each individual brings to the table. I think it is important to remember that—every day.

The MCBP and partnering program staff care deeply about this program. We are making environmental improvements in our watershed, but equally if not more importantly, the program is changing lives. As an environmental educator for more than 17 years, I can say this is the most challenging, most rewarding, and most effective program of my career. I knew the staff was hoping to achieve multiple benefits for the students and our agencies/organizations, but we did not realize the extent to which our own perspectives would be altered and our lives enriched as we learned from our Stewards.

## Moving Forward

Thanks to a commitment of continued funding for 2012 from the U.S. EPA, we have several next steps planned to further promote and supplement the Coastal Stewards program. Most immediately, we plan to hire a full-time, year-round Coastal Steward. Additionally, we have the funding for a Master's or PhD-level person, who will be responsible for documenting the successes and challenges of our diversity-related work and gathering similar information from other National Estuary Programs. The goal is to identify best practices, share information on overcoming barriers, and develop case studies that may benefit other National Estuary Programs and partners as they move forward with their efforts to increasingly and more effectively engage all communities within their watershed.

To move forward as effective, environmentally-related organizations, we must aim to foster the next generation of environmental stewards. Every effort should be made to do this with care, deliberation, and respect. Fostering meaningful, positive connections with nature and providing the encouragement and the tools needed to affect change is key. Let us focus on small steps, incremental change, positive reinforcement, and empowerment.

*If you're interested in learning more about the Maryland Coastal Bays Program's diversity initiatives, please contact Carrie Samis at [csamis@mdcoastalbays.org](mailto:csamis@mdcoastalbays.org). You can follow Coastal Stewards on Facebook, Twitter, and Foursquare.*

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*CARRIE SAMIS is the Education Coordinator for the Maryland Coastal Bays Program. She has 17 years of environmental education experience, including time with the Maryland Department of Natural Resources and the Salisbury Zoological Park, and is involved in several national and state committees and organizations related to her work.*