

# THE GREENER GOOD

## The Enviro-Active Museum

By Elizabeth Wylie and Sarah S. Brophy

**F**resh water from six eastern states mixes with salt water flowing in from the Atlantic Ocean to create the Chesapeake Bay, the largest estuary in the United States. While it was once a haven for shellfish, fin fish and waterfowl, its environmental health and the economic well-being of the population have been seriously affected by pollution, the loss of wetlands to development and over-aggressive fishing.

In St. Michaels, Md., the 40-plus-year-old Chesapeake Bay Maritime Museum (CBMM) interprets and preserves the culture of the region, a culture once based almost entirely on the bay. Despite the museum's popularity, President Stuart Parnes is concerned. "I've been asked, if the museum prospers while the bay dies, what's the point?"

The museum's mission is to preserve the culture of the region, Parnes says, "but we all recognize that this means more than collecting physical artifacts. If we are going to preserve the very tenuous culture of the bay's people, we need to help sustain the bay." Now, through greening the museum campus and expanding environmental programming, the museum is choosing to emphasize environmental stewardship for the institution, for the community and for the bay through waterfront restoration, pollution reduction, stormwater management and education—for starters.





The Chesapeake Bay Maritime Museum has extended its reach from preserving culture to also preserving the bay.

As environmental sustainability goes mainstream, many museums like CBMM are finding they have an expanded role in educating on environmental issues; in turn, these museums realize benefits as they engage the public and attract support. Where once it was primarily science and children's museums that made the public connection between interpretation and community action, now history and art museums and others, small and large, are finding that sustainability is an issue that connects their missions to local, regional and global communities in new ways.

"Integration of systems is the basis of environmental sustainability," notes Barbra Batshalom, executive director of the Green Roundtable, an independent nonprofit organization whose mission is to promote and support sustainable buildings and development. "Museum staff and trustees have increased awareness around the responsibilities of being stewards and understand the need to integrate mission activities into the natural, social and built systems of the whole community."

Environmentally sustainable practice in museums requires engagement with our whole community. It means reaching not just the audi-

ence attending lectures, visiting exhibits and participating in town meetings, but the audience that lives or works in the neighborhood, reads the newspaper, buys light bulbs, feeds their families, drives a car and generates trash. Museums are in a position to positively influence those who notice their sites, share their environment and simply care about things they care about, too: children's health and education, science, history, the planet. Building and running museums sustainably while advocating for sustainability in the community is a powerful opportunity for thoughtful, proactive museum work.

The benefits can be both immediate, as in increased attendance, and intangible,

as in connecting to a deepening eco-consciousness among the young people who are our future audience and supporters. In the current state of green public awareness, environmental sustainability can brand museums as trusted educators leading by example.

The green movement in museums is following the same trajectory that began transforming college campuses almost 20 years ago. A 1990 declaration from a group of university leaders acknowledged that universities have a major role in addressing environmental changes. It was a watershed moment that galvanized and accelerated fledgling campus sustainability efforts that had sprouted up during the 1970s energy crisis, according to *Sustainability on Campus: Stories and Strategies for Change*, edited by Peggy F. Barlett and Geoffrey W. Chase. Grassroots clamoring by students and staff for attention to the environmental impact of campuses is now driving university policy on energy, water use, recycling and waste reduction. (The University Leaders for a Sustainable Future website lists campus sustainability programs with links to their websites, potentially useful resources for museums seeking to go green.)

In museums, early efforts are also often staff-driven internal programs for

its staff a small electronics recycling program, TechnoTrash Can. The first can was filled in six weeks with 45 pounds of materials—45 pounds of material that did not go in a landfill. In 1999, the Autry Museum of Western Heritage (now the Autry National Center) won a state award for its recycling program, which subsidizes an employee recreation program. That program was started by a staffer, a former Boy Scout, with a personal interest in environmental issues. Today, the program has expanded with a connection to a community recycling center for "e-waste," or defunct electronics. Institution-wide green efforts have grown to include landscaping practices, energy-efficiency measures and using biodegradable products in the cafe. Facilities Director Mike Garcia, again a former Boy Scout with an interest in the environment, has been a champion for green actions. "We hope to serve as inspiration for others by showing that one person's idea can be realized and grow into larger ideas that affect the greater good," he says.

**E**arly external expressions of a green message, and first attempts by museums to publicly connect action to mission, often take the form of recycling programs for visitors to deposit paper, batteries, CDs, DVDs and cell phones. The Cabrillo Marine Aquarium in Los Angeles asks school groups to bring bags of recyclables in lieu of an admission fee. Major institutions like Cleveland's MetroParks Zoo and smaller ones like the Discovery Museums in Acton, Mass., have on-site community paper and phone book recycling programs that earn money. In their case, savvy recycling businesses supply free containers and free pick-up to guarantee the opportunity to buy back the recyclables. Keeping recyclables out of their trash stream also saves museums hauling fees.

Some museums are making the connection between sustainable agriculture and mission by hosting farmers' markets, operating their own farm stands and serving as distribution sites for Community-Supported

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recycling paper, cans, plastic and printer cartridges. (Raise your hand if you have carted home recyclables from work before a formal program was in place.) Now many of these office efforts have matured, and some sites encourage staff to bring in recyclables from home.

Chicago's Lincoln Park Zoo piloted for

Agriculture (CSA). CSA programs, which aim to increase quality of food and of care given land, plants and animals while reducing potential food losses and financial risks for producers, have been around for about 20 years. There are currently more than 2,000 across the country. Consumers "subscribe" for produce from local farms using cash, time or both. Buyers pay for their shares in the off season and reap the benefits during the harvest. The system supports a regional, sustainable food supply and preserves local farmland.

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Volunteers pick strawberries and rainbow chard for the Massachusetts Audubon's community-sponsored agriculture program.

world through collection-based discovery, interpretation and education. The museum has formed a green committee to study and implement sustainable actions in all areas. This activity has become a rallying point for staff who see the opportunities for education and mission fulfillment, as well as cost savings.

Connecting mission to action, the museum recently added more than 20 acres of open space behind its building to the state's Natural Areas Registry to conserve a prairie hay meadow. In addition to being one of the few meadows remaining in central Oklahoma, the site also hosts a large population of Oklahoma beardtongue, a beautiful and threatened flowering plant found only in central Oklahoma. The museum has also registered its 7-year-old, 195,000-square-foot building for LEED-EB certification, which the U.S. Green Building Council initiated in 2005 to evaluate maximum operating efficiency and minimal environmental impact in existing buildings. The museum's goal is to be the first LEED building on the 24,000-student campus and the first existing building in Oklahoma to become LEED-certified. Director Ellen Censky says she feels it is important that the museum have a bully pulpit from which it can promote environmental awareness—throughout the museum field, Oklahoma and her community. (As a resident, she is pushing for Norman to be the greenest city in Oklahoma.) "It is part of our mission and vision to inspire understanding, appreciation and stewardship of the earth and its peoples," she says. "If we cannot lead by example, then why should people listen to what we are saying?"

Sustainable activities and mission fulfillment can only truly be linked and optimized when museums tell people what they are doing and why. Beyond green teams with internal recycling and energy efficiency programs that go largely unseen, many museums are starting to explain and encourage sustainable choices and connect the dots to mission via signage,

websites and program partnerships. The Cincinnati Zoo and Arboretum uses its website to educate about plant conservation issues, with articles on sustainable gardening and data on propagation, preservation and restoration of endangered flora (e.g., one in every eight species of plant in the world is threatened with extinction). Their Local Flora Project seeks to entice community members to contribute to the Local Flora Database, a record of plants in the Greater Cincinnati area, to understand how the changes in the region over the past 200 years have affected the local flora.

**B**ack on the Chesapeake Bay, CBMM is adding sustainability interpretation onsite and in the community, in concert with converting to a sustainable campus and marina. "Everything we do here is because of, and about, the bay," says Director of Education Robert Forloney. "We haven't taken on the challenge of sustaining the bay, yet everything—vessel design, culture and lifeways and folk traditions—is based on the bay. The rate of change in the bay's health has had and will continue to have major consequences on the area."

The museum now offers programs for waterfront homeowners on creating living shorelines instead of seawalls, provides public lectures via kayak and partners with the Adkins Arboretum on planting stormwater-containing rain gardens that reduce runoff to municipal storm sewers. For the museum's first Bay Day, about 25 environmental organizations were expected to accept the invitation to a public information day. Eighty showed up. They ranged from grassroots to international, and all encouraged individuals to help save the bay with at-home activities and volunteer opportunities.

Most recently, the museum held a free workshop on campus greening for nonprofits, with funding from the Chesapeake



Bay Trust. Representatives from 20 Eastern Shore nonprofits attended a day of how-to programming. On the second day CBMM staff and consultants assessed the museum's campus and began sketching a multiyear action plan for implementing sustainable practice in all areas. On the agenda were policy and planning; water and energy use; selection, recycling and disposal of materials and resources; and site sustainability. To reconnect to the water, the museum is replacing its bulkheads with a living shoreline and incorporating the construction into site interpretation. After construction, when the museum begins planting and propagating oysters, popularly known as oyster gardening, the shoreline also will be an interpretive site. And to think, the only "natural" landscape on the campus is the pile of oyster shells it sits on.

Connecting individuals to their environment is also an important goal for the Brooklyn Children's Museum, where natural science education is a strong focus. A major facilities project has provided unique opportunities that go beyond creating an energy-efficient building. The \$46 million museum expansion is expected to be the first LEED-certified museum in New York and is a demonstration site for the city's green building initiative. There is tremendous excitement about implementing programs for interpreting green building systems as well as providing environmental education exhibits and workshops for children and families. The new Kids Cafe will extend its green initiative to visitors' plates with ecologically conscious products and practices at all levels, from low-volume packaging, biodegradable and recycled napkins and tableware and biode-



The Oregon Museum of Science and Industry occupies a former brownfield.

the sculpture park,” SAM spokeswoman Cara Egan says. “It has become integral to the urban fabric of our city.”

On the shores of the Willamette River in Portland sits the Oregon Museum of Science and Industry (OMSI), whose complex also occupies a former brownfield. During a period of redevelopment in 1990, there were no city or state regulatory design requirements for stormwater discharges into the river. Seeing an opportunity to test new strategies, the city asked OMSI to rework its parking lot design to introduce bioswales. These landscaped areas capture water runoff, retaining, filtering and cleansing it of silt and pollution before it is released into the watershed or storm sewer. The new design filtered and cleansed the runoff from four acres of parking lots and prevented more than 3.9 million gallons of untreated stormwater runoff from discharging directly into the Willamette River annually. OMSI’s project schedule was not disrupted, and the museum saved \$78,000 in construction because it eliminated the need for stormwater pipes, sedimentation manholes and catch basins. OMSI’s collaborative approach to site design led to important revisions in Portland’s municipal codes governing stormwater management and parking lots. The new codes in turn protect the river.

In Chicago, environmentally sustainable whole-community action will benefit residents of North Lawndale, an inner-city neighborhood that suffers from high rates of poverty and unemployment, low educational achievement, a more than 50 percent adult incarceration rate, routine drug-related violence and chronic disease associated with poor nutrition and deeply stressful living patterns. The Chicago Botanic Garden (CBG) is the lead institution in Windy City Harvest, a social enterprise initiative that will provide job training and transitional employment for North Lawndale residents through a year-round agro-business on a 15-acre site in the neighborhood. Two local foundations

are providing much of the funding. They recruited the garden to work with the North Lawndale Employment Network, the Chicago Christian Industrial League and the City Colleges of Chicago to create a master plan for the site and implement the training and production programs.

According to Patsy Benveniste, CBG’s vice president of community education programs, the developing project and site are “a catalyst for overall community development.” The project expects to develop a full menu of green-collar activities including organic foods entrepreneurship, green roof plant evaluation and production, urban arboriculture and soil test-

Chicago. Other zoos and aquariums have adopted related programs, with names like Ocean Safe and Go Fish. All promote sustainable choices in seafood by providing wallet cards to remind diners and shoppers which fish choices are good for the environment. Many sites partner with local restaurants to promote sustainable servings and host culinary sessions to taste and learn about cooking seafood. They’re changing behavior one diner at a time but with a potential global impact.

“People were eager for information and trusted us to give them good advice on seafood choices,” says Ken Peterson, communications director at MBAq. “Eight years later the program is growing, and now this thinking and these values are embraced by big food companies and retailers.” MBAq has helped Whole Foods Market with changes to sustainable seafood efforts and worked with a large food vendor to make and promote its commitment to sustainable food sourcing for the company’s more than 400 institutional cafe clients. And it isn’t just zoos and aquariums. If you eat at the Seattle Art Museum, OMSI or the Getty Center, you’re

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gradable and low-phosphate cleaning supplies to a sorting and recycling program for waste. The museum also wants to encourage visitors to dine green, utilizing seasonal and local produce from area farmers’ markets to provide meals with low carbon impact and high nutritional value. Located in the Crown Heights/Bedford-Stuyvesant neighborhood, where rates of asthma and diabetes are notoriously high, the museum sees community health and wellness as an important benefit to becoming green.

**S**ometimes environmental action means the whole community leveraging for a shared good. The Seattle Art Museum (SAM) has built a public sculpture park on the site of a former brownfield. A now revitalized and accessible Seattle shoreline was formerly the site of a Union Oil Company of California facility where the company loaded and unloaded petroleum products for 65 years. In 1999 SAM and the Trust for Public Land purchased the brownfield. An adjacent lot was then acquired by SAM and the Museum Development Authority with financial help from the city of Seattle and King County. This purchase prevented the construction of a private high-rise that would have blocked a panoramic view of Puget Sound and the Olympic Mountains and limited public access to the park and the water. The park’s boardwalk and paths now provide public access to the waterfront, an extension of a public bicycle trail and a replanted shoreline to support salmon restoration while giving the museum a venue for sculpture. Before this, downtown Seattle had few parks, no large community gathering spaces and limited access to the shore. Now Olympic Park, thanks to a generous operating endowment, is free and open to the public. “People tell us they can’t imagine our downtown without

ing and remediation. The emerging green economy is its platform for establishing local, sustainable food production in a manner that helps residents acquire marketable job skills that support the health and vitality of North Lawndale and the city of Chicago.

Teaching sustainability through food is a longtime public program at the Monterey Bay Aquarium (MBAq). Educating the public about how to make responsible choices is part of the MBAq’s mantra: “Inspire, engage and empower.” Every program includes those three components. While staff feed and train animals on public view, the educator “on the dry side” with the visitors inspires, engages and empowers them by teaching about the animals, connecting the animals to visitors’ daily lives and empowering everyone to make a difference. MBAq’s conservation mission spawned Seafood Watch, which has spread to four other West Coast aquariums and inspired the Rite Bite at the Shedd Aquarium in

part of the sustainable seafood movement MBAq has helped spread.

Environmental advocacy is a mission-driven no-brainer for institutions with living collections like MBAq. Recently revised accreditation standards from the Association of Zoos and Aquariums state, “Interpretive programs and publications should include information on the conservation of wildlife and their habitats to foster concern for disappearing biodiversity and to elevate the environmental knowledge of individuals in the field, in the zoo, and the visiting public. . . . The institution should demonstrate responsible energy and natural resource conservation through such activities as recycling, water conservation initiatives . . . and use of solar energy.”

It may seem that zoos, aquariums and gardens have a head start on environmental practice compared to gallery-based institutions, but all can embrace sustainability and community action. Institutions with non-living collections often fail to recognize the synergy between global environmental health and institutional health—overlooking the financial savings, educational opportunities, improved conditions for objects, staff and visitors and the mission connections to history, art, innovation, preservation and technology. In these museums green has not reached standards of practice or accreditation, but surely it will. Just as issues of diversity, disabled accessibility and ethics have made their way into professional expectations, so too will environmentally sustainable practices. ●