

FACILITY PROFILE

Nature Calls

THE BRONX ZOO

BRONX, NEW YORK

EMILY TIPPING

When nature calls, visitors to the Bronx Zoo in New York now not only get to take a potty break—they also get a little education about conservation and environmental awareness along the way.

Owned and operated by the Wildlife Conservation Society, the Bronx Zoo has been educating visitors since 1899 and is the flagship of the largest network of metropolitan zoos in the country. From its initial 22 exhibits, the Zoo has grown into an award-winning, cutting-edge facility that features more than 4,000 animals. Some of its conservation success stories include the development of the zoo's bison herd and its devotion to snow leopards—it was the first zoo in the western hemisphere to exhibit the cats, and 82 cubs were born at the zoo between 1966 and 1999. Among the zoo's current exhibits are its famous Congo Gorilla Forest, a naturalistic Himalayan Highlands Habitat (home to the snow leopards) and an acre of indoor Asian rainforest.

But it was the need for amenities for the human species that led the zoo to replace its restrooms by the Bronxdale entrance. At the time, in early 2004, the old restroom building was in need of a replacement septic system—a proposition that led to concerns about pollution in the nearby Bronx River. A sewer connection was considered, but then abandoned due to cost concerns. Finally, in the fall of 2004, the Zoo decided to install composting toilets.



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“Guest convenience dictated that we replace our old facilities located at a public entrance that services approximately 60 percent of our total annual attendance of 2 million visitors,” said Jon Dohlin, project manager for capital construction for the Wildlife Conservation Society. “There had long been a desire within the Bronx Zoo’s Design Department to explore the possibility of commercial application of composting toilets, which had been in use at some of our isolated Global Conservation field stations for years. The NYC Department of Environmental Protection was very interested in the use of the technology on a larger scale, and became a key funding partner in the construction of our Eco-Restrooms.”

But the endorsement of the Department of Environmental Protection did not mean the project was without its challenges.

“With any kind of unconventional approach in the public sector to standard building practice, permitting issues are problematic,” Dohlin explained, adding that the way the restrooms handle greywater, “black” water and solid waste are all “a radical departure from typical building systems. Bureaucracies are

INFORMATION

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not well equipped to respond to unique situations, so extra time and effort has to be expended in explanation and education; inspection, re-inspection and special meetings with Building Department officials.”

He added that the ongoing maintenance of the composting system requires occasional inspection and mechanical turning of the waste piles, which created skepticism on the part of the maintenance staff that also had to be overcome.

Designed to accommodate more than a half-million visitors per year, the new Eco-Restrooms include 18 toilet fixtures, including 14 foam-flush toilets and four waterless urinals. Cartoon animals pictured on the walls praise the “power of poop”—and provide practical advice on conserving resources at home.

“As a conservation organization, we are constantly looking for ways to reinforce our mission in everything we do, and Eco-Restrooms were something that gave us a chance to ‘walk the green walk’ while meeting a real operational need,” Dohlin said. “At the same time, education is key to our mission and this gave us a chance to talk to our visitors in a fun way about resource conservation, water use and waste disposal.”

The foam-flush toilets use only 3 ounces of water per flush, saving more than a million gallons of water every year. And the restrooms’ greywater irrigation system means the building can manage wastewater sustainably on site. In addition to saving



money, the odorless system captures and recycles the nutrients in human waste, providing compost for the gardens that surround the facility.

“This particular building is beautifully designed—filled with natural light, warm, airy and sleek—not your typical public bathroom,” Dohlin said. “And the experience of using it begins well before entering. We have interpretive graphics explaining the gardens and water collection devices on the pathway leading to the building. If people are so inclined, they are already aware of the ‘why’ we are

composting and ‘why’ it makes so much sense by the time they get to the interior, which is filled with humor and more information about what’s going on behind the seemingly normal bathroom fixtures. It’s a terrific way to make people aware of the choices they can make in their everyday life—even in the most mundane activities—in order to make a difference for conservation.”

People’s response to the new Eco-Restrooms has been “overwhelmingly positive,” Dohlin said. “The building is a pleasure to use, so I think the fear that some people might have going in that they’re going to be faced with an ‘outhouse’ experience is quickly overcome,” he added. “People ‘get it’...they come away realizing that a small change in behavior can result in a big change for the environment. Quite an accomplishment for a bathroom break!”

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