Science Barge, Yonkers

Logan Peric, 9, of Yonkers and Ikechukwu Chima, 17, plant a lettuce plant in a coconut husk pot Saturday at the fifth-season opening of the Science Barge in Yonkers. See a video and photo gallery at lohud.com. / John Meore/The Journal News

YONKERS — Bob Walters calls it “the green oasis of learning,” a floating agricultural laboratory that has been docked on the city’s Hudson River waterfront for years.

Walters is the director of the Yonkers Science Barge, an entirely green-powered craft that grows hundreds of thousands of pounds of food using hydroponics, a highly efficient form of farming with mineral nutrients that uses little water and replaces soil with substances like porous volcanic “rock wool.”

“There’s no place like it around,” Walters said Saturday as the barge launched its fifth season. “Here we have a floating urban farm. We’re growing vegetables with no soil, and hydroponics only uses 25 percent of the water. And we can grow vegetables faster, tastier and at seven times the quantity.”

The barge, formed under the tutelage of Groundwork Hudson Valley, a local nonprofit group, is entirely powered by solar panels and other green energies, and enlists dozens of volunteers to run its farming and other operations.

“This whole main system that we use is hydroponics,” said volunteer Jaspreet Signh, a junior at Yonkers High School. “This is really important because in the cities, you don’t have a lot of space and you can’t really use soil because, one, soil weighs a lot, and also it takes a lot more space than this would.”

Groundwork Executive Director Rick Magder said the barge serves several purposes, including offering educational programs for students and providing food for the community. In June, the group will launch Get Fresh Yonkers, a program to sell the vegetables at a farmers market in the city.

“It’s important to create destinations downtown that will draw visitors,” Magder said.

“And the barge not only serves 3,000 schoolchildren every year but also brings in 3,000 visitors from all around the globe to downtown Yonkers.”

The grand opening festivities included a host of dignitaries, a kite-flying exhibition and a performance by the Nepperhan Youth Corp. drum troupe.

“We knew the program was going to be really neat,” said Rhea Pliakas, 49, of Riverdale, who attended the event with her 11-year-old son, Nikia Zikos.

“You learn a lot about sustainable energy in terms of what we’re doing to the Earth with all our car emissions.”

Walters, the Science Barge director, is used to the reaction from visitors, many of whom were unaware that the future of sustainable farming and green energy has been docked off of Yonkers for five years.

“They go, ‘Wow,’ ” Walters said. “And that’s what we want. We want a ‘wow’ experience.”