

Going Organic at Greens Farms Academy

College Preparatory School Embraces Organic Management and Promotes the Health of the Long Island Sound

By Kathy Litchfield
Westport, CT –

Tom Barry used to come home from work with his pants stained blue from the herbicides he had applied on golf courses all day long. The last thing he wanted was for those pants to go into the wash with his family's clothes.

"It was always a question mark, whether the pesticides and herbicides would cause health problems," said the father of two, aged 3-1/2 and 20 months. "I realized I didn't want that question mark in my life."

Barry's interest in organics was sparked during an innovative research project in the environmental effects of home lawn fertilization he completed during his master's degree work in turfgrass and soil science at the University of Connecticut. He studied how nitrates leach out of soil to contaminate groundwater and was able to quantify, based on the rate of nitrogen, how much is taken up by the plant, how much stays in the soil and how much leaves the system, he said.

While managing the organic arm of a local landscape company, Barry became NOFA accredited (CT course, 2010) and two years ago, embarked upon a new career as the grounds manager and field care specialist at Greens Farms Academy in Westport, Conn., an independent college preparatory day school for grades PreK-12.

At this forward-thinking school encompassing about 42 acres, the grounds, athletic fields, landscape gardens, building shrubbery, meadows and vegetable garden which helps to supply some vegetables and herbs for the cafeteria, are all managed and maintained using organic methods, a testament to the effectiveness of forgoing synthetic pesticides, Barry said.

"It was a nice culture to come into because the school had already embraced organic ideology and that was part of why I was hired, so they were willing to support the maintenance team to purchase additional resources necessary when you don't have the convenience of synthetic pesticides," he said.

Academy Head of School Janet Hartwell said the school had made a commitment to fulfill sustainability initiatives with organic land care before Barry was hired.

"This is very important and we know it is the right thing to do," Hartwell said. "It is the safer, better way for all children, to be away from pesticides. And we're fortunate to have Tom who is exceptional and had the experience we sought. He has done a great job. Quite honestly, our fields have never looked better!"

One of Barry's first projects was to manage a recent overhaul of the school's 15 acres of athletic fields. Some were well established with mature soils; others were brand new and extremely compacted.

"They needed some tender loving care," said Barry, who implemented an aggressive cultural program including aerating three times a year on all the fields, and utilizing a new overseeder and liquid organic fertilizing equipment.

"We alternate our aeration practices with core aeration, deep tine aeration and linear decompaction and we treat each field individually in terms of how we approach the fertilizing program, by the age of the fields," he said. "We also soil test regularly to monitor the effects of our fertilization so we can adjust accordingly."

Another 10-15 acres of the grounds are grassy lawns and landscape beds, which receive organic applications once or twice a year. The addition of many annual beds have added color and interest to the grounds, said Barry, who chooses to plant natives as often as possible.

Last year on Earth Day, the lower school (grades PreK-5) science students and faculty installed 12 native trees including redbud and white spruce.



Students, parents, faculty and staff also got involved in the planning and installation of a 6,500 sq. ft. butterfly garden/meadow. On a sunny Saturday, about 75 volunteers planted 3,500 plugs of native plants including milkweed, butterfly weed, joe pye weed and native goldenrod. While they are struggling with an overrun of the invasive mugwort, Barry said the meadow is beautifying the area, encouraging birds and beneficial insects and mostly thriving.

Lower School (grades PreK-5) Science Teacher Jackie Tran, who recruited volunteers for the school-wide plantings, also integrates curriculum in math, science and writing into the organic vegetable garden she oversees at the Academy. Students start seeds in the greenhouse, transplant them into 15-20 raised beds inside their 32-foot by 40-foot garden, harvest them and deliver the vegetables to the cafeteria where they are used in school lunches. Kitchen waste is also composted on site.

“Kids are able to study where their food comes from and they’re experiencing food from every aspect of the cycle. We do as many cooking classes as we can. All of this helps them form a connection to their food and food culture, food safety and tasting new things like purple carrots, or red and yellow striped heirloom carrots,” said Tran, who holds a master’s degree in environmental conservation education.

“We use the garden as a place to insert environmental literacy for students. We are giving them the tools to make decisions that are sustainable, and understand their impacts so they can be our great world leaders and think about these types of topics as they’re making environmental decisions.”

Barry is looking forward to implementing a new planting plan that will surround the construction of a brand new performing arts building on a section of campus bordering the marshlands directly adjacent to the Long Island Sound. Barry and his team were able to work closely with the landscape architect who designed the planting plan, to substitute native plants for the shrubbery and landscaping around the building. For instance, instead of boxwoods they are planting inkberries; instead of Siberian carpet cypress, low bush blueberries; and instead of Korean firs, eastern red cedars.

“I tried to match the form and function of the plants they had on the original design with a native alternative, working also with a native plant consultant who knew what would work where. The (landscape architect) was very open minded,” said Barry, who also replaced the specification for a Kentucky bluegrass seed mix in the design with a turf type tall fescue that is drought tolerant, requires less nutrient inputs and wears well over time.

“My plan is to irrigate it until established, then stop, and use minimal fertilization as well,” said Barry, who loves his work and hopes his sharing will help others solidify decisions about organic management.

“The NOFA course, the teachers, other professionals and people I’ve met since, really inspired me and the more I learned about organics, and the questions about pesticides, the more I knew this is what I wanted to do,” he said.

For more information, visit www.gfacademy.org. You can also read Tom’s blog on pesticide free grounds maintenance at www.fromthegfields.wordpress.com.

