



Kirk Lang / Staff reporter

Students enrolled in Green Light Academy help install wind turbines at Penfield Lighthouse Wednesday. The turbines will help power electricity used for the lighthouse's renovation.

## Environmental upgrade

# Breathing new life into lighthouse

By Kirk Lang  
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In this era of going green, the Penfield Lighthouse is quickly becoming a model of alternative energy. Already equipped with solar panels that power the foghorn and the light tower, professionals from Norwalk-based Purepoint Energy and more than a dozen teens involved in Greenlight Academy — a four-week summer program offered by Beacon Preservation Inc. — worked side-by-side Wednesday to install one of two wind turbines for the lighthouse.

"We're teaching them all about sustainable technology," said Keith Murray, associate general counsel and director of development for Beacon Preservation. The turbine installation is the final project for the Greenlight Academy students, who hail from Fairfield, Bridgeport, Oxford, Stratford, Norwalk and New Haven public schools.

"From here to the shore is a long way to run a power

line, so to put up a couple of wind turbines, [along with the existing] solar panels, makes a lot of not only financial sense but it's a great sustainable model," said Tom Wemyss, a co-founder of PurePoint Energy.

Everyone made their way to the lighthouse — launching from Captain's Cove — on an eight-seater plastic boat owned by Murray, a Southport resident. Sixteen-year-old Mary McHale, a Fairfield Ludlowe High School student, said she not only learned about wind power but also got a real lesson in working with others she had never met before. She also faced her fear of heights, as she carefully walked up a narrow ladder that leads to the light tower platform.

Sarah Lipecz, a junior at Bunnell High School in Stratford, said the four-week Greenlight Academy program has taught her how

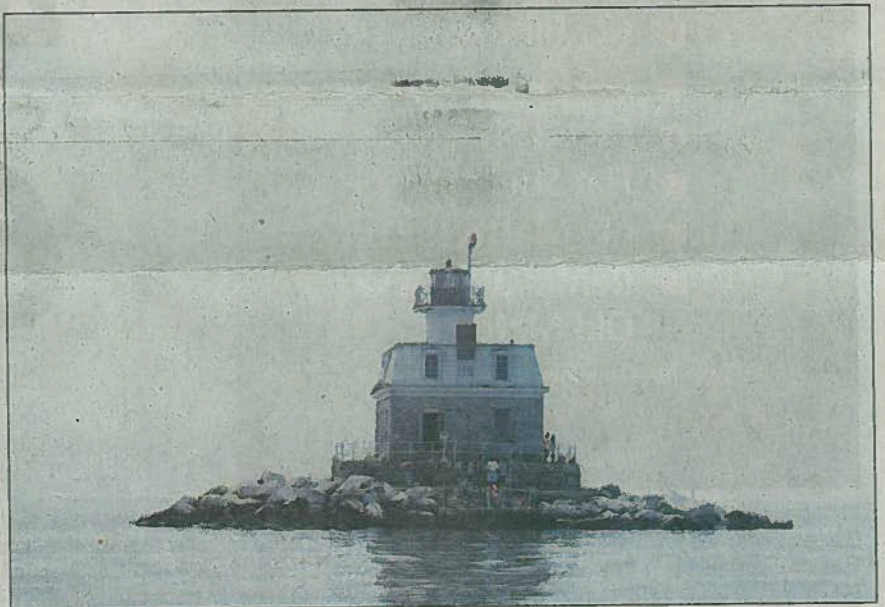
to be more environmentally friendly and "live a green lifestyle." In fact, she's educating her parents and has turned them on to recycling. Lipecz said she and her family drive by the lighthouse all the time "so when I see it [after both turbines are installed] I'll be able to say I helped restore that lighthouse. Not many people can say that."

The small 24-volt turbines will generate electricity that will be stored in a battery bank with four batteries. An inverter will draw electricity from the batteries and turn it into usable alternating current (AC) electricity for power-tool use when the lighthouse begins a full-scale renovation. The lighthouse may look pretty from the outside, but its interior is in need of a serious renovation. A "Flip This Lighthouse"-style transformation

lighthouse. The poles that support the turbines can move from an upright to a horizontal position, and the turbines can be taken off the poles when they are not being used.

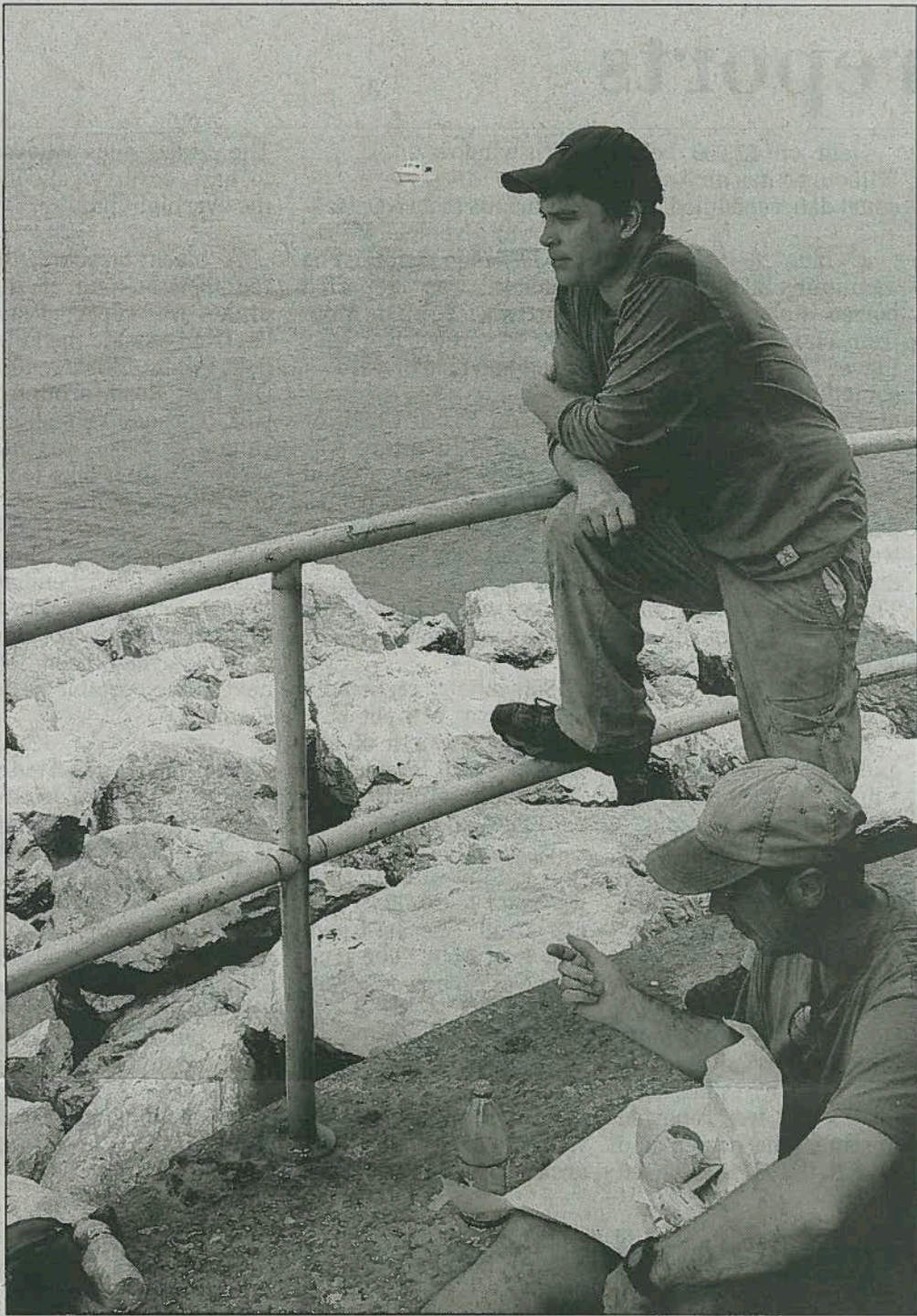
"We're trying to show you can use solar, you can use wind, to create electricity economically, especially in remote locations," said Wemyss.

The lighthouse was built in 1872, Murray said, and was really built as a small Victorian-era house. The first floor has four rooms, as does the second floor. There are no beds or lounge chairs. In fact, the only remaining clue that someone might have lived at the lighthouse at one time is a shower stall. People no longer sleep over here but spiders have made the place their home. In fact, Murray warned a student Wednesday to be careful



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**Dr. George Northrop, top, vice president of Beacon Preservation Inc., and Keith Murray, associate general counsel and director of development for Beacon Preservation Inc., take a break during the turbine installation at Penfield Lighthouse.**

## Turbines breathe new life into lighthouse

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Calderon, a junior at Central Magnet High School in Bridgeport, said Greenlight Academy's four-week summer residential program (the students board at Western Connecticut State University during the week) has "helped us to care more about the environment and to be more eco-friendly."

The students in the program officially graduated last Friday but many came back to the lighthouse on Wednesday — after making a trip last week to decide where to position the turbines — to give the PurePoint pros some assistance. It was a hot day Wednesday — about 88 degrees — but most were handling it pretty well. All did not go as planned, however.

"The foundation is extremely solid so it's taking about three times as

long as we thought to put up the mounting devices," Wemyss said.

He pointed out that he and his crew didn't have the luxury of an industrial grade hammer drill that they could plug into an electrical outlet. Rather, they were limited to battery-based drills that are not as powerful.

When the *Fairfield Citizen* arrived at the lighthouse shortly before 1 p.m. Wednesday, Wemyss and others were grounding the electrical system. By 4 p.m., one of the turbines was mounted. The second turbine will likely be installed next Wednesday. Both Wemyss and PurePoint President David Neaderland are volunteering their time.

Kissy Keophannga, a junior at Central Magnet High School, was clearly influenced by the work she's been doing over the last month. Not even of age

to vote, she's already planning to install solar panels on her future home, as she knows oil and gas are limited resources.

Greenlight Academy is all about hands-on learning and the students at the Penfield Lighthouse got their hands dirty Wednesday. However, dirt is temporary. Contributing to a cleaner planet, on the other hand, has a lasting impact.

For more information on Greenlight Academy, log onto [www.greenlight-academy.org](http://www.greenlight-academy.org).



# *A trip to Penfield Lighthouse to install wind turbines*

Southport resident Keith Murray, a volunteer with Beach Preservation, provided transportation on his boat Wednesday to and from Captain's Cove in Bridgeport to Penfield Lighthouse. Murray was shuttling students from Green Light Academy and representatives from Norwalk-based PurePoint Energy, which installed two wind turbines on the lighthouse to power the fog horn and light. 1.) Helping with the installation are, from left, Veer Dedhi, a senior at Brien McMahon High School; Maureen Pavlik, a senior at Brien McMahon; Tom Wemyss of PurePoint Energy, LLC; Greg Darin, a leader with Green Light Academy; and Sarah Lipecz, a junior at Bunnell High School in Stratford. 2. Mary McHale, a student at Fairfield Ludlowe High School, gets a hand cutting the wiring for the turbine from David Neaderland of PurePoint Energy. 3. Sarah Lipecz drills holes in the concrete where the pole will be erected. 4. Tom Wemyss of PurePoint positions the pole in an optimal location to gather energy from the wind. 5.) Veer Dedhi and Neaderland attach the wind turbine to the pole prior to the final mounting.





*Fairfield Citizen* photos  
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