

# Fields, Food and Forests

Gregory Doyle, Nov 5 2009

Over the course of the fall months, a number of activities have allowed St. Andrew's students to more fully comprehend their relationship with the environment, from their dependence on the earth's bounty to their responsibility for sustainable solutions in the future.

In October, students in the Organic Garden group spent a Tuesday afternoon at the University of Delaware learning about sustainable practices on the dairy farm at the College of Agriculture and Natural Resources. The farm has undergone renovations in recent years to modernize operations and reduce the environmental footprint of the herd of 100 Holstein cows. Milk from the dairy is currently delivered to several local plants, and the program is working to promote the ice cream that is made from the herd's bounty.

The St. Andrew's students arrived at the farm and were greeted by Dr. Tanya Gressley and a graduate student. They quickly donned rubber boots before trekking over to the farm's most recent improvement—a manure recycling and composting facility that reduces manual labor and addresses nutrient management issues. Powered in part by a 9.5 kW solar array on the roof, a separation unit cleans and recycles sand for bedding in the cow stalls, while organic matter from the manure is exported to farms across the state in need of soil nutrient supplement. The liquid portion of the manure is stored in a holding tank where it will be used at various times to fertilize the silage crops grown on the farm. The operation is essentially a closed system in that crops grown on the farm feed the cows, and the cows, in turn, "feed" the next generation of crops. Working their way backwards, the students then moved on to see the cows up close, both in the fields where the younger calves were resting in the afternoon sun, and in the milking parlor where the dairy herd is processed twice each day. The UD staff explained the modern advances that save energy and improve living conditions for the animals. Part of the success of the system is that the operations at the farm are not an "industrial" approach to agricultural. There is a greater focus on the quality of the output, rather than the quantity.

On the 2000 acres surrounding St. Andrew's, students in the III Form spent a day planting trees in two former crop fields set aside for reforestation. The freshmen planted a variety of black oak, red oak, white oak, yellow poplar, black walnut, black willow, sycamore, serviceberry and green ash. The trees will provide a great benefit to the environment by helping to remove carbon dioxide, providing habitat for animals, and serving as a buffer to prevent agricultural runoff from reaching Noxontown Pond. During the efforts, students took a few moments to pose for a photo for the 350.org International Day of Climate Action.

Back on campus proper, the School's Environmental Stewards held a weekend of community events at the Fall Festival to entertain and educate against the backdrop of messages promoting sustainability and environmental sensitivity. Originally planned for outdoors, the weather forced all activities indoors. The Stewards kept spirits aloft with a pumpkin carving contest, pumpkin bowling, tie-dying of old clothes and painting gourds for nesting bird habitats. The Saturday evening's dinner included yams from the School's organic garden, ice cream from a local dairy and other harvest traditions like apple fritters and cider.