

# Flowers in Philly

## HYDROFARM EAST, SUNGLO

Greenhouses and Delaware Valley College were among the exhibitors at the recent Philadelphia Flower Show.

The week-long show, held in March at the Pennsylvania Convention Center, also featured a 10-acre exhibit titled Legends of Ireland, complete with a large-scale replica of an Irish castle and Irish step dancers performing every hour.

At the Hydrofarm East booth, grow lights, hydroponics systems and plant nutrients took center stage. Sunglo Greenhouses booth displayed hobby greenhouses.

Delaware Valley College's Department of Horticulture presented their interpretation of a 21st century homestead, the purpose of which was to emphasize the use of native plants to create a sustainable landscape. Students and faculty members created the welcoming façade and front yard of a sustainable home. The exhibit included a number of components, incorporating items commonly thought of as waste and using them in new and functional ways.

Upon entering the exhibit, visitors walked through a sample high-tunnel greenhouse system. The high-tunnel, a hybrid of a greenhouse and a cold-frame garden, is passively heated by the sun. The system is then cooled by opening the door or rolling up the wall flaps.

Nearby was an old fish tank converted into a floating raft hydroponic system used for growing lettuce. This was used to demonstrate some of the ideas and practices taught as part of Delaware Valley's newest degree program in hydroponic crop science. Students used simple household or easy-to-obtain items such as a fish aquarium, standard rubber tubing, a Styrofoam pad to hold the plants, air stone for aeration, and an air pump to create the floating raft system. Plant growth is powered by fluorescent lamps or natural light, said Ronald Muse, professor of plant science at Delaware Valley.

Muse said Delaware Valley students work on campus with more standard systems such as drip and vertical irrigation systems used to grow strawberries. Students and faculty also learn to grow lettuce

Philadelphia Flower Show-goers were greeted at the Hydrofarm flower show booth by Travis Miles, Northeast sales representative, and Nicole Greiner, administrative assistant.



Gardeners interested in year-round growing, water conservation offered lots of products, ideas for sustainable living at the annual flower show

By Lauren Bolinger



Above: Hydrofarm displayed a Homegarden hydroponic system. Below: Delaware Valley College students and staff let their imaginations run wild. The college's exhibit included a doghouse with a roof garden and a lawn chair made from old bicycle parts.



Sunglo Greenhouses soon will offer a hydroponic system that can be integrated into the firm's hobby greenhouses.

with nutrient flow technique—a system composed of downward sloping troughs.

In addition, there was a doghouse built from wooden slats topped with a roof garden. This model served as a small-scale example of how roof gardens can provide insulation for structures in both hot and cool weather and can help reduce storm water runoff.

Students also incorporated a rain barrel into the exhibit. They reused an old trash bin into which a hole was cut and covered with old window screening to act as a filter to remove heavy debris from run-off water. A rain barrel used in this way reduces the volume of storm water surge and helps

reduce flooding of the property. It also provides a water source for irrigating household and landscape plants.

Situated between the rain barrel and the doghouse was a small rain garden designed to work in conjunction with the other facets of the house to further reduce storm water runoff. A rain garden is a specific water-management scheme that directs water through a downspout attached to the rain barrel into a shallow depression in the landscape where native plants are grown and can tolerate periods of high or low moisture, depending on the amount of rainfall in the region. The water pools and then percolates into the soil,

replenishing the local water table.

The exhibit also incorporated a scheme for reusing gray water from household appliances, in addition to providing an example of native-growth gardens and displaying several sculptures created by students, including a lawn chair and table set made from old bicycle parts. 🍃

*Lauren Bolinger is freelance writer based in Philadelphia. She's a recent graduate of Temple University with a degree in urban studies. As part of her studies, she helped set up simple hydroponic systems in a poverty-stricken district of Rio de Janeiro, Brazil. The project was featured in Growing Edge Vol. 17 No. 4 (March/April 2006).*