Conclusions

Obviously, practices which are inconvenient, expensive, or requiring greater knowledge and consideration are slower to be adopted. Recent economic improvements and improved environmental conditions have apparently decreased perceived needs to change practices. In addition, continued and worsening drought conditions have appeared to delay or prevent adoption of practices. However, Florida House has proven itself as a dynamic, effective teaching facility achieving significant adoption of practices by thousands of people.

Abstract. The Florida House Learning Center has had over 65,000 documented visitors since opening in April 1994. In 1997, volunteers organized a program of tours of the Florida House facility and landscape to teach children the importance of natural resource conservation, demonstrating practical ways they can individually save natural resources, increasing their awareness of their relationship with the environment, and encouraging them to practice the concepts and principles learned on the tour. Prior to their visit, each student is given a pre-test, and a post-test is administered following the tour. Since October, 1997, 137 K-12 classes have participated in the tour program, with 3,221 students, total. Average pre-test scores are 48%, and post-test scores average 85%, resulting in an average knowledge gain of 37%. Many adults have visited Florida House after being persuaded by their participant children, and some indicate their children are now “teaching” them to conserve natural resources at home. With reinforcement, the next generation will conserve resources better than ourselves.

The Florida House Learning Center is an educational demonstration facility for resource conservation and Florida Yards & Neighborhoods for residential properties. Florida House was established in 1994 and is operated by University of Florida Extension, Sarasota County. Since 1994 there have been over 65,000 documented visitors and an estimated 80,000 visitors to the landscape.

In 1997, Master Gardener volunteers recognized that adults were being given tours, but that children were not actively educated when they visited. These Master Gardeners decided to create a special tour program for elementary school children called the Children’s Resource Conservation Tour Program. This tour program was created with assistance from myself and other staff and is conducted by the Master Gardeners.

Children’s Resource Conservation Tours

The ‘Tour Program’ contains two different sets of materials: the ‘Teacher’s Packet’ and the ‘Tour Guide Packet’. The Teacher’s Packet is given to the participating teacher prior to their bringing the children to Florida House. It consists of a list of ‘Tour Objectives’, an 8-question pre- and post-test (matching), an index of Florida State Science Standards addressed through the tour program, a ‘Glossary of Terms’, a checklist of activities & responsibilities, and a post-tour questionnaire.

The Tour Guide Packet is used by the tour guide to conduct the individual tours and contains the same list of objectives and glossary of terms given to the teachers, a list of suggestions for conducting the tour, a map of the Florida House grounds with tour stops highlighted, a tour outline, a copy of the ‘Water Cycle’, detailed ‘House Tour Outline’ and ‘Landscape Tour Outline’, a list of ways to save energy and water, and biographical examples of particular plants seen on the tour.

The Objectives are the teaching objectives governing the tour program. They are as follows:

- To teach children the importance of resource conservation.
- To introduce students to native and other drought-tolerant plants.
- To demonstrate practical ways students can individually save natural resources.
• To increase student awareness of their relationship with the environment.

• To encourage students to practice the concepts and principles learned on the tour.

The 'Suggestions for Tour Guides' are offered to the Master Gardeners conducting the tours to help them be more comfortable and effective. They include the following: "Read the materials in the Tour folder in the office, prior to conducting the Tour; Be familiar with the garden and the Tour stops; Organize how you will present the information; as closely as possible, try to follow the itinerary provided. However, feel free to make personal adjustments, as long as total time used stays consistent with the Tour itinerary; and, Show your enthusiasm and have fun with the students!"

Following the Tour Outline, the entire touring class reviews the basic water cycle, then the class splits and half takes the house tour, while the other half takes the landscape tour. Each tour takes 30-45 minutes, then the groups switch to take the other tour. Basic principles and terms are used and illustrated.

In the House Tour the group first views the Denver Water Dept. “Water Follies”, a 7-minute cartoon video concerning water use and conservation. They are then given a demonstration of the ‘Smart Faucet’, a device regulating water emission from the kitchen faucet when hands are placed beneath it, illustrating water conservation in the kitchen. The group then observes the Cupola, which illustrates passive cooling techniques for a building. Water- and energy-saving appliances are pointed out and discussed along the way. Passive lighting and solar energy is demonstrated and discussed. In one room is recycled plastic carpet, which is demonstrated and used to discuss recycling and buying recycled-content products. This also occurs when the group observes the recycled auto glass floor tiles in another room.

In the Landscape Tour the group observes native plants and a discussion is done concerning their being adapted to the local climate and soils, allowing for lower maintenance and fewer chemical inputs. Water collection is demonstrated by observing and discussing the cisterns and discussing rain barrels for supplemental irrigation. The benefits of mulch are discussed, highlighting organic mulches in particular. A runoff demonstration is held where the children pour water over bare soil and mulched soil, then collect the runoff and compare the clean water off of the mulch to the muddy water off of the bare soil. Beneficial insects are discussed and examined using magnifying glasses, and this time is also used to observe small insect and plant features. Different types of micro-irrigation are shown and the benefits of water conservation in irrigation are highlighted. The group is shown the wildlife garden and the importance of attracting animals and insects and increasing biodiversity are discussed. The landscape tour concludes with a highlight of the “3 R’s”: Reduce, Reuse, Recycle.

Results

Since Fall, 1997, 137 classes of 3,221 children have participated in the Tour Program. The teachers compare their scores on the pre-test, taken before the children participate in the tour, with their scores on the post-test, taken after the tour. The participant children have an average 37% gain in knowledge as a result of participating in the tour program. In addition, numerous anecdotal reports come to us of participant children bringing their parents to Florida House and enforcing resource conservation at home.

Conclusions

The Florida House Children’s Resource Conservation Tour Program is popular with elementary school teachers and kids. This program is effective at teaching the desired principles and is attaining the desired objectives. And most importantly, this program is accomplishing changes in household practices through participant children encouragement of other family members.