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Using a Community-Specific Web Site to Engage Homeowners in Natural Resource Conservation Within Green Communities

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Using a Community-Specific Web Site to Engage Homeowners in Natural Resource Conservation Within Green Communities

Abstract

"Green" communities or conservation subdivisions offer the opportunity to create environmentally sound and resource-efficient buildings and landscapes. However, environmental responsibility is left to the residents to manage their homes, yards, and neighborhoods. The objective of our project was to develop a tailored Web site that addresses natural resource conservation within a specific residential development. The Web site was designed and implemented for a green community, Harmony, in Florida. Topics covered environmental issues such as water, energy, waste, landscaping, wildlife, and natural/human history. The Web site can be found at <<http://www.wec.ufl.edu/extension/gc/harmony>>.

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The Need for Environmental Education in Green Communities

Conservation subdivisions, or green communities, are the "green" version of neo-traditional neighborhood design (Arendt, 1996). "Green developing" integrates environmentally sensitive land-use aspects and addresses them upfront (USDOE, 2003). Typical community design includes clustered homes and dedication of a percentage of land for open "green" space (Haines, 2002).

Regardless of community design, new residents are probably not aware of local issues concerning natural resources. Once construction of the green development is completed and the developers leave, environmental responsibility is left to the residents to manage their homes, yards, and neighborhoods in a pro-environmental, sustainable manner. Without a continuous, on-site education program, there is the potential for residents to resort to traditional, non-environmental behaviors (DeLorme, Hagen, & Stout, 2003; Youngentob & Hostetler, 2005). Most developers have not considered educating residents to reinforce the message of a green community.

One study in Gainesville, Florida showed residents of a green community had a greater sense of community but scored lower on several questions about environmental knowledge, attitudes, and behavior than "standard" community types (Youngentob & Hostetler, 2005). In this green community, residents liked the idea of an environmental community and felt that the developer was more concerned about the environment, but survey results showed these residents lacked basic environmental knowledge about subjects such as storm water drain destinations and which plastics are recyclable in their city. Thus, the original intent of this green community did succeed in creating a sense of community, but may not have succeeded in terms of promoting natural resource conservation.

However, a majority of homeowner survey respondents reported they would like to see more information about such issues (Youngentob & Hostetler, 2005). One possible way to create a community that is aware of and understands local natural resource issues is to develop a Web site that provides specific environmental information for a targeted community. As online information

resources proliferate, use of the Internet as an educational resource is increasing overall (Metzger, 2003).

A Web site alone may not be enough to drive behavioral change, but a community-specific Web site could offer opportunities for people to become more involved with the day-to-day decisions regarding natural resource conservation within their homes, yards, and neighborhoods. Having an economic and personal investment in their home and neighborhood, homeowners may be motivated to make environmentally responsible household changes (DeLorme, Hagen, & Stout, 2003; Morrone & Meredith, 2003).

Web Site Design

The objective of the project was to develop an educational Web site that addresses natural resource issues tailored to a green residential development in Florida. The Web site is part of an environmental education program that targets residents of a green community, the town of Harmony (Kissimmee, FL). Information contained in the Web site is also reinforced with interpretive kiosks placed along trails in the community and an introductory brochure given to each homeowner.

What is different about this Web site than a general environmental education Web site is that information is based on issues found within the town of Harmony. Through site visits, discussion with the developer, focus groups, and review by local environmentalists, we developed six main topics: water, energy, waste, landscaping, wildlife, and natural/human history (Table 1). A short background of each major topic and corresponding sub-topics are further enhanced by community-specific highlights and links to local, regional, and national resources and organizations as well as related fact sheets. All of the information is designed to be relative to built structure and natural areas within the town of Harmony. The Living in Harmony Web site became active in January 2005 for Harmony residents to view <<http://www.wec.ufl.edu/extension/gc/harmony>>.

Table 1.
Living in Harmony Web Site Components.

Major Topics	Corresponding Sub-Topics
Using Water Wisely	Water-saving devices; Lawn care & irrigation; Water quality; Get to know your watershed
Energy Efficient Living	Money-saving tips; Lighting; Heating & cooling; Water heating; Insulation; Landscaping for energy
Managing Household Waste	Recycling; E-cycling; Household hazardous waste; Composting
Landscaping for the Environment	Invasive exotic species; Fertilizers & pesticides; Integrated pest management; Mulch; Xeriscape; Composting
Meet Your Wild Neighbors	Mammals; Birds; Herps; Insects; Landscape for wildlife; Wildlife/human conflict
Natural History	Natural history; Human history; Fire ecology

Evaluation and Future Applications

Preliminary feedback from Harmony's conservation manager and residents indicate that the Web site is easy to use and provides useful information. Pre-test surveys were sent to the residents of Harmony and a control community in the spring of 2004 to acquire baseline information on their environmental knowledge, attitudes, and behavior. Long-term program evaluation will come in the form of resident workshops and post-test surveys that will be conducted 2 years after the program has been implemented. Maintenance is key in keeping the Web site dynamic and useful. The Web site has been turned over to the conservation manager at Harmony, who will periodically make changes.

This type of Web site can be implemented in any green community. The idea is for developers and their design/build team to collaborate with Extension to design and implement such a Web site for their community. The Harmony Web site could be used as a as an example and framework for future residential communities that adopt an environmental education program. For such communities, information on the Web site would be tailored to each community. A new community will have slightly different issues and local environmental contact information (e.g., phone number for a local recycling coordinator).

We believe that community-specific Web sites will help create functioning green communities where residents understand local environmental issues and take action. For more information about adopting this Web site and other parts of the educational package, please contact Mark Hostetler at the University of Florida.

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