

The Galveston Bay Yards & Neighbors Program Reducing Residential Non-Point Source Pollution To Galveston Bay

Julie K. Massey, Galveston County Extension Agent - Marine
Dr. William M. Johnson, Galveston County Extension Agent - Agriculture
Susan Russell, Galveston County Extension Agent - Family & Consumer Science

Introduction

Non-point source pollution (the runoff from our yards and streets) has been identified as one of the major sources of pollution to Galveston Bay. Estimates indicate that homeowners apply up to 20 times the recommended rate of fertilizers and pesticides.

The potential for impact to the bay is great considering that more than 70% (153,690) of Galveston County's residents live within 2 miles of Galveston Bay. The numbers increase in Harris County where 16% or 467,595 people live within two miles of the bay. The Galveston Bay Yards & Neighbors Program is designed to reduce the amount of non-point source pollution by introducing "Bay Friendly" home and lawn care practices to homeowners.

1997 will be the Galveston Bay Yards & Neighbors Program's third year. It is sponsored by the Galveston County Extension Office of the Texas Agricultural Extension Service, the Texas A&M Sea Grant College Program and the U.S. Fish and Wildlife Service.

Objectives

The goal of the Galveston Bay Yards & Neighbors Program is to reduce the amount of residential non-point source pollution which reaches Galveston Bay. Educating individuals about the small changes they can make in their daily home and lawn care practices can reduce this type of pollution.

Methodology

In 1994, over 3000 residential questionnaires were distributed to homeowners in six communities in the Clear Lake and Dickinson areas. The questionnaires were designed to gather information on current residential home and lawn care practices. The questionnaires also provided information on those topics which would be of interest to homeowners and would help reduce residential non-point source pollution.

Based on the questionnaire results, a series of educational programs and hands-on demonstration landscapes were developed and offered to homeowners and their communities. Program topics included "Bay Friendly" Xeriscape landscape design, water conservation, disease and insect control using Integrated Pest Management practices, alternative household cleaning products and composting.

Three of the six community associations were chosen to participate in the Yards & Neighbors Program in 1995. For their participation, communities were provided a "Bay Friendly" demonstration landscape in their community. The Yards & Neighbors Program supplied the landscape design and materials but the neighborhoods had to supply the labor to install and maintain the landscape.

Educational materials developed to enhance the Yards & Neighbors Program included a "Mix-It Yourself: Non-Toxic Household Products" brochure and a "Gulf of Mexico Repair Kit: Rx for a Healthy Gulf". News articles and flyers were also used to inform community newsletters of scheduled programs and to provide information on the program topic.

In 1996, homeowners were targeted instead of their community associations. Participants were offered a free "Bay Friendly" landscape design for their own yard if they attended at least three of the six educational programs offered. The programs were held in Dickinson and Galveston.

Results

965 of the 3000 questionnaires distributed were returned. The results of the questionnaires revealed that 66.6% of the homeowners surveyed fertilized 1 to 3 times per year, 23.7 % fertilized 4 to 6 times per year and 2.4% admitted to fertilizing up to 12 times per year. Most (52%) bag and discard their leaves and lawn clippings in the trash. 14% have a backyard compost.

In the home, approximately 22% have low flow shower heads and faucet aerators; 18% have a water conserving toilet. 57% routinely recycle household waste but 49% dispose of household hazardous waste in the trash.

Of the homeowners surveyed, 64% have lived in their home five years or less and 95% own their home.

The Galveston Bay Yards & Neighbors has introduced the concepts of "Bay Friendly" home and lawn care practices to over 22,500 homeowners through news articles and educational programs. The 1995 demonstration plantings allowed homeowners to apply the information (and a lot of sweat) to create an attractive "Bay Friendly" landscape in their community. Participants in the 1996 program have the opportunity to create a "Bay Friendly" landscape in their own yard.

Participants in the Galveston Bay Yards & Neighbors Program have new choices to make in their every day activities which can help reduce the amount of residential non-point source pollution reaching Galveston Bay. These homeowners are choosing to plant more native or adapted plant species which require less care and fertilizers or pesticides. Their cleaning products now include vinegar, baking soda and elbow grease. Water conservation includes low flow shower heads and using mulches in the yard.

Many of the participants in the Galveston Bay Yards & Neighbors Program had no idea that the runoff from their yards and streets went directly to Galveston Bay. Most thought that stormdrains lead to a waste water treatment plant. Now these homeowners know that their daily home and lawn care activities have an impact on the water quality of Galveston Bay and they can reduce that impact.

Participants in the Gaycestia program were asked to make a list of activities they enjoyed doing in their yards. The most common activities listed were gardening, playing in the yard, and having a picnic. Other activities mentioned included reading, sunbathing, and watching the birds. The program was designed to help participants enjoy their yards and to provide a safe space for them to express their interests.

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