



Environmental landscaping seminar to be held

The Mid-Neuse Non-Point Source Team is pleased to announce that Christine Kelly-Begazo, State Coordinator for the Florida Yards and Neighborhood Program, will present an Environmental Landscaping Seminar on Tuesday, September 4, 2001 in the Moffatt Auditorium of Wayne Community College in Goldsboro. The auditorium is located on the first floor of the Learning Center. The seminar will begin at 7:00 p.m.

Mrs. Kelly-Bergazo leads an educational outreach program informing homeowners how to be more environmentally friendly with their landscape care practices and how this can help protect Florida's natural environment for future generations. The Florida Yards and Neighborhoods program was developed to address serious problems of pollution and disappearing habitats by enlisting homeowners in the battle to save our natural environment.

Objectives of the program are to: reduce stormwater runoff, decrease non-point source pollution, conserve water, enhance wildlife habitat, and create beautiful landscapes. FY&N encourages homeowners to water efficiently, mulch, recycle, select the least toxic pest-control measures; put the right plant in the right spot; fertilize only when necessary; provide food, water, and shelter for wildlife; protect surface water bodies such as streams, creeks, and ponds; and, minimize stormwater runoff.

The Mid-Neuse Non-Point Source Team sponsored Wayne



Environmental landscaping helps reduce water pollution and adds aesthetic value to an area.

County Extension horticulture agent Lewis Howe's trip to the University of Florida's agent in-service training on the Florida Yards and Neighborhood Program this spring. Thirty counties in Florida have implemented the FY&N Program and Howe is confident such a program can be established in Wayne and other

North Carolina counties.

The Environmental Landscaping Seminar is open to the public and the Mid-Neuse Non-Point Source Team extends a special invitation to the residents of the Stoney Creek Watershed. Contact Lewis Howe at 919.731.1520, Simonne Cato at 919.731.1600, or Mike Regans at 252.747.5831.

Environmental landscaping in-service training set for Sep. 5

Christine Kelly-Begazo, State Coordinator for the Florida Yards and Neighborhood Program, will conduct an in-service training program on the Florida program for county extension agents, paraprofessionals and Master Gardener volunteers on Wednesday, September 5, 2001 at the Wayne Center in Goldsboro. She will review the history and funding of the FY&N program as well as the selection and certification process. Participants will learn how to deliver, market and evaluate the program. Case studies of the program in selected Florida counties will also be discussed.

The Mid-Neuse Non-Point Source Team will sponsor the training. Contact Lewis Howe at 919.731.1520 for more information.

Rain garden demonstration project established

A stormwater best management practice demonstration, funded by the Mid-Neuse Non-Point Source Team, was established recently when a rain garden was installed at the Laurel Pointe Apartment Complex on New Hope Road. A rain garden, also known as a bio-retention area, is a landscaped area that treats stormwater runoff. Stormwater is directed into the rain garden by pipes, swales or curb openings. At the Laurel Pointe site, stormwater from a parking lot cul-de-sac is directed through a curb cut to the rain garden.

Rain gardens remove pollutants using physical, chemical and biological mechanisms. Specifically, rain gardens use absorption, microbial



Rain gardens appear to be effective in removing the most critical elements found in stormwater.

action, plant uptake, sedimentation and filtration according to Bill Hunt, Extension specialist in the Department of Biological and Agricultural Engineering at NC State University. Hunt, who is also a member of the Mid-Neuse Team, says that rain gar-

dens sited in appropriate soils can be designed to allow filtration of most stormwater runoff, thus replenishing groundwater. The exact ability of rain gardens to remove pollutants has not yet been quantified fully. Research has just begun on these new practices. However, rain gardens do appear to be effective at removing the most critical pollutants found in urban stormwater: most metals, phosphorous and nitrogen.

Rain gardens are designed so that water does not regularly saturate or inundate the garden for long periods. The dryness of a rain garden, which depends on how much water is directed to it, how quickly the garden drains and how frequently it rains, usually dictates the type of vegetation that can thrive in the garden.

The Laurel Pointe rain garden was designed and constructed by Danny VanDevender of Landscape Design, Inc. VanDevender selected red maple, river birch, loblolly pine and crape myrtle trees as well as wax myrtle, clematis hummingbird, fothergilla Mount Airy, and itea Henry's garnet shrubs for the rain garden, which is located in an area with sandy soil. The Mid-Neuse Non-Point Source Team purchased the plants and materials with Stoney Creek Watershed Project funds and Landscape Design donated

(Continued back page)

New publication highlights rain gardens



Mike Regans, left and Bill Hunt read about rain garden design from a new publication.

The Mid-Neuse Non-Point Source Team has funded the publication *Designing Rain Gardens* as a component of the team's environmental education program. Bill Hunt, Extension Specialist, Department of Biological and Agricultural Engineering and Nancy White, Associate Extension Professor, College of Design developed the North Carolina Cooperative Extension Service publication (AG-588-3).

The twelve-page publication explains the rain garden, what it is and how it removes pollution as well as the steps in designing a rain garden. Topics include sizing the rain garden, designing the outflow, landscaping with appropriate plants and calculating the costs of construction.

For a copy of the *Designing Rain Gardens* publication, contact your local Extension center or a member of the Mid-Neuse Non-Point Source Team.

The Mid-Neuse NPS Team

Representatives of the following organizations are members of the Mid-Neuse Non-Point Source Team:

NC Cooperative Extension Service
NC Division of Soil & Water Conservation
NC Division of Parks and Recreation
NC Division of Water Quality
NC Division of Land Quality
NC Wetlands Restoration Program
NC Wildlife Resources Commission
Wayne County Planning Department
Wayne County Economic Development Commission
Wayne Community College
Keep Wayne County Beautiful
Wayne County Master Gardeners
Wayne County Historical Association
City of Goldsboro Planning Department
City of Goldsboro Engineering Department
Goldsboro Appearance Commission
Seymour Johnson Air Force Base
Pate-Dawson Company
Royster-Clark, Inc.
USDA — Natural Resource Conservation Service

Stoney Creek Project focuses on water quality solutions

If you live or work in Goldsboro, the chances are good that you will be affected by the Stoney Creek Watershed Project. The Stoney Creek Watershed Project is a cooperative effort of local governments, agencies, interest groups, and citizens known as the Mid-Neuse Non-Point Source Team to reduce nonpoint source pollution and improve water quality. The team selected the Stoney Creek Watershed as its priority waterbody because of the need for the restoration of water quality; the value of the watershed to the community; the diversity of activities within the watershed; the interest and commitment of local agencies, government, and citizens to the project; the size of the watershed; and, the potential for a positive impact on a large number of people.

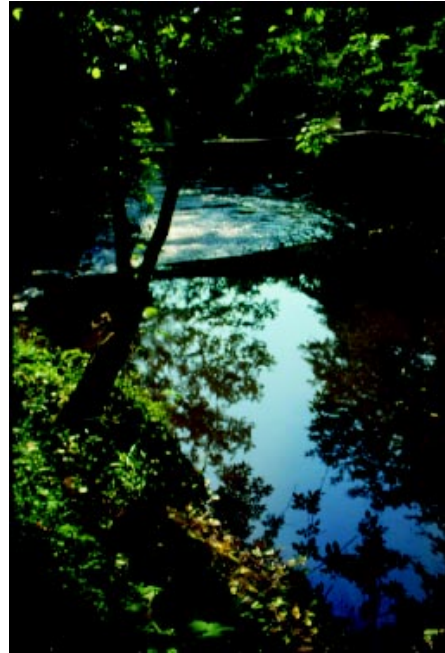
A major portion of the City of Goldsboro and Wayne County is located in the Stoney Creek watershed. The watershed extends from north of the Goldsboro-Wayne Airport to south of Seymour Johnson Air Force Base and includes Wayne Community College, Wayne Memorial Hospital, and ParkEast — the Wayne County Industrial Park. Acres of agricultural land, residential

development and commercial areas are in the Stoney Creek Watershed. Stoney Creek is a tributary of the Neuse River.

The Stoney Creek Watershed project is funded by an Environmental Protection Agency Section 319 Grant. Primary objectives of the project are the establishment of demonstration sites which will demonstrate best management practices to control nonpoint source pollution and the development of an educational program which will inform the local community of specific best management practices that will work in the Stoney Creek Watershed. The manager of the

Stoney Creek Watershed Project is Mike Regans, area specialized agent in environmental education with the North Carolina Cooperative Extension Service.

The participation and support of the entire community is essential for the success of this project. For additional information on the project and how you can be involved, contact the NC Cooperative Extension Service, Wayne County Center at 731.1520 and ask to be contacted by a member of the Mid-Neuse Non-Point Source Team.



Stoney Creek is a tributary of the Neuse River. Community support is vital for the Stoney Creek Project to be successful.

STONEY CREEK Connection Summer 2001 

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Everyone lives in a watershed

A watershed is all the land drained by a river, stream, or lake. Within a watershed all the water flows to the lowest point such as a river, lake, or ocean. The water may travel on the surface across suburban lawns and city streets, across farm fields and forests. Or, the water may seep into the soil and travel as groundwater through the cracks and pores in the sand, gravel and rocks below the earth's surface.

We all live in a watershed. Our daily lives and decisions affect what happens in our watershed for good or bad by how we treat the plants, animals, soil, water and air – our natural resources. As water flows through the watershed it carries and redeposits soil, bacteria, chemicals, excess nutrients and organic matter. What happens upstream affects the watersheds downstream.

Our watershed is part of a natural ecosystem which links plants and animals, soil, air and water. Watershed management is an attempt to keep our ecosystem healthy. Things entering the water which are unhealthy are called pollutants. Pollutants enter the water through a point source – a specific pipe or outfall, or through a nonpoint source – a diffuse runoff from a large area of land.

Nonpoint source pollution can be excess fertilizer or pesticides washing off lawns or fields; the flow from a non-maintained septic tank; oil and chemicals washing off streets, driveways, and parking lots; or stormwater washing away animal feces.

Our daily habits influence the health of our watershed. Consider how you maintain your lawn and garden; how much you use your car; how much water your household

consumes; what kinds of detergent and cleaners you use; how you dispose of common and toxic household wastes; how many pets you have and where their waste is deposited. We are each one of eight million North Carolinians whose daily decisions contribute either positively or negatively to the health of our watershed.

(Rain garden— *continued*)

the time and labor to establish the demonstration site.

Rain gardens are a very attractive best management practice because they can improve environmental quality while meeting landscape requirements. Rain gardens that treat stormwater runoff can appeal to homeowners and developers and can be constructed in both residential and commercial areas across the state, particularly in the coastal plain.

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