November/December 2006

Environmental Update

NCCE – Onslow County Center
Onslow County Multipurpose Complex
4024 Richlands Hwy.
Jacksonville, NC 28540
Telephone: (910) 455-5873
Fax (910) 455-0977
http://onslow.ces.ncsu.edu

NCCE – New Hanover County Center
6206 Oleander Dr.
Wilmington, NC 28403-3822
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NCCE – Brunswick County Center
Brunswick County Government Complex
25 Referendum Drive (Building N)
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http://brunswick.ces.ncsu.edu

Septic systems: usually ignored, mistreated, and misunderstood. How have you been treating yours?

The US Environmental Protection Agency considers managed septic systems to be a viable long-term solution to wastewater treatment. The key word here is "managed". All too frequently, homeowners do not know the age of their system, its location, or its maintenance history. This is especially true in eastern NC due to the high turnover rates of homes.

What should a homeowner with a septic system do? First, go to the Environmental Health section of the local health department and ask for a copy of the septic system permit. This permit will show you where the septic system is located, the site for the repair system, and any repairs or changes that have been made. Next, see if it is time to pump the septic tank. The usual recommendation is to have the tank pumped every 3-5 years, depending on household practices.

Don't wait until the tank “needs” to be pumped. That's like saying that you aren't going to change the oil to your car because the engine still runs! Waste backing up in the drains or coming to the surface is a good indication that the drainfield is failing. Pumping the tank won't fix a problem in the drainfield. The purpose of the tank is to keep excess solids and greases from going to the drainfield and clogging the soil. A double-blind study was conducted a few years ago at NC State to evaluate septic tank additives. The result?: none of the additives tested worked any better than the "blank". What does this mean for the homeowner?: have the tank pumped out and then you know that the material is gone. A new drainfield costs much more than having a tank pumped out every four years.

What else can the homeowner do? Be aware. Don't park or drive over the drainfield lines. This compacts the soil and can shorten its life. Don't place an above ground pool over the drainfield. That will definitely compact the soil. The soil in the repair area also needs to be protected from compaction. Do not plant trees within 20 feet of the drainfield. This is especially true for trees such as river birch and willow. Their roots can completely clog drainlines. If work is being done at your home, such as cable television, telephone lines, or other activities where lines are being laid by a vibratory plow; make sure that the installer knows where the septic system is located. Drainfield lines are not detected by locator services that find power lines. All too frequently, the lines in a drainfield are cut.

Last, but definitely not least, keep tab of how much water you use and check for leaks in toilet flappers and faucets. A septic system is sized based on the number of bedrooms: 60 gallons of water per person per day and two people per bedroom. Therefore, a three
bedroom home would be sized for 360 gallons per day (gpd); a four bedroom home would be sized for 480 gpd. On a day-to-day basis, it is good to keep actual water use to roughly 70% of the design amount, which would be 42 gallons per person per day (gpd per person). If you are on a water meter, you can calculate your average daily water use as follows:

\[
\frac{\text{Number of gallons used}}{\text{(# of days)(# of people)}} = \text{gpd per person}
\]

Example:

\[
\frac{4800 \text{ gallons}}{30 \text{ days}(4 \text{ people})} = 40 \text{ gpd per person}
\]

So, how HAVE you been treating yours?

**Fall reminder: Soil Sample Time!**

Gardeners take note! This is a very good time of year to bring your soil samples to your local NC Cooperative Extension office for submittal to the NC Department of Agriculture. Soil analyses are **FREE**! Bring at least a pint (two cups) of soil from each yard area: flower garden, vegetable garden, lawn, problem area, etc.

You will need to come up with a short “code” to label each soil sample location. For example:

- FY1 = front yard, sample 1
- FG = flower garden
- AB = azalea bushes

Your results will be mailed back to you using this code, so make sure to write it down or draw a yard map showing the sample locations.

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**Upcoming Events:**

**Eco Explorers**

**When:** Saturday, November 18, 2006

**Where:** Cape Fear Museum
814 Market Street
Wilmington, NC 28401

**Admission:** Museum Admission + $2 Fee
**Phone:** 910-798-4364

Step into the world of ecology! Explore unusual connections among local plants and animals. Take on the role of prey or predator in a giant food web, dissect an owl pellet, and create a model of an insect-eating plant.

**PreK-8 Project Learning Tree Workshop**

**When:** Monday, January 22, 2007

**Where:** Halyburton Park, Wilmington NC

**Phone:** Andy Fairbanks, 910-794-6001,

PLT is an interdisciplinary environmental education curriculum designed for educators of ANY background. It is a required component for the North Carolina Environmental Education Certification Program. The workshop and materials are provided free of charge.

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**Sincerely,**

Diana M.C. Rashash, PhD
Extension Area Specialized Agent
Natural Resources-Environmental Education

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