Happy springtime....almost

It’s the time of year when birds are singing, flowers are blooming, and the temperature goes in all directions. If you are planning a garden, it’s not too late to submit soil samples to NC Department of Agriculture & Consumer Services (NCDA&CS). It’s free, and samples can be dropped off at your local county NC Cooperative Extension Center. While there, pick up information about grasses, flowers, vegetables, shrubs, and trees suited to this part of the country. Plants that are well suited to their environment look better, grow better, and need less care.

Getting ready for summer ...

Yes, it is still early in the year; however, warm weather will be here in earnest very soon. Is your home ready? With the current troubles in the economy, you may think that you shouldn’t have your heat pump or air conditioning system checked out. This may be a big…and costly…mistake! You can also contact your electric company and ask about home energy audits. The services offered can vary. One utility may offer a simple self-evaluation with additional information based on your results. Another utility may offer a more in-depth evaluation….for a fee. Do call your electric utility to see what services are available.

Insulation and weather-stripping are also important in the summer, as you try to keep the hot air out of your home. Shade - for you, your house, and your air conditioner - is a great help. Again, find out what trees and shrubs are recommended in your area. Sunny? Dry? Wet? Ocean spray (salt tolerance)? Clay soil? Sand? Some combination? North, south, east, or west side of home? All of these are important factors in proper plant selection.

Speaking of salt …

If you have installed an irrigation well and are close to the coast (or even if you aren’t), consider having a “solution analysis” conducted on your well water. To do this, collect a water sample in a well-rinsed water or soda bottle (16-20 ounce, plastic). Bring the sample to your local NC Cooperative Extension Center. Ask to have the sample sent to NCDA&CS for a “solution analysis” and complete the form. It costs $5.00 and NCDA&CS will mail the results to you. The results include salinity and pH, both of which are important in plant selection and survival.
Permits, rules, & regulations...oh my!

At times, it may seem that there is nothing more confusing than trying to determine WHAT permits are needed and WHERE to get them. The NC Department of Environment & Natural Resources (DENR) has a web site to help you find your way:

DENR Environmental Permit Handbook
http://portal.ncdenr.org/web/csc/start/overview

Once at the site, you can look up information about the permit by either the permit name or the environmental category. Be sure to check out the “Local Program Delegation” link. “Delegation” is when an agency or government gives control and responsibility for a program to another agency or government. In this case, a county or municipality is given the authority (“primacy”) to enforce the State’s rules and regulations.

Some examples of “delegation” include the following:

NC Division of Air Quality (DAQ) has delegated parts of its jurisdiction to Buncombe, Mecklenburg and Forsyth County. Information about these local air quality programs is available at:
http://daq.state.nc.us/about/local/

The NC Sedimentation Control Commission has delegated authority to some local governments to enforce the state’s rules and regulations that pertain to controlling erosion and sedimentation damage to property and surface waters. For a list of these local governments, name of contact, address, telephone number and other information, go to:

http://www.dlr.enr.state.nc.us/pages/
Sediment local programs 20070524/LP Contacts 20080415.doc

Local health departments carry out the state’s rules and regulations regarding septic system permits, restaurant inspections, tattoo shops, daycare facilities, pools, and some other businesses. The decision by a county or municipality to gain primacy is not made lightly, especially if they then make their rules different than the State’s. Both Guilford and Orange County developed their own onsite wastewater rules (septic system rules). This decision had important legal ramifications: any legal actions and court cases are done without the benefit or assistance of the State’s Attorney General’s (AG) Office. Conversely, counties that are enforcing the State’s rules are covered by the AG’s office.

There are times when counties are not given an option about taking over a program. As of July 1, 2008, the State assigned jurisdiction (delegated authority) for the permitting and inspection of drinking water wells to the county health departments. This came about due to the passage of Session Law 2006-202, Article 7, known as the NC Well Construction Act. Section 87-97(a) requires “mandatory local well programs” where each county health department “shall implement a private drinking water well permitting, inspection, and testing program.”

One of the biggest changes with the well statute is the increase in water quality parameters checked in all newly constructed drinking water wells. From July 2008 until October 1, 2009, new drinking water wells will be checked for arsenic, barium, cadmium, chromium, copper, fluoride, lead, iron, magnesium, manganese, mercury, nitrates, nitrites, selenium, silver, sodium, zinc, pH, and bacterial indicators. After October 1, 2009, water samples will be analyzed for these items plus: methyl tert-butyl ether, ethylene dibromide, 1,2-dichloroethane, 1,2-dichloropropane, isopropyl ether, benzene, toluene, ethylbenzene, xylenes, trichloroethylene, and tetrachloroethylene. Things have come a long way from only testing for nitrate and bacteria!

Just introduced ...

NC House bill 169 has just been introduced to the legislature. It would change the well sampling regulation such that private water wells would be tested for volatile organic compounds only if the local health director decided it was necessary to protect human health. If passed, this would impact those items that go into effect on Oct. 1st.

Decisions...decisions!

With the new State storm water requirements, the
coastal counties and municipalities are determining what portions they will implement and enforce themselves. For example, the City of Jacksonville is required to have their storm water ordinance codified (made law) by March 1st. These decisions were made after discussions on costs, staff workload, local fee versus state fee, timeliness of filling permit requests, convenience for residents, and other considerations. Storm water and well programs are not the only new or expanded items coming to local governments or utilities. Read on!

**Water use ...**

In July 2008, Session Law 2008-143 was passed. This statute deals with a variety of water use issues, including a requirement in Section 9 for separate water meters for new irrigation systems. Specifically, it states that:

> “Local government water systems and large community water systems shall require separate meters for new in-ground irrigation systems that are connected to their systems.”

The intent of the irrigation meter is to help utilities distinguish between irrigation and other household water usage.

In order to receive grant or loan funds from the State for water infrastructure projects, a water system must demonstrate that:

1. It has established a water rate structure that is adequate to maintain, repair, and operate the system, during periods of both normal or reduced water use.
2. It has implemented a leak detection and repair program.
3. It has an approved water supply plan.
4. It meters all water uses that are practical to meter, including water for firefighting and to flush waterlines.
5. It does not use a rate structure that gives residential water customers a lower per-unit rate as water use increases.
6. It has evaluated the use of “reclaimed” water to meet some future water needs.
7. It has implemented a consumer education program that emphasizes the importance of water conservation.

The requirement for separate meters on new in-ground irrigation systems and the eligibility criteria for infrastructure funds both become effective on July 1, 2009.

**Water re-use ...**

Session Law 2008-143 also contains information on water re-use. The water re-use policy statement in Section 10 states that “the reuse of treated wastewater or reclaimed water is critical to meeting the existing and future water supply needs of the State.” Section 14 goes on to define “gray water” as “wastewater removed from household wash basins, bathtubs and showers”. The section continues on to say that “untreated gray water may be used in periods of drought to hand water trees, shrubs, and inedible plants on single-family residential property” under the following conditions:

1. Untreated gray water shall be applied using buckets, watering cans, or other handheld containers. Gray water may not be used in an irrigation system unless it has been treated according to State Plumbing Code standards.
2. Gray water shall be applied as soon as practical and not be stored for later use.
3. Use of untreated gray water is restricted to the property where the gray water originated. Runoff onto adjoining property, roadways, ditches and storm drains is not allowed.
4. Gray water containing hazardous chemicals, such as solvents, shall not be used.
5. Gray water shall not be applied closer than 100 feet to surface waters or a water supply well.

**Earth Day 2009 ...**

Don’t forget! Earth Day is April 22nd. Events will be held in a variety of
locations throughout the state, including:

Location: Museum of Coastal Carolina & Ingram Planetarium, Ocean Isle Beach
Date: April 18
Time: 11 am
http://www.museumofcc.org/

Native Plant Festival & Sale
Location: NC Coastal Federation, Ocean
Date: April 18
Time: 3 pm to 7 pm
http://www.earthday.net/node/13744

Location: Hugh MacRae Park, Wilmington
Date: April 18
Time: 12 pm to 6 pm

Location: NC Aquarium, Pine Knolls Shore
Date: April 19-25
Time: 11 am to 3 pm
http://www.earthday.net/node/13744

Location: Swansboro United Methodist Church
Date: April 25
Time: 10 am to 2 pm

Earth Day t-shirt design contest ...

The Earth Day 2009 T-Shirt Design Contest, sponsored by the National Environmental Science Education Center, Inc., is open to all students in grades k-12. This includes private schools and homeschooled students. Each school may only submit one entry per division (divisions are K-3, 4-6, 7-9 and 10-12).

Individual artwork division winners will receive a framed certificate of appreciation, a t-shirt that portrays their artwork, and a $50 US Savings Bond. The deadline for submission is March 13, 2009. Complete details are available at:

http://www.nesecenter.com/page13/page13.html

2009 photo contest ...

Protecting Our Threatened Landscapes is the theme of this year’s digital photo contest, sponsored by NC Coastal Federation and Emerald Isle Realty. You must be at least 18 yrs. old to enter. The first-place prize is $500, and the entry deadline is April 15th. For complete rules and other information, contact Sally Steele at (252) 393-8185, ext. 108.

NC State Science & Engineering Fair ...

This year, the NC State Science & Engineering Fair will be held on March 28th at Meredith College in Raleigh. The participants are those students who won at one of the regional fairs and were recommended to advance to the state level. The Southeast Regional Science Fair was held on February 14th at UNC-Wilmington’s Trask Coliseum. This region contains Sampson, Wayne, Greene, Lenoir, Craven, Pamlico, Jones, Onslow, Duplin, Carteret, Pender, New Hanover, and Brunswick County.

Roughly 200 students from grades 3-12 participated in the daylong event. Their projects fit one of the following categories:

- Elementary (grades 3-5)
- Biological Science (Junior & Senior level)
- Earth Science (Junior & Senior level)
- Physical Science (Junior & Senior level)
- Technology (Junior & Senior level)
- Senior Team

In addition to the 1st, 2nd, and 3rd place awards for each category, there were several special awards:

- American Meteorological Society
- American Water Works Assoc.-Water Env. Assoc.
- Equine Health Program Award
- Keep America Beautiful of New Hanover County
- Medical Research Award
- NC Aquarium at Fort Fischer
- New Hanover County Extension Service
Outstanding Creativity
Women in Science Award
Wayne Hanson “Best in Fair” Award

Information about the NC State Science & Engineering Fair is available online at:
http://www.ncsta.org/sciencefair/

Dr. Ellen Smoak and Dr. Robert Williamson, with NC A&T State University Cooperative Extension, wrote A Student’s Guide to Keeping the Science in Your Science Project, to help students with their projects. This guide is available online at:

Your local NC Cooperative Extension office may be able to help students with project ideas. Keep that in mind for next year’s event! A science fair entry can also fulfill the high school graduation requirement of a senior project, as the same elements are required:

**Paper:** This needs to demonstrate that the student can research a topic and write about it.

**Product:** The possibilities range from a service project to something the student designs or builds.

**Portfolio:** This demonstrates progress with the project through journal entries, a log, or other method.

**Presentation:** This can include a display board, slideshow presentation, and oral presentation (respond to judges’ questions).

**New NC organization …**

In early 2008, the NC Children and Nature (NC CAN!) coalition was formed. Kathy Bull, with the NC Zoo Society, stated: “It is critical that communities begin to address the issue of children’s disconnection from nature and the negative impact this is having on their physical, intellectual, emotional and social health.” The groups’ second meeting was held on February 18th in Asheboro. For more information, contact Kathy Bull at kbull@nczoo.com or call (336) 879-7286.

**Online video …**

EPA has a 9-minute video on reducing storm water runoff:
http://epa.gov/owow/nps/lid/video.html

The concepts presented would make great science fair projects!

**Invasive Species …**

With all the talk about bailouts and cutting budgets, how’s this for a big number: The total annual economic cost for dealing with terrestrial and aquatic nuisance species in the US is $100 billion! The Aquatic Nuisance Species Task Force has an education website:
http://www.anstaskforce.gov/education.php

Information is available to help boaters, aquarium hobbyists, and water gardeners prevent the transfer and release of invasive species. The site even has guidance on science fair projects!

**Don’t forget …**

Help save paper and postage! This newsletter is available online. You can also receive it as a pdf file attached to an email message. To get on the email list, send a message to: diana_rashash@ncsu.edu with “email Environmental Update newsletter” as the subject.

**Extension Volunteers Recognized**

On January 27th, Onslow County 4-H recognized Leona Walton as the 4-H Volunteer Leader of the year. Along with Mrs. Walton, all 4-H volunteers were thanked and recognized for their years of service at the annual 4-H Volunteer Leaders Banquet. The theme this year was “4-H.. Celebrating 100 Years”.

The annual Onslow County Agricultural Awards Banquet was held on February 10th at the Onslow Multipurpose Complex. Recognition was given to the various groups of volunteers that give of
themselves to support and expand the work of the NC Cooperative Extension Service in Onslow County. During 2008, Onslow County Master Gardeners volunteered 3,300 hours of service to local citizens.

Special recognition was given to Willie Wooldridge, Lea Crews and John Burns for 500 hours of volunteer time each; and Brian Wheat was recognized for 1500 hours of volunteer time since becoming a Master Gardener. Willie Wooldridge was named the 2008 Master Gardener Volunteer of the Year for his devotion to increasing the knowledge level of other Master Gardeners and the public.

Several local farmers received awards for crop production contests. Barry Shepard was the corn yield champion, with 226.02 bushels per acre. The runners-up were Jack and George Pierce, with 162.91 bushels per acre. The wheat yield champion was Winzell Taylor Jr., with 65.04 bushels per acre.

The Onslow County Agricultural Hall of Fame award was begun in 1984. The nominee can only be inducted to the Agricultural Hall of Fame once, as either a recipient of the Master Farmer Award or the James R. Strickland Service to Agriculture Award. Mr. Jack Aman was inducted as this year’s Master Farmer Award recipient.

The Onslow County Extension and Community Association (ECA) celebrated their 2008 achievements on February 24th. The speaker for the event was Mrs. Chase Padgett, Retired Home Economist Agent for NC Cooperative Extension.

The event started off with a memorial to ECA members that had passed away since the last Achievement Day. Several members were recognized for special awards, as follows:

**Perfect Attendance:** Thirteen members were recognized for attending all of the club’s monthly meetings.

**Reading Certificates:** Seven members were recognized for reading a total of 115 books and submitting a report on each book read. Ruth Clifton was recognized for reading a total of 50 books.

**Cofer Leader Program Award:** Annie Lane received this award for a lesson she presented to her club. All clubs voted on a member that had presented information during the year. Judges then picked the overall winner from reports presented to them.

**Most Outstanding Club Member:**
- Barbara Crossman - Harmony
- Mary Sabourin - Jacksonville
- Faye Gould - Meadow View
- Barbara Nichols - Sneads Ferry

**Most Outstanding Club:** Judges vote on this award after seeing all the work done by a club’s members. This year’s award was presented to the Harmony Club.

**Extension and Community Associate of the Year:** This award is given to an outstanding member that goes above and beyond the call of duty. This year’s award was presented to Ida McNamara. (Other awards were given, but were not available at the time of this release.)