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Environmental Update



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Cape Fear River action plan & rock arch ramp...

On May 30, the Cape Fear River Partnership released the final version of the [Cape Fear River Basin Action Plan for Migratory Fish](#) – a blueprint that provides long-term, habitat-based actions for the most pressing challenges to migratory fish populations in the Cape Fear River basin. The plan was unveiled during a ribbon-cutting ceremony at the Cape Fear River Lock and Dam No. 1, near Riegglewood NC. This is the first rock arch ramp in the eastern US.

Figure 1: Lock & Dam No. 1 Rock Arch Ramp Before & After Installation



The rock arch ramp is expected to improve passage of anadromous fish such as striped bass, American shad, river herring and sturgeon, during the spring migrations to their historical spawning grounds. A post-construction evaluation will assess fish use of the ramp over a two-year period. Plans to install rock arch ramps at Lock and Dam No. 2 and No. 3 are already being discussed, to provide these species with unimpeded access to spawning areas in Harnett County. Providing fish passage beyond these two barriers is critical to re-building migratory fish populations in the Cape Fear River and is a top priority of the action plan.

The action plan will look at improving fish habitat and water quality, as well as assess the community and economic benefits of improved migratory fish populations on tourism, recreation, fishing, and other commercial uses. In 2011, North Carolina anglers spent more than \$1.5 billion on fishing related activities. For more information, visit the [Cape Fear River Partnership](#) website.

Recycling facts and figures ...

You've likely seen the numbers about how much we recycle and the amount of trash thrown away. You may have wondered how folks came up with those values. Well, the NC Department of Environment & Natural Resources (NC DENR) has a website that provides recycling factoids and includes the calculations!

http://www.re3.org/docs/NC_Recycling_Stats_Facts_with_Calculations.pdf

So, the next time you tell someone that every year North Carolinians throw away enough trash to circle the earth twice, you can back it up with the calculation. That goes for these interesting tidbits as well:

- Every 55 days, North Carolinians throw away enough trash to fill dumpsters lining the entire 420-mile length of I-40.
- The state picked up more than 10 million pounds of litter in 2007. That's more than one pound of litter per resident.
- North Carolinians recycle 85.4 pounds of materials per second. That's not bad; however, more than 752 pounds of trash per second are still being thrown away.
- In NC, more than \$74 million in aluminum cans, \$41 million in plastic, and \$16 million in steel are thrown away each year.
- Although a lot of steel is recycled in NC, less than 15 percent of steel cans are recycled.
- Almost all of the steel made in the US is made from scrap. Recycled steel saves resources and energy. For every ton of steel recycled, 2,500 pounds of iron ore, 1,400 pounds of coal, and 120 pounds of limestone are saved. Recycled steel also requires only 25 percent of the energy to make than virgin steel.
- Recycled aluminum uses 95 percent less energy and recycled plastic uses one-third less energy than using virgin materials.

Table 1: Annual recovered materials

Material	% Recovered	Tons trashed
Paper*	17.3%	1,730,268
Glass	18.6%	260,413
PET	18%	66,995
HDPE	16.7%	42,534
Aluminum cans	13%	37,036
Steel cans	13.9%	56,065
Total tons:		2,187,311

* Includes newspaper, cardboard, magazines, office paper, and mixed paper

Table 1 indicates just how much recyclable material is ending up in the trash, rather than the recycle bin. If recycle bins aren't available where you shop or work, let management know that you'd like to see them installed. Recycling: it saves resources, energy, and landfill space. It also provides numerous NC businesses with their raw materials and puts people to work.

Preparing for disasters ...

Hurricanes, tornados, floods, heat waves, and drought are not new to the US. Southeastern NC has seen its share of each. At the start of this 2013 hurricane season, NC Emergency Management had the following comments:

- We can't prevent disasters, but we CAN PREPARE for them.
- Being ready and knowing what to do can save your life.
- Staying informed when severe weather threatens is CRITICAL!

For this reason, NC Cooperative Extension has a website with links and information sheets available to help you prepare for the worst that nature presents:

<http://www.ces.ncsu.edu/disaster/>

The following are minimum recommendations:

- Make sure prescription information is current.
- Have nonperishable food items, including those that don't need cooking or water to prepare. Purchase sizes that will be used in one meal, so you aren't trying to safely store leftovers. Common examples are canned tuna; canned fruit; individual-sized gelatin, fruit cups, and pudding; peanut butter; breakfast bars; granola bars; energy bars; trail mix; nuts; and juice packs. Don't forget the hand-operated can opener!
- Have sufficient water for several days, usually 1-2 gallons per person.
- Have charcoal or propane for outdoor cooking.
- Check your "staples": batteries, radio, flashlight, first aid supplies, etc. The hand-cranked combination radio-flashlight is very useful.
- Have entertainment items that don't require electricity: board games, playing cards.
- Don't forget the pets during your preparations! That includes their medications, food, water, and shelter.
- Prepare your property: put away loose items (including trashcans, toys, garden hoses, and yard furniture), protect windows, and reinforce garage doors. A well-washed 32-gallon trashcan can be filled to provide water for pets. The bathtub can be filled to provide water for flushing the commode.
- Protect important personal documents.
- Have gas in your vehicle and cell phones charged.
- Keep out-of-area relatives informed of your plans, whether staying in place or traveling.
- Track the storm and road conditions:
 - <http://www.nws.noaa.gov/om/hurricane/r>

resources/atlchartshpmillclr.pdf

- <http://www.uscg.mil/news/stormcenter/>
- <http://tims.ncdot.gov/tims/>

Remember: Be safe. Be prepared.

Coast Guard storm flag warning system:



Rain barrels ...

The response to the April rain barrel sale was fantastic! The rain barrels sold out in 5 days. Due to this demand, a second Onslow County office of Cooperative Extension rain barrel sale will begin the afternoon of July 17 and continue while supplies last. The rain barrels can be pre-ordered using the online order form (link provided below) or in person. They can also be purchased after July 17 "first come - first served". The cost is \$50. For more information, contact Diana Rashash at 455-5873.

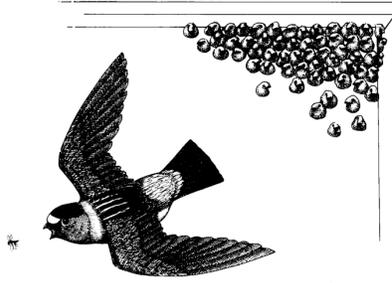
<http://www.ces.ncsu.edu/wp-content/uploads/2013/02/Rainbarrels2013b.pdf>



A bit about birds

Spring has sprung and many birds have returned to the region. With them comes much singing, nesting, feeding, and raising young. As with anything, some folks love them and want to attract more to their yard by providing nesting options and feeders. Other folks are less happy, usually due to property damage or nests in inappropriate locations. Airports, for transportation safety reasons, are particularly concerned about not attracting too many birds to their location.

If you have property damage or nests that need to be removed, check to see if the birds are a protected species. Many are, including woodpeckers and swallows. It is illegal to take, possess, transport, sell, or purchase protected bird species or their parts (feathers, nests, or eggs) without a permit. A list of species is available on the Migratory Bird Treaty Act website:



<http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtintro.html>

It is understood that birds can inflict significant property damage or be a hazard in other ways. For this reason, an environmental assessment, *Reducing Bird Damage Through an Integrated Wildlife Damage Management Program in the State of North Carolina*, was conducted in 2010. The report is available online:

http://www.aphis.usda.gov/regulations/pdfs/nepa/NC_Bird_EA_draft_website.pdf

In the report, damage was described as agricultural, natural resources, property, and human health. Great blue heron were listed for being a hazard near airports and for predation on

fish at aquaculture farms. Vultures were also among the birds mentioned. Other websites provide information about individual types of birds. For example, the NCSU Wildlife Damage Control website contains factsheets about several birds, including pigeons, starlings, swallows, and woodpeckers:

<http://www.ces.ncsu.edu/nreos/wild/wildlife/wdc/index.html>

If you need assistance or have questions, you can contact a NC Wildlife Damage Control Agent in your county. Damage control information and county agent listings are available:

<http://www.ncwildlife.org/Trapping/WildlifeDamageControlAgent.aspx>

For additional information, you can also try your local NC Cooperative Extension office:

<http://www.ces.ncsu.edu/local-county-center/>.

We are always willing to provide what information we can. In Onslow, call (910) 455-5873 and request Diana Rashash, or email her at diana_rashash@ncsu.edu.

Don't forget ...

Help save paper, postage, and your tax dollars! This newsletter and the annual reader survey are available online at:

<http://onslow.ces.ncsu.edu/content/Envedarchive>

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