

# North Carolina Climate

## August 2007

“North Carolina Climate”, the newsletter of the State Climate Office of North Carolina, is going through some changes. Instead of a longer newsletter produced 2-3 times a year, a monthly newsletter will be published that highlights the previous months weather and climate and a few interesting activities of the State Climate Office. This is the first edition for this new format, and we’d love to hear and feedback from you, our readers.

### New State Climatologist

Dr. Sethu Raman retired as State Climatologist in July 2006. He served as the Director of the State Climatologist since 1996, and is responsible for the complete overhaul of the SCO and introduction of modern climate services in North Carolina. Sethu is still teaching part-time in the Department of Marine, Earth, and Atmospheric Sciences and continues to support and interact with students and scientists in the SCO.

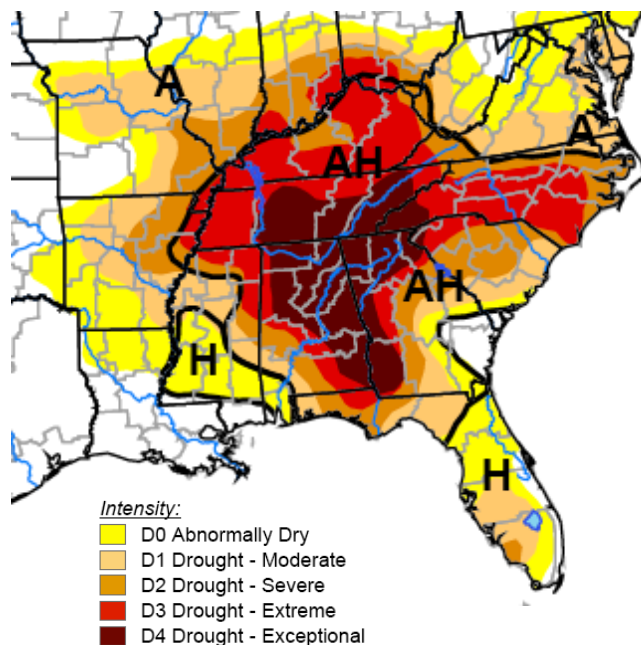


Dr. Ryan Boyles has been named as the new State Climatologist and Director of the State Climate Office. Ryan has been with the SCO since 1997, originally as one of the first graduate students working with Sethu in the SCO, then later as a meteorologist, assistant state climatologist, and most recently as the associate state climatologist. Ryan hopes to continue the successful program started under Sethu with an emphasis of the SCO’s public service mission for climate science

extension, research, and education.

### 2007 Southeastern US Drought

Drought conditions across the southeast have reached unprecedented severity. Centered on Alabama and Georgia, extreme heat and dry weather have lead to widespread impacts to agriculture, forests, and water supplies. In North Carolina, drought conditions are considered exceptional in southwestern NC and somewhat improve through the northeastern coastal plan.



## **Save water – don't waste your outdoor irrigation!**

*SCO and Crop Science announce Turf Irrigation Management System (TIMS)*

With drought upon us and water restrictions in place for much of the state, the SCO has teamed up with scientists in Crop Science and the NCSU Center for Turfgrass Environmental Research and Education to help everyone with grass minimize their outdoor water use and still maintain a beautiful lawn. The online tool uses information about irrigation rates, the kind of grass grown, and recent precipitation and evaporation amounts to provide a precise amount of water a user needs to apply to ensure a healthy lawn without wasting water.

More information, and access to the online tool is available at:  
<http://www.turffiles.ncsu.edu/tims/>

## **Volunteer Observers Wanted – Every Drop Counts!**

When you hear the rainfall amount from the official gage, have you ever said, "That's not what I got!"

Beginning in September, you can let us know how much rain, hail, or snow you measured in your backyard by joining the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS). This new program will help meteorologists, researchers, the media, and others see and study the variability of precipitation across North Carolina. The accumulated precipitation data will be available to anyone using the web. Observations reported by CoCoRaHS volunteers will be used by a wide range of agencies and scientists, including National Weather Service and UNC system scientists, to monitor and study rainfall patterns, drought, and the impacts to our surface water systems. This is a great activity for science teachers and their students, for the farmer who tracks precipitation, or for weather hobbyists who want to contribute to our knowledge of the environment.



CoCoRaHS volunteers use a standard scientific rain gauge, available through the CoCoRaHS Web site ([www.cocorahs.org](http://www.cocorahs.org)) for about \$30, including shipping. Volunteers complete online training and install the rain gauge on their property about five feet above the ground in a site with little or no obstruction from trees or other objects.

To sign up as a volunteer observer, visit the CoCoRaHS Web site at <http://www.cocorahs.org>. Once you register and begin to report, your rainfall observations will become part of the volunteer record, and will be plotted on maps of your county and state. You can view the maps and see how your observation fits in with your neighbors involved in CoCoRaHS across the country.

### **August 2007 Month-in-Review**

Heat and drought dominated the weather and the media in August. For much of North Carolina, August 2007 was the warmest on record. Several cities broke daily maximum temperature records, and some set new all-time maximum temperature records. To add to the drought injury, several locations also set new records for low precipitation in August.

Based on preliminary data, new records for August average temperature were set at:

<b>Station</b>	<b>Year of First Observation</b>	<b>Aug 2007 Temperature</b>
Asheville Airport	1946	76.7
Brevard	1902	75.8
Cullowhee	1909	76.8
Hickory Airport	1949	83
Morganton	1897	80.7
Tryon	1917	82.4
Grandfather Mountain	1955	69.2
Mount Airy	1893	78.6
W. Kerr Scott Reservoir	1965	80.1
Piedmont Triad Airport	1903	83.2
Raleigh Durham Airport	1948	84.1
Statesville	1901	80.3
Albemarle	1911	82.6
Charlotte Airport	1948	83.7
Concord	1891	84.9
Dunn	1962	83.1
Fayetteville	1899	83.5
Laurinburg	1946	85.1
Lumberton	1903	83.5
Aurora	1973	82.2
Greenville	1897	82.2
Wilson	1916	82.9

New records for low rainfall were set at:

<b>Station</b>	<b>Year of First Observation</b>	<b>2007 Precipitation</b>
Danbury	1946	0.72
Conover Oxford Shoal	1948	0.08
Charlotte Airport	1948	0.41
Concord	1891	0.39
Fayetteville	1871	0.7
Laurinburg	1946	1.36
New Bern Airport	1948	1.12

New records for daily maximum temperatures were set at:

<b>Station</b>	<b>Year of First Observation</b>	<b>2007 Temperature</b>
Hickory Airport	January 1, 1949	104
Lumberton	January 1, 1903	105
Raleigh Durham Airport	January 1, 1948	105
Charlotte Airport	January 1, 1948	104
Laurinburg	May 23, 1946	107
Wilson	October 1, 1916	105
Roanoke Rapids	January 1, 1972	104
Williamston	November 1, 1952	101

### **Statewide Summary for August 2007**

As part of the monthly newsletter, the SCO will provide a basic summary of monthly conditions for all locations that have an automated reporting stations. A daily version of this products is available online at:

<http://www.nc-climate.ncsu.edu/cronos/review/>

[INSERT OUTPUT FROM MONTHLY REVIEW]