# Messages of the Day September 2011

Thursday, September 1, 2011

### How is CoCoRaHS correctly pronounced?

We get this question a lot, since this is not your ordinary run of the mill acronym. It stands for the Community Collaborative Rain, Hail and Snow Network, which started out as the Colorado Rain and Hail Study back in 1998.

The correct pronunciation is: "CoCo" . . . that's easy, like in coconut. The second part "RaHS" is just about like it looks. When the doctor checks your tonsils he says "say ah!" and that's the same sound only with an "R" and an "S" on it. Like he's saying "say rahs!" Put the two together and there you have it "CoCoRaHS".

Friday, September 1, 2011

### Tropical Storm Lee ... Heavy Rainfall and Flooding!

As Tropical Storm Lee meanders along the Gulf Coast this weekend there will undoubtedly be some amazing rainfall amounts from many CoCoRaHS observers, just like we saw on the East Coast with Hurricane Irene last weekend. We want to stress "safety first" when encountering this storm. Although your rainfall reports are important, please make sure that you heed all evacuation recommendations, as heavy rainfall and flooding will be a major component of Tropical Storm Lee.

Folks ask whether to take the funnel out of the gauge or not. As we said last week, it can't hurt to take it out. You probably have less of a chance of having it blow away. The 4" diameter rain gauge holds a little over eleven inches of precipitation total.

Feel free to document the elements of the storm in the comment section of your daily report. If it is safe to go outside and read your gauge, please report any unusual rainfall amounts in real time via the "Significant Weather Report Form" on our website. This will go directly to your local National Weather Service office and may provide them with important information on the storm's rainfall. Don't forget to report your normal 24 hour report as well.

To follow the progress of Tropical Storm Lee, visit the <u>National Hurricane Center's</u> web site. Now through the end of September is a prime time for tropical system development and a good time to stay informed on what's going on in the tropics. In addition to TS Lee, be sure to keep an eye on Hurricane Katia as she heads northwestward in the Atlantic.

Stay safe! We will update our message on Monday.

#### **NOAA** Weather Radio All Hazards (NWR)

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

Working with the Federal Communication Commission's (FCC) Emergency Alert System , NWR is an "All Hazards" radio network, making it your single source for comprehensive weather and emergency information. In conjunction with Federal, State, and Local Emergency Managers and other public officials, NWR also broadcasts warning and post-event information for all types of hazards including natural (such as earthquakes or avalanches), environmental (such as chemical releases or oil spills), and public safety (such as AMBER alerts or 911 Telephone outages).

Known as the "Voice of NOAA's National Weather Service," NWR is provided as a public service by the National Oceanic and Atmospheric Administration (NOAA), part of the Department of Commerce. NWR includes more than 985 transmitters, covering all 50 states, adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. NWR requires a special radio receiver or scanner capable of picking up the signal.

Click on the following link to find out more about where to listen to NOAA Weather Radio in your area: NOAA RADIO

Wednesday, September 7, 2011

#### Fire Weather ... Information and Outlooks!

Another zero in the rain gauge? Hot, dry weather in September can create ideal conditions for wildfires in many parts of the country. As you read this message dozens of blazes continue to sear the drought-plagued state of Texas destroying homes and property.

Most NWS Weather Forecast Offices provide fire forecasts twice a day and provide warnings in close partnership with local, state and Federal fire control agencies. Learn more about <u>Fire Weather</u> and the NOAA Storm Prediction Center's latest <u>Fire Weather Outlooks</u> for your part of the county by clicking on the underlined text.

For additional info on wildfire prevention and other wildfire topics, visit the National Interagency Fire Centers web site by clicking here: NIFC

### Turn Around Don't Drown (TADD) -- Flood Safety

While we focus on drought and wildfires in some parts of the country, flooding from recent tropical systems threatens others.

Flooding is a coast to coast threat to the United States and its territories in all months of the year. Heavy rain in a short amount of time can threaten both lives and property.

NOAA continues to promote their campaign "Turn Around Don't Drown (TADD)" by instructing citizens not to venture into flooded areas. They state that "each year, more deaths occur due to flooding than from any other severe weather related hazard. The Centers for Disease Control report that over half of all flood-related drownings occur when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths is due to walking into or near flood waters".

Take a few moments to visit this informative site on Flood Safety

For those of you facing floods at this time, our thoughts and prayers go out to you. Please stay safe.

Your friends at CoCoRaHS

Thursday, September 15, 2011

# How Long Have People Been Tracking Precipitation?

In his book Meteorologica, Aristotle (340BC) mentioned topics such as clouds, mist, rain, snow, etc, but not the measurement of precipitation. Measuring rain and keeping records of it was apparently still far off in the future.

The earliest quantitative device for measuring rainfall seems to be credited to a king in Korea called King Sejong who lived from 1397 to 1450. One of his goals as king was to make his people literate, so not only did he invent a rain gauge, but more importantly, he invented a phonetic alphabet for the Korean language as distinct from the Chinese characters widely in use in his time and movable type for that alphabet.

He decided that instead of digging into the soil to check for moisture, it would be better to have a standardized container about 30cm in depth and 14cm in diameter that stood on a pillar to measure the rainfall. These containers were to help villagers determine their potential harvest and to give King Sejong a better idea of how much the farmers should be taxed! So, these standard containers were distributed to each village. The rain gauge was invented in the fourth month of 1441, according to records.

The tipping bucket rain gauge was invented by Christopher Wren in Europe around 1661 and used the standard of weight, or sometimes volume, of the liquid precipitation. This tipping bucket idea is still used in many of the automated electronic gauges today.

In 1887, Mr. Cleveland Abbe wrote a manual on "Meteorological Apparatus and Methods" for the U.S. Army Signal Corps (agency responsible for U.S. weather observations at the time). In this booklet, Mr. Abbe described the standards for the weather gauges to be used by the U.S. Army Signal Corps. This

standard 8 inch diameter gauge is still in use by many National Weather Service offices and cooperative weather observers across the United States and abroad.

Monday, September 19, 2011

## "CoCoRaHS hits 10,000 Reports" Summer-Fall Challenge Week

September 19-23, 2011 is our chance to reach 10,000 precipitation reports per day for the first time in CoCoRaHS history. Please join us in reaching this significant goal.

Most of you already report your daily measurements each and every morning rain or shine (zero). We (CoCoRaHS Team) and all those who use CoCoRaHS data each day are grateful for your excellent rainfall reports.

To reach our goal of 10,000 reports, we will need the help of the hundreds of other CoCoRaHS volunteers who report less frequently -- or only when it rains. Please help this week, September 19-23 by reporting rain or shine.

Finally there are some of us who have signed up, bought a gauge and are waiting for a good opportunity to put it out and make that first report. This week is for you!

Thanks for helping reach this goal. We will report on the results next week.

Friday, September 23, 2011

#### **Autumn Leaves**

"The falling leaves drift by the window. The autumn leaves of red and gold...." Some of you may remember the old classic song by Johnny Mercer "Autumn Leaves". Its that time of year again when the leaves in many parts of the country begin to take on color, the nights are cooler and the pumpkins adorn the porches of many homes.

Have you ever thought to yourself "Why do the leaves change color?"

The US Forest Service has put together a nice web site explaining just that at: "Forest Service Leaves".

Or have you ever wondered "Does precipitation play a role in leaf color?"

"The amount and brilliance of the colors that develop in any particular autumn season are related to weather conditions that occur before and during the time the chlorophyll in the leaves is dwindling," says University of Kentucky agricultural meteorologist Tom Priddy. "Temperature and moisture are the main influences. The countless combinations of these two highly variable factors assure that no two autumns can be exactly alike."

And if you are just trying to find out where the leaves are turning during a certain week or in a certain place in the country, the Foliage Report Network: "The Foliage Network" keeps track of leaf colors in the eastern

half of the country and the US Forest Service keeps you advised on fall colors throughout the US at: <u>"Fall Colors"</u>.

More info the study of periodic plant and animal life cycle events that are influenced by environmental changes, especially seasonal variations in temperature and precipitation driven by weather and climate visit the National Phenology Network Web site at: "National Phenology Network".