### Messages of the Day April 2014

Tuesday, April 1, 2014

# CoCoRaHS March Madness 2014 FINAL RESULTS ... NORTH CAROLINA (155) WINS THE TRADITIONAL CATEGORY ... WYOMING WINS PER CAPITA! CONGRATULATIONS TO BOTH STATES! 1,098 NEW VOLUNTEERS NATIONWIDE!

In the "traditional count" category (sheer number of new observers), **North Carolina** (155) catapulted back into the lead last Friday and never looked back. A super effort by our friends from the Tar Heel State! Florida (138) finished in second, followed by last year's champions Texas (130). Great efforts by Georgia (57) and Wyoming (48) round out the top five. Colorado and Maine (both at 36), Minnesota (34), and Maryland and Mississippi (tied at 33) all showed a strong month of recruiting to finish in the top ten. Well done!

In the "population weighted-per capita" category, **Wyoming (85.16)** wins the CoCoRaHS Cup with a runaway effort that had them in first place already in the second week. South Dakota (35.62) finished a strong second, followed by Maine (27.10). North Carolina (16.26) and Nebraska (15.88), finished fourth and fifth respectively. Mississippi (11.12), Florida (7.34), Colorado (7.16), Minnesota (6.41) and Georgia (5.88) round out the top ten. Great work everyone!

To view the final standings and learn more about our contest, visit our March Madness webpage by clicking here: "MADNESS FINAL STANDINGS.

Thanks to all of you who have mentioned the network to a family member or friend! With your help CoCoRaHS has recruited 1,098 new volunteer observers during March 2014!

Thursday, April 3, 2014

### Weatherwise Magazine's 2014 Photo Contest and Discount Subscription Rate for CoCoRaHS Members

"Some people are weatherwise, but most are otherwise" -- Ben Franklin

Weatherwise Magazine is an exciting bi-monthly magazine that provides the weather enthusiast with fascinating articles regarding all aspects of weather and climate. With our full endorsement, CoCoRaHS regards this magazine as one "which everyone interested in weather would benefit from having on their coffee table". Thanks to a special arrangement CoCoRaHS volunteers can subscribe to the magazine at a 27% discount: CoCoRaHS discount.

Now thru June 3rd, Weatherwise Magazine is accepting submissions for its "2014 Photo Contest". There are great prizes awaiting the winners. This annual event provides an opportunity for you to share your

potential prize winning photos with a nationwide audience. Click here to find out more about the magazine and photo contest: Photo Contest.

Check it out today, you'll be glad you did!

Saturday, April 5, 2014

### CoCoRaHS WxTalk Webinar for April 2014: "Air Quality: Local, Regional, and Global Perspectives"

Air Quality will be the focus of our next "WxTalk Webinar" on April 17th. "Air Quality: Local, Regional, and Global Perspectives" will be presented by Sonia Kreidenweis, of Colorado State University's Atmospheric Chemistry Department.

*Space is limited to the first 500 registrants*, so register today! We will notify the first 500 who register of their acceptance to the Webinar. Those who aren't able to attend will be able to watch this episode on-line the following day.

#### REGISTRATION INFO

Title: Webinar #29 - CoCoRaHS WxTalk: Air Quality: Local, Regional, and Global Perspectives

Date: Thursday, April 17, 2014

Time: 1:00 PM Eastern, Noon Central, 11:00 AM Mountain, 10:00 AM Pacific

"While air quality in many parts of the world has been steadily improving in past decades, many challenges remain. In this talk we will take a look at the major air pollutants that are regulated in the United States and why they made the list. Some of the atmospheric chemistry that contributes to pollution levels will be discussed. We will conclude the discussion with an overview of some of the websites that provide information about daily air quality as well as forecasts for the US and other countries."

Reserve your seat now by registering here: AIR QUALITY

Our May CoCoRaHS WxTalk Webinar: "Aviation Meteorology: All you ever wanted to know . . . topics from what causes clear air turbulence to how airports' traffic flow is impacted by weather" will feature Mike Bardou of the National Weather Service's Chicago/Romeoville Office and Robb Kaczmarek of the National Weather Service's Chicago Air Route Traffic Control Center. It will take place on Friday, May 2nd. Stay tuned for an upcoming announcement on how to register.

Monday, April 7, 2014

### "CoCoRaHS Hail Week" -- April 7-12, 2014

Join us in creating 'Hail Awareness' during our annual "CoCoRaHS Hail Week". Most of us see hail in our backyards from time to time and many of us will even experience a hailstorm this month. Learn more about hail, including how to observe and report it, as we explore this icy phenomena all week long.

- Tuesday: "Five things you always wanted to know about hail, but were
  afraid to ask" We will feature some interesting facts about those falling balls
  of ice.
- Wednesday: "CoCoRaHS Hail Reports . . . What are they, how can I access them?" How you can help report hail.
- Thursday: "CoCoRaHS Hail Pads" How to make a hail pad . . . it's fun and easy to do.
- Friday: "CoCoRaHS Hail Photo Day" Have a great/unique photo of hail? E-mail it to us today!
- **Saturday:** "*CoCoRaHS National 'Put out your Hail Pad' Day*" Have a hail pad? . . . join thousands around the country who will put out their hail pads today. It's that time of year!

To find out more about hail, visit our CoCoRaHS Hail Page by clicking here: Hail Information

**CoCoRaHS** "Hail t-shirts" are currently available via WeatherYourWay.com as long as supplies last. They sell for \$12.75 (\$14.75 XXL) plus shipping and are pretty cool looking.



Thanks again for your reports and be on the lookout for hail in your neighborhood.

Tuesday, April 8, 2014

### **TUESDAY: "Five Interesting Facts about Those Frozen Balls of Ice"**

Over the years CoCoRaHS has become one of few repositories of hail information in the nation. Thanks to your observations, we are able to catalogue hail reports from all fifty states. As we strive to become more 'hail aware' here are five things you may or may not know about hail.

- 1) Hail comes in many shapes and sizes, ranging from rice sized pellets (1/8") to giant softballs (4 1/2"). Hail can be clear or white or a combination of the two. Hail can be hard or soft. Wind patterns usually form hailstones into balls, but they can also appear in other shapes, such as cones, discs, stars, pyramids, or just strange looking pointy blobs. We've even had reports of donut shaped stones!
- 2) On July 23, 2010, the largest hailstone ever recorded in the United States in terms of diameter and weight fell in Vivian, South Dakota. The stone had a diameter of 8.0 inches with a circumference of 18.625 inches and weighed 1.9 pounds. No one was injured. This hailstone broke the previous United States hail size record for diameter (7.0 inches 22 June 2003 in Aurora, NE) and weight (1.67 pounds 3 September 1970 in Coffeyvile, KS). The Aurora, Nebraska hailstone will retain the record for circumference (18.75 inches). For more info on the Vivian, South Dakota hailstone click here: Hailstone.
- 3) In North America, hail is most common on the High Plains just east of the Rocky Mountains. For example where Colorado, Nebraska, and Wyoming's borders meet just east of Cheyenne, WY there are an average of 9 to 10 hailstorms each year. Hail in this region occurs between the months of March and October mostly during the afternoon and evening hours, with the bulk of the occurrences from May through September.
- 4) Hail suppression has been tried by many over the years including silver iodide cloud seeding and types of rockets. "Hail cannons" whose "LOUD" acoustic burst is believed to break-up hail while it is just forming, are still being used in some areas where fruit and vegetables are grown extensively.
- 5) Hail is found in many countries around the world, such as China. In June 1932 a hailstorm killed an estimated 200 people, and injured thousands more there. Other countries with frequent hailstorms include southern and western Germany, northern Italy, northern India and Croatia.

Thanks again for your reports and be on the lookout for hail in your neighborhood.

Wednesday, April 9, 2014

### WEDNESDAY: CoCoRaHS Hail Reports . . . What are they, how can I access them?

Thanks so much for your CoCoRaHS hail reports. You may not realize it, but there are very few sources for accurate data about hail. Most weather stations don't even measure or report hail. Scientists have great difficulty finding good data to help analyze hail storm patterns, frequencies, probabilities, etc. Therefore, our CoCoRaHS hail reports are especially important.

If you experience hail at your location (even the small stuff) please use the CoCoRaHS hail report form to submit a report. Even if you don't have much information about the hail or weren't home to know exactly when it happened, still send in a report: <a href="Hail Report">Hail Report</a>

Hail pads help us document the size and number of stones. If hail pads are not provided in your area, you can make your own: Making Hail Pads. More on this subject tomorrow!

Please report hail even if you don't have a CoCoRaHS hail pad: Measure Hail

"Days with Hail" reports are viewable to the public and include a list of all days during a calendar year with one or more hail reports entered into the CoCoRaHS database. This is a great way to see where hail fell across the country on any given day as well as the size of the hailstones. Those reports with a camera icon next to them indicate that a photo of a hail pad associated with that specific report is available for viewing on-line.

To access the "Days with Hail" report click "View Data" on the CoCoRaHS homepage's top menu bar. Under "Summary Reports" click "Days with Hail Reports". That's all there is to it.

You can also see a map of hail reports for any given day by clicking here: Hail Maps

Thanks again for your reports and be on the lookout for hail in your neighborhood.

Thursday, April 10, 2014

### THURSDAY: "CoCoRaHS Hail Pads" -- How to make a hail pad . . . make your own at home!

Hail pads are essential to CoCoRaHS's mission to measure, map and study hail. They are fairly easy to construct with the right materials. If you can wrap a present, you can most likely make a hail pad.

A hail pad consists of a 12" by 12" square of Styrofoam covered in heavy duty aluminum foil. A little tape and you're set to go. To learn more on how to construct one visit: Making Hail Pads.

For those of you who would like to order hail pads without going through the process of making your own, they are available from www.Weatheryourway.com for a modest fee.

Thanks again for your reports and be on the lookout for hail in your neighborhood.

Friday, April 11, 2014

### FRIDAY: "CoCoRaHS Hail Photo Day."

Do you have a great/unique photo of hail that you observed within the last year? E-mail it to us today! We hope to use these in our presentations and educational information on hail.

The categories of photos we are looking for are: 1) close-up photos of hail stones -- unique shapes, size, colors, etc.; 2) hail damage (vegetation, dented cars, etc.) showing the power of this force of nature; and 3) interesting shots of ground covered by hail. For your safety, please wait until the storm is over to take your photos.

Send your hail photos over the next several weeks to: henry.reges@colostate.edu. Please include the name of the photographer for credit purposes, the date of the hail, as well as the location - city, state - of where

the hail fell (ex- Hailey Jones, March 28, 2014, Royal, IL). Without this information, we will not be able to use your photo. Finally please include in the text of your message that "you give CoCoRaHS permission to publish the photo and use it for other possible CoCoRaHS promotions".

Thanks again for your reports and be on the lookout for hail in your neighborhood.

Saturday, April 12, 2014

### SATURDAY:CoCoRaHS National "Put out your Hail Pad Day"

Have a hail pad? . . . join thousands around the country who will put out their hail pads today. It is that time of year!

We have a saying in CoCoRaHS and that is "A hail pad does no good unless it's outside to capture the footprint of a hail storm as it passes overhead". This is so true! Many of us from time to time will learn of a hail event hitting our neighborhood while we are at work, out shopping, etc. and say to ourselves, "Great! Guess where my hail pad is . . . it's in the garage!" When our pads are out and deployed it is really fun to see the actual craters hail has left on the pad after the storm. Many pads often look like the surface of the moon. So don't miss out, put your hail pad out on this special "Put out your Hail Pad Day".

Some have asked, "Gee, these pads are light, how do we keep them from blowing away?" Great question! A simple way would be to cut two "L" shaped wires from a metal coat hanger and secure the pad to the ground in that fashion. Others have attached them to their snow measuring boards or made a special 18" x 18" plywood board to attach them to. Still others have mounted them to old tree stumps. As long as you have an open area with an exposure to the sky and not too close to a building you will be fine. Some have chosen to elevate their pads to prevent their pets from stepping on them. Many have sprayed a dull coat of spray paint on the pad to keep birds from peeling them and using the foil for nest material (somehow many birds are attracted to the shine of the metal). It is also important to mark an "N" on the back of your pad to tell which direction is north. Finally, make sure to include your station ID number on the back of the pad and the date the hail event occurred. We get many amazing looking pads dented with craters, but unfortunately with no information on them.

We often are asked the question, "Can the foam be reused or recycled?" The answer is yes . . . when we make hail pads here in Colorado, we are careful to reuse the foam (after the pad is photographed and analyzed) if it is still intact by turning it over to make a new pad. You can do this too if you decide to photograph and not send the pad in to us. If the pad is too far gone, please check locally to see if you can recycle the foam.

Also, please remember that you do not need to have a hail pad to report hail that falls in your yard. You can report it by clicking here: <u>Hail Report</u>.

Thanks again for joining us for "CoCoRaHS Hail Week". We will rerun some of this week's messages from time to time. We'd love to have your feedback as to whether this series was helpful in making you more "hail aware". Send your thoughts to: henry.reges@colostate.edu.

Have a great weekend and thanks for putting out your pad!

Thursday, April 17, 2014

### The CoCoRaHS iPhone and Android App

Would you like to submit your daily measurements from your smartphone? Well you are now in luck, as the CoCoRaHS iPhone and Android apps are now available and free to download thanks to the hard work of one of our CoCoRaHS volunteers, Steve Woodruff at Appcay in South Carolina.

The CoCoRaHS iPhone App is available at the Apple Store. Click here to download: "CoCoRaHS iPhone App".

The Android App can be downloaded via the Google play store by clicking here: "CoCoRaHS Android App"

These apps allow registered CoCoRaHS observers to submit their daily precipitation reports via their mobile devices. In addition, users can view past reports to ensure accuracy.

Monday, April 28, 2014

# "BE AIR AWARE" Air Quality Awareness Week April 28th thru May 2nd, 2014



The U.S. Environmental Protection Agency (EPA) and the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service urge Americans to "Be Air Aware" during Air Quality Awareness Week, April 28th thru May 2nd, 2014

Join the EPA and NOAA as they examine the following topics:

- Monday: Do Your Part: Reduce Your Contribution to Air Pollution
- Tuesday: Air Quality- Important at Every Age
- Wednesday: Air Quality & Your Health
- Thursday: Get Outside...with the Air Quality Index!
- Friday: Traveler's Health

To find out more visit: Air Quality Awareness Week

## CoCoRaHS WxTalk Webinar Series

### CoCoRaHS WxTalk Webinar for May 2014:

"Aviation Meteorology: All you ever wanted to know . . . topics from what causes clear air turbulence to how airports' traffic flow is impacted by weather"

Weather factors which result in hazards to aviation will be the focus of our next "WxTalk Webinar" on Friday, May 2nd. "Aviation Meteorology: All you ever wanted to know ... topics from what causes clear air turbulence to how airports' traffic flow is impacted by weather." will be presented by Mike Bardou, a Lead Forecaster/Aviation Program Leader with the National Weather Service in Romeoville, IL and Robb Kaczmarek, National Weather Service Aviation Meteorologist, at the National Weather Service's Chicago Air Route Traffic Control Center in Aurora, IL

*Space is limited to the first 500 registrants*, so register today! We will notify the first 500 who register of their acceptance to the Webinar. Those who aren't able to attend will be able to watch this episode on-line the following day.

#### REGISTRATION INFO

Title: Webinar #30 - CoCoRaHS WxTalk: Aviation Meteorology: All you ever wanted to know... topics from what causes clear air turbulence to how airports' traffic flow is impacted by weather

Date: Friday, May 2, 2014

Time: 1:00 PM Eastern, Noon Central, 11:00 AM Mountain, 10:00 AM Pacific

"NWS meteorologists Mike Bardou and Robb Kaczmarek will discuss some of the weather factors which result in hazards to aviation. This will include a brief discussion of aircraft icing and turbulence from a perspective that you may not be familiar with. They will also discuss how different weather parameters impact commercial air travel, as well as how conditions at one airport can affect air travel across the country."

Reserve your seat now by registering here: **AVIATION** 

Our June CoCoRaHS WxTalk Webinar: "Waterspouts: The Wet-Whirlwind Cousin to the Tornado" will feature waterspout expert Joseph Golden of Golden Research & Consulting in Boulder, CO. It will take place on Thursday June 19th. Stay tuned for an upcoming announcement on how to register.