

The Catch

COCORAHS - APRIL 2010 - FLOODS AND/OR DROUGHT

FORT COLLINS, CO — Thursday, April 15, 2010

Dear CoCoRaHS team member, friends and family

Sorry it's been awhile since I last wrote. This is a very busy time of year at home and at work not to mention I've had some trouble with my home computer. But that being said -- "Happy Spring". Welcome to the several hundred new CoCoRaHS volunteers who have signed up in recent weeks to help measure and report precipitation across the country. Welcome aboard! Do your best to get your gauge and get it set up and ready for action. Whether it's wet or dry, this is a very critical time of year as farmers (gardeners) across the country prepare their fields (gardens) and plant their crops.

Special congratulations to North Dakota who just won the "CoCoRaHS Cup" -- the traveling trophy that goes to the winner of our annual "March Madness" CoCoRaHS recruiting competition. This year, for the first time, we used "population weighting" to give states with lower populations a better chance to compete. North Dakota took advantage of this opportunity and signed up 21 new observers out of their approximately 650,000 residents to win the prize. Mississippi came in a close second with 80 new recruits out of statewide population of nearly 3 million. Good job. There is already a noticeable improvement on the CoCoRaHS rainfall maps in Mississippi where many of the gaps are filling up with data reports.

If you've taken the winter off from CoCoRaHS reporting, give it a try again. Now that thunderstorm season is upon us, this is the time of year when precipitation patterns are most variable and potentially extreme. We need as many reports as possible. Even if others in your community are reporting, the chances are the rainfall in your backyard is different than theirs.

Snow tapering off

There has only been one day since last fall where no snow fell anywhere in the country (or at least anywhere where there were CoCoRaHS volunteers). But now the snow season is quickly winding down. Make sure your funnel and inner tube is now in place so that you won't lose water to evaporation.

Severe weather?

We're now in the heart of the annual severe weather season for much of the country. But so far it's been a very quiet season. In fact, by this date we are tracking near the bottom in terms of tornadoes for this time of year.

http://en.wikipedia.org/wiki/File:2010_United_States_tornado_count_graph.png

That could change very quickly, so please stay alert. Thanks for all of you who are severe weather spotters for the National Weather Service. Despite all the technology available for tracking and predicting storms, spotter reports remain an essential ingredient for providing timely warnings and critical verification.

"Significant Weather Reports"

Please remember, whenever you are experiencing unusual weather or intense storms (heavy rains, heavy snow or similarly important weather), to use the "Significant Weather Report form" on CoCoRaHS to send in a quick update. You can send in "Significant Weather Reports" any hour of the day or night and the information will be forwarded immediately from CoCoRaHS to your National Weather Service office.

<http://www.cocorahs.org/Admin/MyDataEntry/IntensePrecipReport.aspx>

You can also view these reports at:

<http://www.cocorahs.org/ViewData/ListIntensePrecipReports.aspx>

Click "Select State" at the top of the state menu to view reports for the entire country.

In the last 7 days, we've only received 26 "Significant Weather Reports" from across the entire country, so either we're all too busy, or else the weather has been quite dull for this time of year. I think it's the latter.

Drought or floods, mud or dust

One thing that CoCoRaHS participation guarantees is a near-certain appreciation for how much precipitation varies from place to place and from time to time. Over an area the size of the U.S. it is totally normal to have some areas experiencing drought while others are experiencing excessive precipitation. The rains in recent weeks in New England were frightful. March precipitation totals exceeded 17" (more than we get here in Colorado most years) at locations in New Hampshire, Maine, Connecticut, Massachusetts and especially Rhode Island. Hats off (and raincoats on) to all of you who braved those storms to submit your excellent reports.

Just because you've just had major flooding doesn't mean that drought might not be your next climate challenge. In fact many areas of the country are now drying out quickly (including my yard and fields -- the barnyard and horse corral has transitioned quickly from ice, to mud and now to dust). As temperatures warm and vegetation greens up, evapotranspiration rates are increasing rapidly and soil moisture can quickly be used up. We're working with the National Integrated Drought Information System (NIDIS) (<http://www.drought.gov>) to try to improve drought monitoring, impact reporting and early warning. As CoCoRaHS volunteers, all of our daily reports feed in to painting a better and locally accurate picture of developing dryness. While weather forecasting continues to improve, forecasting the development of drought weeks to months to seasons in advance remains difficult and illusive. Most likely major drought will emerge this summer across parts of the country -- but where will it be?

Zeros really matter

I know it's hard to be motivated to get up and log in just to send in your report of "no precipitation", but it really does matter. Don't forget the "Monthly Zeros" entry form to make it easy to go back each month (and even for prior months) to quickly fill in your zeros for previous dry days. While each and every report sent in to CoCoRaHS is valuable, stations with complete data each day of the month are especially great for climate monitoring and analysis.

<http://www.cocorahs.org/Admin/MyDataEntry/MonthlyZerosReport.aspx>

Drought Impact Reports

Several of you have assessed your local situations and noticed dry conditions developing and beginning to cause trouble. That is exactly what the new CoCoRaHS "Drought Impacts Report" form is for. Familiarize yourself with this when you have a few minutes and then help out if and when the situation warrants. Thanks so much.

<http://www.cocorahs.org/Content.aspx?page=droughtimpactreports>

Bad dog, or bad dog owner?

That is the question. I've been told there is no such thing as a bad dog – just a bad (or incompetent) dog owner. Well, I just don't know. In one week, one of each of my best work gloves was chewed to shreds. They were not left on the ground carelessly but were in the glove rack at eye level (I'm 6 foot 5") in the laundry room. And my wife's glue gun and glue sticks were all chewed and partially consumed (including much of the power cord -- not sure how digestible that is). We don't even know how Lily (our 14-month old Australian Shepherd) found that glue gun -- we hadn't used it in years. And then there's one of our chickens. Lily opened the door to the chicken yard and let the chickens out into the field. Then she captured one gently and proceeded to lick off half her feathers before I caught her (the hen survived and is now feeling better). I could go on. I thought she (the dog) was settling down, and all of a sudden she's been on a puppy rampage.

Have you moved or changed your e-mail address?

If so, please let us know.

Hail, hail, hail.

Indeed, it is the season. We'll be featuring hail information in our "Messages of the Day" very soon. Please practice up on what to measure and how to submit a hail report. It's very important. If possible, use hail pads to more accurately determine the number, size and hardness of the stones.

<http://www.cocorahs.org/Content.aspx?page=hail>

There will be an article coming out soon in WeatherWise Magazine about hail storms in the U.S. that have dropped deep accumulations of hail. This type of storm has been poorly documented and the article was

difficult to research. This year, if you have a storm that covers the ground with hail -- and especially one that covers the ground with several inches of hail, please do your best to take photos and let us know. It is possible that as much as a foot of hail on the level is possible. If this happens even if it's somewhere no one lives or measures, we still want to know about it.

Remember, hail tends to bounce out of your rain gauge when the funnel is in place, and that moisture may be missed from your measurement. You can try to take a core sample of the hail on the ground, but the hail melts quickly, and it's hard to get an ideal sample. If you're home and a hail storm seems imminent, it's OK to take the funnel and inner tube out of your gauge so that you can capture a better "catch" from the storm. Last year, my funnel filled with hail 3 different times, so I plan to use two gauges this spring and summer -- one with funnel in (to avoid evaporation and one with the funnel out (to improve gauge catch from hail). I'll let you know what I find.

Onward

I gotta get to work. Have a great spring. Today I get to try my hand at teaching a couple of high school science classes. Wish me luck.

Best wishes to all,

Nolan Doesken
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CoCoRaHS Network

P.S. I always appreciate e-mail replies and questions, but I don't always have time to reply, especially this time of year. I will do my best to forward your questions to other CoCoRaHS staff or volunteers who can help you.