

The Catch

COCORAHS -- SPRING 2011 UPDATE

FORT COLLINS, CO — Thursday, March 24, 2011

Dear CoCoRaHS friends, family and neighbors

Greetings. Since I last wrote three weeks ago nearly 500 new people have signed up to be rain gauge volunteers for CoCoRaHS (the Community Collaborative Rain, Hail and Snow Network). This is fantastic!

If you are new to CoCoRaHS, thank you for signing up. Welcome aboard! We hope you are able to set up a rain gauge, review training materials and begin sending in your rain gauge reports soon. The handiwork of the CoCoRaHS network of "backyard rain gauges" are our daily national, state and local precipitation maps. <http://www.cocorahs.org/Maps/ViewMap.aspx>

Please take a moment, if you haven't before, to examine past or present CoCoRaHS precipitation maps. Every day is different as storms develop and track across the country -- soaking some areas and skipping others. See what we are able to accomplish together by pitching in a couple minutes a day to share our measurements. Precipitation -- whether it's too much, too little, or just right -- is incredibly important and varies so much from storm to storm and place to place. Every single rain gauge measurement helps to tell the story more accurately and clearly.

If you have any questions or need help getting started -- or restarted, please contact your state or local volunteer CoCoRaHS coordinator, or drop us a line at info@cocorahs.org or just reply to this message.

March Madness -- the home stretch

We have seven full days left in our annual "March Madness" CoCoRaHS recruiting contest. At last report, Indiana was the front runner with over 100 new sign ups so far this month. Minnesota and North Carolina are still in striking distance and Illinois has a hold on 4th place. Almost every state has had at least one new recruit. If you know anyone who might like to be part of CoCoRaHS in your state or anywhere in the country, let them know and encourage them to sign up today. There are still many, many gaps to be filled on our CoCoRaHS maps.

Too wet, too dry, too windy -- it must be spring

Spring (the official calendar date) arrived this week and with it came widespread wet weather on the West Coast, a major snowstorm in the northern plains, and reports of "thundersnow" (snow accompanied by lightning and thunder) all the way from South Dakota and Minnesota to New Jersey. It has rained every day but two since February 12 in Portland, Oregon. During that same 6 week time period, much of Texas has been lucky to get more than 0.50" and landscapes are quickly looking parched there, in Oklahoma and in nearby eastern Colorado and western Kansas. Winds have been howling in some areas, and dust was in the air across parts of the Southwest and Plains states this week. Tornado watches were issued for Iowa and Missouri, and hail fell in several places. Some of us have been dealing with flooding or forecasts of future flooding, while many of us are in or on the verge of a major drought. All I can say is -- it must be spring.

State Climate Series returns soon

We haven't forgotten. We'll be returning to our "State Climate Series" in a few days to finish up our state-by-state climate descriptions provided by all the State Climatologists across the country. We will keep these on our website for the foreseeable future as a reference.

<http://www.cocorahs.org/Content.aspx?page=50StatesClimates>

SWE and snow depth heroes

Thanks to everyone who has made the effort this winter and early spring to measure and report the depth of snow and the water content of the snow on the ground as a part of our CoCoRaHS "SWE Monday" campaign.

SWE stands for "Snow Water Equivalent" and is simply the depth of water contained in whatever snow has accumulated on the ground. Hydrometeorologists track our CoCoRaHS SWE measurements very closely to help predict the water supplies and flooding potential from melting snow. This year they have had a lot to track, both in the northern plains (where there is still plenty of snow and the high potential for more flooding) and in parts of New England and the western mountains. I noticed several reports of SWE (snow water equivalent) well over 6" in New England earlier this week, so there is a long mud season yet ahead as that dense snowpack eventually melts.

A dedicated CoCoRaHS reporter at Soda Springs, CA reported 209" of total snow depth yesterday morning and the snow was still coming down hard (we haven't seen their report yet for this morning but they could have easily gotten another 2 feet.) 132" of fresh snow has fallen there just in the past 10 days -- with several more days of heavy snow forecast. That's something to behold. Not surprisingly, structural engineers also examine these observations to determine the weight and structural loads on the roofs and walls of buildings resulting from the accumulation of heavy snow

Facebook anyone?

For those of you who are Facebook and Twitter users, you probably noticed the icons at the top of our Web site. You may have previously joined the unofficial Facebook "Group", but if you have not started following our official CoCoRaHS Headquarters page, we encourage you to join. This is a way to meet fellow CoCoRaHS volunteers where you can share notes, pictures, stories and ideas! Thanks to those who already joined in, as we quickly sprouted to almost 1000 fans on Facebook and over 150 followers on Twitter in a very short time. Join today!

Also, the link to the CoCoRaHS blog that has been in existence for several years is also now a convenient icon in the top banner of our web site. <http://www.cocorahs.org> The blog is written by meteorologist, Chris Spears, who has been a CoCoRaHS volunteer since college. He does a great job tracking current weather topics in a way that I'm sure you'll enjoy."

What comes next? The challenge of seasonal climate prediction

If you are involved in agriculture, water resources, construction, energy, transportation or any of a number of other businesses, you probably find yourself asking (or at least thinking about) what the weather will be doing next month or over the course of the next season or year. Are we headed towards drought? Will we be having an extremely hot summer requiring more electricity for air conditioning? Will next winter be very cold -- increasing the demand for heating fuel, electricity and natural gas?

Great progress has been made in recent decades improving weather forecasts for the next 3-7 days. But trying to figure out the next 3 to 7 weeks and beyond has proven to be a great challenge. Through years of research examining the nature and "teleconnections" associated with the El Nino Southern Oscillation, some progress has been made in understanding some of the causes for climate variability. This past winter we experienced a strong La Nina (the cool phase of the El Nino Southern Oscillation). As a result, climate forecasters, starting last summer, began predicting higher probabilities for having a warm and dry winter for much of the southern U.S., cool and wet for the Pacific NW and the northern plains, wet for the Ohio Valley and dry for the desert Southwest and the southern Great Plains. Much of this forecast has proven to be correct but with some highly publicized exceptions -- like the frigid episodes of weather that chilled the Southeast all the way to southern Florida and the flooding rains across Los Angeles and southern California.

But now as we move into the 2011 growing season, the La Nina has been weakening. Furthermore, summer weather patterns with their more localized thunderstorms are just a lot harder to anticipate and predict. For most of the country, most seasonal climate forecasters will simply tell you "I'm not confident about this coming summer's weather patterns". The concern about expanding drought remains high as well as prolonged flooding in the Dakotas. But what the summer storm patterns will be is still anyone's guess.

There are some very informative websites where you can track official forecasts for 6 -10 days and 8 -14 days in advance and also keep up to date on climate forecasts out to 15 months into the future. If you have the time and inclination, here is a useful link.

<http://www.cpc.ncep.noaa.gov/>

Keep those daily reports coming

We've had the normal drop off in CoCoRaHS participation during our long winter. But now that warmer weather is here, hopefully more people will get in the habit of CoCoRaHS rainfall reporting.

Also, remember that we have several other types of observations/reports that CoCoRaHS volunteers may choose to provide. For example – our hail reports. We are already in the hail season for many parts of the country. Remember that we have a special on-line form specifically for entering information on hail

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

You can include as much or as little information as you know about the storm -- when it started, how long it lasted, the sizes and hardness and color (clear, white, etc) and shape of the stones and the type of damage done. Hail information like this is really hard to come across, so you can provide a great service. We're seeing many reports of hail mentioned in the "Comments" section of our daily precipitation reports. That's good and appreciated, but what helps most is to also fill out a "Hail Report Form". Those reports go directly to your local National Weather Service Office and also show up immediately on the CoCoRaHS hail maps. <http://www.cocorahs.org/Maps/ViewMap.aspx?type=hail> Take a look at the National hail map for March 23rd -- very interesting.

It only takes a minute or so to send in a hail report, so please fill that out if you have had a hailstorm -- even a little one.

Also, remember to send in "Significant weather reports" if you are experiencing heavy rain or snow or other weather conditions that you think meteorologists or emergency managers in your area may want to know about. Your timely reports may really make a difference to those people in the path of the storm.

The thick white welcome mat

We are so dry here on our old farm on the NW edge of Fort Collins (Colorado). I just ran a "Station Snow Summary Report" for my CoCoRaHS station. We've had less than 4" of precipitation in total here in the last 8 months and only 24" of snow all winter (that is less than half the average). We haven't had a single storm with more than 0.36". With recent warm weather, the grass has been trying to green up, but there's

just not much moisture in the soil. Three times now in the past 3 weeks we've had the disquieting experience of going outside to check on the animals only to smell the tell-tale smell of a nearby grass or forest fire smoke. Fortunately, each fire was some distance away and was controlled quickly. Tuesday, we had some brief but scary periods of blowing dust as winds gusted to over 50 mph associated with that huge storm tracking across the northern half of the country. The next 3 months (April–June) are normally our wet season, so let's hope something changes and the rains return.

I'm not sure why, but Angel (our 115 pound Great Pyrenees) has decided to be our new welcome mat. She now lies, about 12 hours a day, on the doormat right in front of our front door. If you want in or out, you have to take a big step up and over her. She has no intention of moving but is very hopeful we'll bend down and take a few minutes to pet her on the way. She has stopped chasing (and occasionally eating) our geese and chickens, so our fowl seem to be safe. Visitors, however, have quite the fright when they see our very large, fluffy doormat.

Spring

I hope spring treats you well and that severe weather skips your area this year. As always, your precipitation reports are appreciated.

Sincerely,

Nolan Doesken
Colorado Climate Center
Colorado State University