

The Catch

COCORAHS -- WILD APRIL WEATHER

FORT COLLINS, CO — Friday, April 22, 2011

Greetings,

It's been awhile since I last wrote. Weather has been crazy across the country from the extreme drought and wildfires in Texas to the deep snow in the northern Rockies, Utah and the Sierra to the persistent floods of North Dakota. Your rain gauge reports, day in and day out, are helping tell the story.

March Madness in Review

It's been three weeks already since the culmination of our March Madness volunteer recruiting competition. We had a great month with 776 new recruits signed up to help measure and report precipitation. North Carolina pulled out a victory with one minute to go in March and nipped Indiana 129 to 128.

If you are a recent new recruit to CoCoRaHS, thanks so much for signing up and giving this a try. We're really looking forward to seeing your rainfall reports soon. So far, about half of you have begun reporting but that means that nearly 400 of you haven't got started yet. If you have any questions, or need any help getting going, just let us know.

Tornadoes and other bad stuff

Ever since CoCoRaHS has spread across the country, I can't look at weather the way I used to. In years past when we'd see pictures of tornadoes and tornado damage elsewhere in the country, it was always exciting but usually distant and impersonal. Of course we felt for the victims, but they were strangers. Now, with nearly 15,000 of us spread across the country, whenever there is harsh weather anywhere in this country there is usually a CoCoRaHS volunteer experiencing it. The fires

in Texas, Oklahoma, New Mexico and Colorado this spring have burned within feet of CoCoRaHS volunteers. The floods in North Dakota, Minnesota, Indiana and elsewhere have disrupted the lives of CoCoRaHS volunteers. The tornadoes in North Carolina damaged or destroyed houses of CoCoRaHS volunteers. These storms, floods and drought are no longer something distant and disconnected. These storms are affecting friends and colleagues. All you have to do is read the comments from CoCoRaHS volunteers <http://www.cocorahs.org/ViewData/ListDailyComments.aspx> and quickly you sense the struggles and pain. In some odd yet wonderful way, we have become family. When a station that has been reporting for months or years is suddenly missing from the daily list of reports after a severe storm, we immediately get worried. Most of the time it ends up just being a temporary power outage, but not always.

But that's why we do this, and hopefully our timely reports of rain, hail and snow may, some day, help others get out of harms way.

Hail Matters

Today I got this question from a volunteer in Arkansas. *"I have noticed that when, sometimes, Hail has been reported in the Comments section, no Hail information is reported in the observation section. Will this generate a hail report map?"*

This is something we're seeing a lot. After receiving hail, many of us are mentioning it (the hail) in our comments on our daily precipitation report. That's great and useful. But remember, if you want to make sure that your hail observation shows up on the national hail reports and hail maps <http://www.cocorahs.org/Maps/ViewMap.aspx?type=hail> then make sure you also take a minute to fill out the "Hail Report Form". In fact, don't wait until 7 AM the next morning. Report hail as soon as you can after the storm eases because your report will go directly and immediately to your local National Weather Service forecast office. You don't need to have a hail pad in place to use the hail report form. Hail reports are so valuable and are helping to build a hail database for the country that many researchers are interested in.

Here's another way you can look at data for the hail reports that are sent in. <http://www.cocorahs.org/ViewData/ListDaysWithHail.aspx> Tuesday almost 90 reports of hail were submitted, but today (Thursday) there were only seven.

Having a hail pad in place really does help quickly identify the size, hardness and relative severity of each storm. If you live in Colorado, please make sure you have a supply of hail pads ready and get one installed outside soon. If your local hail pad supplies are low, let us know so we can get them restocked. This list may be out of date, but here was the latest list of where to pick up new and drop off used hail pads in Colorado.

http://www.cocorahs.org/Content.aspx?page=hailpaddropoff_co

What Happened to the CoCoRaHS website?

Back on April 7th we had a discouraging day. Many of us tried to enter our precipitation reports that morning but were greeted by the message "*Service Unavailable*". We scrambled here trying to figure out the problem. At first glance it appeared that everything was OK, but clearly it wasn't. For those of you fascinated by computer system details, here is the rest of the story from Julian, our Web developer.

"After extensive troubleshooting with our website host, we believe that the problem has been identified and resolved. Our web host uses firewalls (http://en.wikipedia.org/wiki/Firewall_%28computing%29) to protect its servers from various types of attacks, like denial of service or sql injection attacks. On Thursday morning the heavy activity between the CoCoRaHS website and CoCoRaHS database was wrongly identified by the firewall as a possible attack. The firewall then denied the website access to database as a response. The CoCoRaHS website requires the database to function, so observers were unable to view or enter data. Each time the website showed a "Service Unavailable" error message, I restarted the website, which would cause it to work for a little while before being blocked again by the firewall.

CoCoRaHS experiences heavy usage during the morning hours each day as observers submit their reports, people view the data, and data users import the data into their systems. So why did this happen this Thursday morning and not another day? My best answer is that web hosts are always working at improving their security, and that they might have made changes in response to the LizaMoon SQL injection attack that has recently made the rounds, or another similar change which caused the CoCoRaHS site to be blocked. It is similar to the constant battle of limiting the amount of spam someone receives. In this case it's as if the spam filters changed and CoCoRaHS emails were wrongly identified as spam. The solution is also similar to what you would do to prevent a spam filter from blocking a valid email address, a whitelist

(<http://en.wikipedia.org/wiki/Whitelist>). The CoCoRaHS site has been added to our hosts firewall whitelist, so this problem should not happen again.

By the way, if you were unable to report that morning, remember you can always go back and fill in previous daily reports. Most of us eventually went back and filled in the data for April 7th, but we're still about 500 reports short of what we usually get.

Smoke and dust have settled -- for now

Thanks to four rains in the past eight days here in northern Colorado, the dust in our pastures and horse corral has settled. The wildfires in the foothills have been doused, and the grass has begun to emerge bright green. After being so dry and dusty for several months, this temporary moisture is a great relief. Precipitation for the year is still well below average, but for now things feel and look a lot better. I'm happy to report that all of our animals are fine, and our little grandson is already nearly five months old. Now let's hope for some soaking rains for TX, NM, OK and southeast CO so we can all set drought aside for awhile.

Thanks so much for being a part of CoCoRaHS and working with us to improve the monitoring of precipitation and water resources across the country.

Sincerely,

Nolan Doesken
Colorado State University