

The Catch

COCORAHS UPDATE—FORT COLLINS LOCALIZED FLOODING CONTROLLED

FORT COLLINS, CO — Wednesday, July 6, 2005

Hello, fellow weather watchers

It's time for an update. While I spent the last week cleaning the mess out of my flooded basement (caused by a ground water issue related to nearby irrigation and NOT due to a localized storm -- we've had no measurable precip here in over a week, and only 0.19" since June 13th, hardly enough to flood a basement), some of you have been watching day after day of nasty storms. NE Colorado and parts of Kansas and Nebraska have been having most of the action, while the Rocky Mountains and New Mexico have remained dry. Interestingly (at least to me) is that since May 22 we have had 31 days where at least 100 of you reported measurable precipitation (0.01" or more) and on all but 6 days at least one of you reported more than 1" of rain. Since June 1, southwest Colorado and much of New Mexico has received less than 0.50" (actually, typically dry for this time of year) with some totals of near zero in southern New Mexico. At the same time, more than 5" of rain has fallen in the past 5 weeks and locally as much as 8" over local areas of southeastern Wyoming and eastern Colorado. Six of our new volunteers in Kansas have reported over 10 inches of rain since June 1. New record precipitation totals for June were set at Steamboat Springs with well over 4" and almost certainly at other areas as well. Hay fever sufferers have been complaining of miserable conditions this year -- perhaps due to the generous grass growth. There's always something . . . to please some of us and make others of us miserable.

With the rains have come hail, and some of it has been nasty indeed. We just got a hail pad back from Washington County from an early June storm. Absolutely all foil was removed and about 80% of the foam was gone, too. A little plastic wrap was all that held it together. Reports of dead birds, dead rabbits, ruined crops, and pummeled roofs and windows have been prevalent. Some of you have even been so kind as to send digital photos almost before storms have ended. It's almost like being there -- without the noise, the smell, the confusion and the damage. By the way, we find it very useful to have pictures of the hail stones and hail on the ground during and after the storms so we can compare that to what we find on the hail pad. Some recent storms caused nearly 2"

diameter dents on hail pads but the stones that caused those dents were only 1" across. They exploded on contact causing the larger dents. We would not have known that were it not for having the stones to prove it. Usually it works the other way around with the dent diameter smaller than the stone diameter.

Hail Reports

We've noticed relatively few hail reports have been coming in via the website, but many hail pads are being turned in (that's good) and many hail remarks are showing up the next day in the "Notes" field of the daily precipitation reports. That is dandy, and we really appreciate your remarks to help us understand the weather you were dealing with. But for our research and to help the National Weather Service, it would be super if you would take that extra minute after a hail storm and submit your "Hail Report".

If you haven't done it before, all you have to do is click "My Data" at the top of the CoCoRaHS page. You will then see "Enter my new reports" on the left hand of your screen. Click "Hail" and in a few seconds you can submit your hail report. Remember, we are interested in small hail as well as the big stuff. Any hail is worth reporting, even if you don't know for sure when it started or how long it lasted. Then, at your leisure turn in your hail pad at the nearest designated hail pad distribution center or trade it in for a new one with your local coordinator.

Steven and Katie -- your fearless hail stone counters

By the way, we now have two new hail pad counters working for CoCoRaHS. Steven is going to be a senior at Poudre High School here in Fort Collins, and Katie is a CSU student. They are still counting the number and size of all hail stones from 2004 and photographing each pad. But they hope to be caught up with 2005 storms by the end of the summer. So keep them busy by remembering to put our your pads and turn them in after each storm. Always write the station name, number, and date of the storm on the foil of each pad before you turn them in, as well as noting which direction was north when the pad was hit by hail.

Hurray -- Sublette County, Wyoming has joined!

There was celebration last week here in CoCoRaHS headquarters when the first application came in from a new volunteer up in western Wyoming. We finally have someone interested in Sublette County (the beautiful Pinedale area). We now have at least one CoCoRaisin in every county of Wyoming. Now, let's fill in New Mexico and Kansas. :-)

What do we mean by "Intense Rain"

As you know, we also have a special report for submitting information about heavy rain falling. The question "What do we mean by "Intense Rain"?? is often asked. My first answer is "You'll know it when you see it." but there is more to it than that.

Our general definition is that anytime you get at least 0.30" in one hour or less, that is heavy rain by traditional National Weather Service definitions. But anytime you are getting rain at a rate of at least 2.00" per hour for at least 5 minutes (0.17" or more in 5 minutes) that is also worth reporting, even if it doesn't continue much more than 5 minutes. But obviously the more it rains and the longer it lasts, the more critical your report becomes. If you've had 1.00" or more in 30 minutes or less, then PLEASE report, and if you have received more than 2.00" in no matter how much time, that is also critically important. Each "Hail" and "Intense Rain" report, as I've told you before, go straight to the National Weather Service and help them issue severe weather warnings. Your timely report could save someone's life, so please help.

Don't forget to report your ZEROES

And when it doesn't rain, please know that 0.00" is also a very important. It is especially important on days like we have been having recently where there are big storms rumbling around but they are small enough to miss many weather stations. It is just important from our point of view to know that it didn't rain than to know that it did.

Daily Precipitation Reports

Between 750 and 1050 of us are reporting each day and the numbers seem to be leveling off or even going down slightly (lots of vacationing going on??) Some of you loyally and reliably enter your CoCoRaHS reports by 7:00 or 7:30 AM each morning. Others of us wait until we get to work and have a break, and others wait -- well, until we get around to it. The result is that by 8 AM each day only about 20% of our precipitation reports are in increasing to about 45% by 10 AM and maybe 60% by early afternoon. Then the other 40% trickle in over the next few hours all the way to the next few months. We are still getting May reports dribbling in today.

As a climatologist, this is fine by me. I am delighted for all the extra data that CoCoRaHS is offering our scientists. But you probably know that many of our sponsors, such as the National Weather Service, the U.S. Bureau of Reclamation, and local utilities, are really interested in current information. So if

it takes you a few days or a few weeks to report your zeroes, then so be it. But if you did have a significant precipitation event, do try to report as promptly as possible. There are many folks eager to find out how much moisture fell in your area.

Your daily "Observation Notes"

You may think that all that really matters in your reports is your numeric data. Clearly that is important, and needs to be accurate. But it turns out that your written remarks entered as "Observation Notes" may be most important. Your description of what you observed bring your numeric data to life. So if you wish to wax poetic in the morning, go for it.

Any rainfall report of 1.00" or greater deserves some sort of remarks. When I see 2.55" of new precipitation and no notes describing when and how that rain fell, I'm just a little disappointed. This is your chance to contribute to the historical climate narrative of our region.

We're open to suggestions.

As you have noted, ever so gradually more features and capabilities are being added to our website as Julian works steadily to make everything work and work better. Last week, for example, we finally finished the "Data Export" functionality that many large data users have been asking for. This allows users to set their computers to automatically grab our data and move it into their computers for special analysis, mapping and other applications.

If you are still having any problems using the CoCoRaHS website or if you have ideas on how to make it work better, please let us know. Our "To Do" list is already long with many great ideas, and you will continue to see changes for months to come. But we do welcome your input and will accommodate your suggestions as best we can -- if you can be patient with us.

Just send me a message with your suggestions to:

nolan@atmos.colostate.edu

North American Monsoon -- will it start.

Well, the 4th of July -- the traditional startup to the wet phase of the North American Monsoon -- has come and gone and so far southern New Mexico and Arizona remain dry. But if climatology is worth anything, it tells us that sometime between now and late July, moist air will begin working northward into Arizona

and western New Mexico and there will be several multi-day periods of thunderstorms, some capable of producing flash floods. These storms should make it up into the mountains and western valleys of Colorado and occasionally into Wyoming.

To read about the monsoon, try

<http://www.wrh.noaa.gov/psr/general/monsoon/index.php>

But don't look for much desert rains today, as the Tucson, AZ dewpoint temperature is only 34 deg F. The swamp cooler should work just fine there today.

I have another message to send you shortly with the specifics on the CoCoRaHS recruiting contest. My local flood and multiple computer glitches and power outages kept me from getting the announcement out by July 1 as I had planned.

Best wishes for a great summer with adequate moisture, good crops, some green grass, blue skies (and not those smoky ones we've had in recent summers) and not too much hail.

Sincerely,

Nolan Doesken

P.S. If you are still having trouble using the new website to enter and view data or if you just haven't tried yet, please let us know so we can help you get started. <http://www.cocorahs.org>