

The Catch

NOLAN DOESKEN'S BI-MONTHLY COCORAHS E-MAIL MESSAGE

COCORAHS - FLOODS AND OTHER REASONS

FORT COLLINS, CO — Sunday, June 12, 2010

Greetings,

I keep thinking that sometime there will be some dull moments in the land of rainfall measurement and a chance for me to catch up on other work. But dull moments are hard to find -- especially considering we have CoCoRaHS rain gauges and volunteers from northern Maine to Key West, FL and from the Puget Sound down to San Diego and eastward to Brownsville, TX. There are CoCoRaHS rain gauges almost everywhere and rarely does a storm go undetected, thanks to you.

I was worried earlier this spring that we'd be seeing drought emerging in several parts of the country. For awhile it was trending that direction, but areas of drought are hard to find now and they are still shrinking. In fact, this is about the least area of the U.S. experiencing drought at this time of year anytime for at least the past decade based on the U.S. Drought Monitor. From the Oregon coast inland to the Northern Rockies and across the Black Hills to the South Dakota Badlands (and good lands), rain has been abundant in both May and June. Two stations in SW Oregon have totaled over 13" of rain so far this month (in just 12 days) and are eager for a change to sunny weather. One of the worst drought areas of the country has been northern Wisconsin and Upper Michigan. Finally, in the past week, even that area has been getting some good rain as have the dry areas of Louisiana and New York. From end to end, the country is about as green as we could hope for this time of year -- and that's good.

Drought Impacts Reports

I guess we chose a good time to launch "Drought Impacts Reports" this spring. As usual, there have been dry areas, but so far there has been no crisis. So far only 181 reports have been filed -- thanks very much!! We've seen some excellent and thorough and well written "dry" observations. But the chances are as we move into the summer that some areas where we live will dry out. Drought impacts will emerge again. Take a look at the kind of reports we've received so far.

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

Click on "Select State" at the top of the state drop-down menu and that will select the entire country at once. Then select a begin date of February 1 and you can view all the drought reports sent in so far.

The time will someday come when you notice things in your area getting drier than they should be for that time of year. When it does, please fill out a report. It will really help.

Why we do CoCoRaHS

There are many good reasons why backyard rainfall measurements are important. But the flash floods in Texas earlier this week and the sad, devastating campground flash flood in Arkansas just two days ago -- plus lesser but significant floods in South Dakota, Nebraska, Kansas, Colorado and other areas -- reinforces powerfully just why we do CoCoRaHS. Your measurements on any given day may not seem all that useful or important, but every daily rain gauge measurement helps paint the picture of where there is moisture and where there is not. Some day, your report will be the one that matters most of all. Your "Significant Weather Reports" of heavy rain in progress are especially useful to weather forecasters since those reports are forwarded immediately to the National Weather Service. It doesn't matter if it rained 0.20" or 5.20" in the past hour -- if you think it might help the NWS, then please send in a report.

We had five CoCoRaHS gauges fill to the top in just a few hours this week in south Central Texas from torrential downpours. It rained so hard that our volunteers never had the chance to go out and take an intermediate measurement and empty the gauge before the gauges filled and spilled. With the help of many volunteers we were able to map those Texas storms very accurately and help the National Weather Service with warnings, forecast verification, and streamflow predictions.

For those of you who think that meteorologists already have all the information they need, please think again. Heavy rains can be incredibly localized. When you look at the NWS dandy nationwide detailed colorful precipitation maps produced each day <http://water.weather.gov/precip/> it is tempting to think "Who needs CoCoRaHS? They already have every square mile of the nation covered." But the fact is that those fantastic maps, which are based primarily on radar data, are only as good as the rain gauge data used for calibration. Your rain gauge measurements are used routinely, day after day, in providing baseline "ground truth" information for U.S. precipitation maps and other products like them. It doesn't matter if you got a lot of rain, a little, or none; your report still matters.

And then there is the flash flood in Arkansas this week. I am really, really sad about it. We didn't have many gauges in that beautiful area of the state, and even if we did it might not have made a difference. Those people in that campground did not have access to information about what was headed their way and didn't have an escape route. They were trapped. I'm getting goose bumps and chills just thinking about it as I had a very similar experience in the Missouri Ozarks in the early 1970s. We were camping near a beautiful river on a hot, humid summer evening. It was one of my only trips to the Ozarks. We had been watching many people in canoes stopping and setting up camp along the river or on small islands. I had not realized how large, clear, cool and scenic their rivers were. They were just beautiful. By comparison, our central Illinois rivers were mostly muddy and uninviting. Anyway, after sunset that evening thunderstorms erupted in all directions. At first we took shelter in the car, but then as the rains continued but the lightning and thunder grew more distant I remember running out in the rain and reveling in the fresh coolness after a sultry summer day.

I even took a shower and shampoo in the downpour -- amazed that the rain was warm enough and pouring down hard enough that I could comfortably wash and rinse my hair (which was fairly long back in those days). But then the pleasure of a summer storm gave way to quite a different feeling when a park ranger pulled up and urged us to evacuate immediately. I was clean and ready for bed and knew we had chosen a camp site on high ground away from the river -- just in case. So I was reluctant to respond even when he used the words "Get out NOW!" But when I shined the flashlight into the trees back behind my tent and saw muddy debris-filled water moving through the underbrush, that changed my mind. In seconds we threw as much as we could into the car and headed up the hill out of the campground. We found a pull-off on the

main road and that's where we tried to sleep -- sitting upright in the car. I don't think we slept much that night and I recall seeing nearly continuous flashes of lighting to our east and northeast. I can never sleep when there's lightning to watch.

Then came the shock of the morning. That beautiful clear stream that we were splashing and wading in the previous evening had surged more than 15 feet and was carrying rocks and entire trees downstream. I immediately feared for the lives of all those other campers and canoeists who were camping on the islands. As the sun rose higher we watched many emergency vehicles arrive. Special search and rescue boats were launched as soon as the water subsided a bit. That day had a happy ending, fortunately, as all campers were accounted for. The story was not good in St. Louis, however. I am fairly sure that was the same night that a plane went down near Lambert Field during severe weather. Most likely some of you will remember that event -- Ozark airlines as I recall.

A bunch of hail

Hail may be an uncommon event for many of us. Most of us don't have hail pads yet to make it easy to count the number and size of hail if and when it does occur. <http://www.cocorahs.org/Content.aspx?page=hail>

Keep in mind, you do not need to have a hail pad to report hail. Yesterday we got one doozy of a hail report (June 11) from a long-time CoCoRaHS volunteer in the mountains west of Denver. It's worth looking at his report and comments.

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

This observer reported 6 inches of hail on the ground on the level with vegetation stripped of its leaves and needles. All of this occurred in just 20 minutes. The ground was still covered with a few inches of hail this morning. We often hear of storms like this that drop deep layers of hail in short periods of time. But rarely do they hit directly on our official weather stations where accurate measurements can be taken and confirmed. We are often left being unsure just how much hail can fall in a short amount of time. Yesterday the observer, taking core samples, approximated that over 3" of water content fell from that storm -- a whopper indeed.

<http://www.cocorahs.org/Maps/ViewMap.aspx?state=usa>

So if you get a big dump, or just a few stones, please remember to submit a hail report.

When do I send in a hail report?

Report any time it has hailed -- any size, any amount. Wait until it is safe to get on the computer. If possible, don't wait until the next morning to report. Go ahead and submit the hail report right after the storm. Select "Hail" from the menu under "Enter My New Reports" when you are logged into CoCoRaHS.

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

You dont have to know everything on the form to send in a report. Even if you weren't home and don't know exactly when it fell or how long it lasted, still let us know that it hailed. Fill out what you know and leave the rest blank. Your reports will help our hail studies very much. We appreciate your notes about hail in your regular daily precipitation report too, but please also fill out the special "Hail" report so the data get into the hail database. Thanks!!

Farm stories

Yes, there have been a few stories this past week. We drove out to Burlington, Colorado, last Thursday for the special program organized by the Goodland, KS National Weather Service Office commemorating the 75th anniversary of the great Republican River flood of May 30-31, 1935. The program was excellent -- extraordinary -- and I was so glad that Kathy (my wife) and I made the 240 mile drive. The program was well researched and wonderfully presented with many personal stories and excellent old photos. It was also well attended and there were people there with their own stories to share about the flood. But while we were enjoying our outing, things were falling apart at home. Thanks to an unexpected drop in the water levels in the irrigation ditch that runs through our property, the neighbor's large dog was able to get out, wade upstream, and find herself face to face with some wonderful and vulnerable barnyard fowl. At the same time, our old Great Pyrenees

(Argy, not Angel) took advantage of the low water to pretend to be young and free again. He escaped down stream but was too lame to get out of the ditch and ended up stranded on a shallow sandbar for who knows how long until our son found him soaked and shivering and brought him back home in a wheel barrow. Lily, our young Aussie, also got into the action. She has learned that she can jump a 4 foot fence with a single bound and has been enjoying the experience ever since. When we got home on Friday, we had one lame dog, one less chicken, one less goose and three injured birds. It was traumatic enough for the chickens that they took most of the week off from laying eggs and only now are getting back in the mood. And then there's the story of the stuck raccoon and the big bull snake -- but that will have to wait for another time.

Things have calmed down again, fortunately, and thanks to over 1.55" of rain the place is looking good and the garden is growing (bless that bind weed!).

Finale

Let's hope the rest of the month is less eventful on all accounts. Take good care, and thanks for being a part of CoCoRaHS.

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