

The Catch

COCORAHS - AUTUMN BEGINS, 2010 WATER YEAR DRAWS TO AN END

FORT COLLINS, CO — Friday, September 24, 2010

Greetings CoCoRaHS rain gaugers and acquaintances:

Welcome to those of you who are new to CoCoRaHS (Community Collaborative Rain, Hail and Snow network) and thanks to everyone else for sticking with the project through wet weather and dry. It's been a long, hot summer for much of the country, but we've made it through. It's now autumn and seasonal weather changes are getting started already. The rapidly shortening day length is particularly obvious and cooler temperatures will follow.

Dry Rain

I don't know about your part of the country, but our green early summer has given way to a very brown September with almost no rain for several weeks. Between the lack of rain and the grasshoppers, there's not much left of our horse pasture. And if you've followed the news, we've had some terrible wild fires this month in northern Colorado. Dry (D0) and drought (D1 and higher) designations have been expanding rapidly each week on the U.S. Drought Monitor (www.drought.gov). The latest map was updated today.

We finally had our first significant rain all month last evening, but it only added up to 0.06" and only slightly moistened the top of the thick dust layer. I know others of you have been facing similar situations based on the many "Drought Impact Reports" that have been coming in lately.

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

This storm passed quickly and now all we have is clear weather in sight for as far out as the forecasters can see -- 7 days or more. If abnormally dry weather is impacting your area (vegetation, farming, rivers and

streams, wildlife, economy, etc) please let us know by using the Drought Impact entry form. If you have questions, just let me know.

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

Dry weather -- lull in reporting

With the dry weather has come a lull in the number of daily CoCoRaHS reports being submitted. We talked last month about a competition for this week to see if we could finally hit 10,000 daily precipitation reports per day September 20-23. But with the dry weather and temporary loss of interest, we thought we were likely to be disappointed. So we'll wait for October and try again then.

Wet rain

Despite dry, dull weather over much of the country this month, there are always exceptions. Today there is flooding in Wisconsin, Nebraska and Minnesota and I see a CoCoRaHS report of 6.61" in the past 24 hours up in Blue Earth County SW of the Twin Cities. The flooding continues in parts of eastern South Dakota as well. Monthly precipitation totals in September are already over 10" at two CoCoRaHS sites in Brookings County. And then there's south Texas. In Cameron County (Brownsville, TX) it has rained almost every day this month and precipitation totals are well over 12" at many CoCoRaHS stations and over 16" at a couple. That's more than we get here most years.

The forecast today looks like the wet areas will keep getting wetter and the dry areas (such as SW Ohio) won't get much relief. Hang in there. Patterns will change -- eventually.

Monster hail -- again

By mid September, we usually think that the hail season will be winding down. Overall, we've had fewer hail reports this year than "average". But the Wichita, KS area got whopped last week (September 15th)

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

It won't be a new national record, but there were stones more than 7" in diameter collected after the storm. Even the Wichita National Weather

Service office got in the act with a crater in the ground nearly 10" in diameter found outside their office. NWS meteorologists were among the many with damaged cars and homes.

In a future e-mail (probably next spring) I'll let you know what to do if you happen to have the misfortune of being in the path of such a storm but want to document that stone dimensions (diameter, circumference and weight) accurately.

CoCoRaHS Water Year coming to an end

Yes, the year is nearly over. For purposes of climate record keeping many of us in the Western U.S. use a different calendar for tracking annual precipitation. We start the clock October 1 and end the year September 30th. This coincides with the natural cycle of winter (cool season) snow and soil moisture accumulation and recharge followed by summer (growing season) water use and soil moisture depletion. This is the time of year when many rivers and streams in the U.S. run slow and clear (baseflow) awaiting the widespread precipitation that sometimes comes during fall and winter. Soil moisture and river flow in many parts of the country undergoes an annual cycle that tracks with this water year definition.

For that reason, we have a tradition of encouraging CoCoRaHS volunteers to review and compile your statistics for the year as September comes to an end. We then assemble that information and put out year-end reports for the country. This will be the first year that almost every state in the U.S. was involved in CoCoRaHS for the entire year so we'll have some fascinating comparisons to make.

The good news -- -- We now have a computer program written that will compile your monthly and annual statistics for you. We'll compile summary reports for every station regardless of how many days they've reported. It will be up to you to make sure your data entries are correct and as complete as you can make them. Here is how it will work.

A Station Water Year Summary Report will be made available for each station. It will include monthly and yearly summaries of the station's reports and will also contain every daily, multi-day, and hail report submitted during the water year. The Station Water Year Summary Report will be available from our site for viewing and also for download as an Excel file. The reports will all be run at the same time overnight on the evening of Oct 1 and will hopefully be posted October 2. One month later these reports will be rerun and refreshed on Nov 1st after

everyone has had a chance to review their reports, find any data errors or omissions and edit their data as necessary. We will not be updating these summary reports continuously throughout October but will wait until data are more complete.

Our goal is to make this summary information available in the future in as close to real time as possible. We will also continue to improve Station Water Year Summary Reports in the years to come with graphs to highlight both geographic and historical comparisons. We welcome your suggestions when the time comes.

Of course, you are still welcome to compile your own water year summaries in your own preferred format, since some of you have been doing this already for many years. But this will make it easy to get started for all the rest of us who haven't done this before or who have found the task daunting.

CoCoRaHS Rain Gauge Calendar

The calendar has been sent off to the printers and now we'll just have to wait. Hopefully they'll come back from the printer before Halloween. Considering that this is our first time trying this, the original looks fantastic. The price for the calendar will be standard for calendars these days (around \$14) and they will be distributed through WeatherYourWay.com. We'll let you know when they arrive and are available.

CoCoRaHS and Satellite images

Have you ever wondered about "that storm that produced all that rain" and what it looked like from space? Satellite comparison with CoCoRaHS data is now available thanks to a group within the Naval Research Laboratory, NexSat. Their scientists have created a daily comparison of satellite imagery and CoCoRaHS precipitation to use as an educational resource. Each day this link will provide a 24-hour loop of weather imagery over the United States, along with a map of the total precipitation reported by CoCoRaHS volunteers. This is really neat (or at least I think so).

A new map is created every day, so in order to view the comparison, please go to their main page where you will then need to select the CoCoRaHS link from the top banner:

http://www.nrlmry.navy.mil/htdocs_dyn/PUBLIC/nexsat/pages/conus/nexsat_conus.html

To make life a little easier, we created a direct link that I hope will work.
<http://bit.ly/bbpfzU>

Again, on the left is the 24-hour accumulated precipitation reported by CoCoRaHS observers, and on the right is the 24-hour loop of the weather patterns that created the precipitation YOU reported!

Please feel free to enjoy the other products that are provided on their Web site, as we wish to thank NRL and NexSat for creating this montage.

State climate summary series starts soon

The State Climatologists from nearly every state in the country have provided brief descriptions of their state's climate. Sure enough, every state is different. We are going to begin to showcase these short narratives starting any day now as a part of the "Message of the Day" that you see each time you send in a CoCoRaHS data report. We'll keep an archive of all state climate descriptions for reference.

Winter forecast -- La Nina

No time to discuss this in detail now, but La Nina is alive and well and cooling the surface of the tropical Pacific Ocean. Forecasters are watching this closely since it affects directly or indirectly the climate patterns for several months to come over many parts of the earth. But it still doesn't make it easy to predict exactly what this winter will be like. Stay tuned.

Chicken has a close call

It's been a long day. Today got off to an early and slightly crazy start. Lily (our Australian shepherd) woke me up a bit after 5 AM to let her out. I couldn't fall back asleep so I was working on the computer. When it started to turn light outside around 6:30 AM there was a sudden commotion. There was Lily chasing a lone black chicken. When I did chores last night there was one less chicken than there should have been on the roosts. I looked high and low and finally gave up. But one flying chicken must have gotten out of the fenced yard and roosted somewhere else for the night. That's living dangerously around

here. Just before sunrise she must have dropped down from her hidden roost and attracted Lily's attention. That was OK as Lily is much better with chickens now and hasn't hurt one for several months. The only problem is that Angel (the lovely Great Pyrenees that now lives with our son most of the time) has been staying with us for the last week. Her track record with chickens is notoriously bad despite her normal mild manners and sweet appearance and temperament. When Angel heard the chicken squawking, she just couldn't control herself. She rose from her night's sleep and headed purposefully for the chicken. By now I was on my feet, trying to find my barn shoes. In those few seconds that it took to get dressed and outside, Angel caught the chicken and had her nearly completely inside her huge mouth. I came flying outside screaming and yelling and waving my arms. Dear, sweet (most of the time) Angel ducked behind the raspberry hedge with the chicken firmly cradled in her mouth. Lily was chasing after the dog and chicken barking wildly. I ran back behind the raspberries and Angel reversed direction and ran the other way. I about got tangled in the thorns (long brambles this time of year). But somehow Lily got on one side and I on the other and we had Angel surrounded. By now the chicken was quiet, slobbery wet, and seemingly dead. But alas, Angel dropped the limp chicken -- who promptly jumped to her feet and ran for the chicken coop. So did Angel and so did Lily. We were all racing for the same door. I caught the chicken before Angel, and then Lily caught Angel (about 3 times her size) and totally thrashed her until she was on her back with her feet up whimpering. I got the chicken put back in the coop and broke up the dog fight. Then, and only then, did I take a breath, look around, and notice what a lovely morning it was -- cool, damp (only damp morning in the past month) with a hint of autumn in the morning air. You just never know what each new day will bring.

Vacation in Michigan

Vacation was very short this year, but we managed to find a week in early September to make our annual journey to the Upper Peninsula of Michigan. Family roots run deep there. The weather was cool, mostly cloudy and breezy, but we managed some time on the water and around the wood stove. Plus we have great friends and relatives there to visit with. We were even able to take our little old wooden Thompson rowboat out into the open waters of Lake Huron -- something I had never done in over 50 years of visiting there. The water was like glass and Kathy (my wife) and I could have taken the little boat all the way across. Just one of those magical rare days that won't happen often but needs to be cherished and remembered.

I had hoped to visit a few CoCoRaHS volunteers up in Chippewa County and do some volunteer recruiting in Mackinac County where we don't have a single volunteer. But vacation was too short and too precious. We had promised ourselves that next year we'd stay at least another 10 days and then we might have time for some CoCoRaHS outreach. By the way, eastern Upper Michigan is not known for its intense rains, but when we got there Sept 7 we found erosion ruts in the driveways and deep ravines on the beaches. Also there were large pools of standing water on the normally absorbent sandy soils. From what the locals could tell us (and none of them had rain gauges) they had gotten somewhere between 3 and 11 inches of rain in a few hours just a few days before we arrived. That's heavy rain anywhere, but for there that was huge. So we must find some CoCoRaisins there next year.

Conclusion

Thanks so very much for your continued interest and participation in CoCoRaHS. The effort is worthwhile.

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