

The Catch

COCORAHS -- ODD MAY WEATHER?

Fort Collins, CO —Saturday, May 4, 2013

Dear CoCoRaHS rain gauge team

It's over now, but yes -- it does snow in May sometimes, and 2013 was one of those times. Earlier this week a very cold storm dropped down from Idaho and Montana, maximized here over southeast Wyoming and north central Colorado (13" of water-rich May Day snow right here in Fort Collins -- deeply coating everything in sparkling white). Then it headed south and east with enough snow to cover the ground at least for a time in parts of Nebraska, Kansas the far northern and eastern fringes of Oklahoma, northeast Arkansas, quite a bit of Missouri (snowed 24 hours straight near Springfield), and then up into Iowa. With cold temperatures in Wisconsin and Minnesota some areas there also got over a foot of snow. All in all, over 1300 of us ignored the calendar and sent in CoCoRaHS snow reports. Good job and thanks very much.

It also rains (not such a surprise there) and we've already got 100 CoCoRaHS observers who have measured and reported at least 5.00" of rain already this month (many in Florida) and three of you have received over a foot of rain (one in Mississippi, one in Alabama and one in Florida) We had our first 10" daily rainfall reports on Thursday morning -- almost enough to fill the large outer cylinder of our rain gauge all the way to the top. These two giant rain reports were on opposite sides of Mobile Bay in southern Alabama. CoCoRaHS has helped show that that area has a real propensity for huge rainfalls almost every year.

Who knows what the rest of the month will be like. If you're in California, you're beginning to forget what rain looks like as your normal winter wet season ended early this year. But I assure you things will be interesting at least in some places. Today, for example, rain continues to spread from southeast to northwest (not a typical pattern) as a very large low-pressure area spins counterclockwise in the center of the country.

Welcome --to our new volunteers

We've had a huge surge in new rain gauge recruits since March. We've added close to 1800 new volunteers in the past two months. Only about half of you have gotten your gauge set up yet, but it sure is great to have so many new reports. Don't all e-mail me at once, but if you have any questions please let us know. info@cocorahs.org is a great place to start, or almost every question can be answered on our website.

Several reminders

I have a few reminders for both our new volunteers and our long timers.

1) **Join the Webinar this week!** Weather historian and author James Fleming will be our guest this Thursday (May 9) at 1 PM EDT, noon CDT, 11 AM MDT and 10 AM PDT for our monthly WxTalk Webinar. He'll be sharing some insights and historical perspective on the emergence of the modern field of atmospheric science and the role of one man, Harry Wexler. Click on this link to register :

<https://www3.gotomeeting.com/register/604632862>

2) **Last month's webinar on tornadoes was incredible.** We archive each webinar and you can go back to watch/listen any time

<http://www.youtube.com/playlist?list=PLDDC91E3A979406CE>

3) **Great topics planned.** We've got guest experts lined up for the rest of the year to round out our 2013 WxTalk Webinar series.

<http://www.cocorahs.org/Content.aspx?page=wxtalk> Global climate monitoring, rain water harvesting, hurricane forecasting, weather instruments, hunting for sprites (yes, you heard correctly -- sprites), weather modification -- and more. If any of these topics interest you, put them on your calendar now. Registration is already open.

4) **Most popular Animation.** For those of you who venture into the land of YouTube, CoCoRaHS has some useful resources. Our most recent snow training video (best one yet) has a scene at the end showing the CoCoRaHS staff at work :-)
<http://www.youtube.com/cocorahs/> Click on Item #7 under "Snow Training Shorts." But the most popular video, posted last year and nominated for a possible award at the 2012 Jackson Hole science film festival, is a simple description of the Water Cycle. Take a look, and share it with your favorite teachers.

<http://www.youtube.com/watch?v=ZzY5-NZSzVw&list=PLBD28578BA99D402A&index=1>

5) **The CoCoRaHS Blog.** I realize we don't all have time for blogs and videos, but if you're interested in weather and climate topics, our CoCoRaHS Blog is worth your time. Steve Hilberg (Illinois CoCoRaHS state coordinator) goes into descriptive detail on subjects that are timely and relevant. Please check it out! <http://cocorahs.blogspot.com/>

6) **The PRISM Climate Portal .** This is a precipitation data analysis tool we launched last autumn. (See the e-mail I sent on Nov. 21 "Good News and Happy Thanksgiving" The new PRISM climate portal helps you find the monthly and annual 30-year average precipitation for your home or anywhere in the continental U.S. It also provides estimates of long term precipitation back over 100 years for your location. When you're in the mood to be a climatologist for a few minutes. take a look <http://cocorahs.org/Content.aspx?page=prismportal>

7) **Did you know CoCoRaHS also tracks evapotranspiration and water balance?** As of today, about 50 volunteers are sending in ET reports and this should increase to over 100 as we get closer to summer. <http://www.cocorahs.org/ViewData/ListETReports.aspx>
To view the water balance (precip - evapotranspiration) try our Water Balance charts <http://www.cocorahs.org/ViewData/StationWaterBalanceChart.aspx>.
The ETgage costs over \$200 so it's not for everybody. But if this interests you and you have a representative (of your area) vegetated area to put it, please contact Zach Schwalbe of our staff. We'd love to have a few ET gauges in every state by midsummer when ET rates are highest. zach@cocorahs.org

Also -- remember hail reports, significant weather reports, drought impact reports and more. These are all optional CoCoRaHS reports that show up on your "My Data" menu. Check them out. These are supplemental reports you can send in when you're experiencing inclement weather. Your report can be a huge help to weather forecasters across the country and provide a wealth of additional storm information for researchers. Storm reports could conceivably even save lives by helping NWS forecasters put out timely and targeted severe weather and flood warnings.

A farm story

This message is fast getting too long. I'll make this quick -- well, sort of. For months things have been very, very dry around here -- but also fairly routine on our little 110-year old farm on the NW edge of Fort Collins

(was once a small dairy). But things changed quickly this past week. After our generous snows in April (nearly 30 inches, not counting our May snow), the ground and vegetation was finally moist enough that we felt comfortable doing some "ditch burning". This is the traditional approach to clearing debris and managing weeds and overgrowth along the ditches that bring our irrigation water. The best time to burn is when vegetation is starting to green up and it's just barely dry enough so that vegetation burns thoroughly but not dry enough so that the little fire could grow and spread. Last Saturday was perfect. Snow had just melted a few days earlier. The soil was moist, and spring grasses were just greening up. Winds were light but the sun was warm and strong, helping to dry out the tall grass and weeds along our narrow irrigation "lateral" so they could carry a controllable fire. My neighbor and a helper donned our ditch burning clothes, propane tank, water sprayer, shovels and rakes and at 8 AM we got to work. The weather cooperated famously. At first the ditch burned slowly and needed regular help from the propane torch, but as the sun and the temperatures climbed, we could eventually just walk the fire along the ditch -- using a little water on the edge to keep it from spreading. In about 3 hours we finished the stretch of ditch we were most concerned about and happily called it a day. I took my wheelbarrow of tools, water bottles, loppers, etc. home and was ready to enjoy a little lunch. Then came the phone call.

My neighbor had a pile of cut up branches from his old cottonwood tree that we see from our back porch.. And since we had a burning permit this was a great opportunity to safely burn the debris. He had a helper to make sure the burn went smoothly. But the burn was going so well and was totally safe (down in a cleared area at the bottom of our larger main irrigation ditch) that he encouraged him to go home and get on with his day (which was going to be a round of golf). When my neighbor called, his tone of voice was more than urgent. He simply said, "I need some help -- now!". I went to the back door, looked out and immediately saw the reason for such urgency. A large and growing plume of smoke was aimed directly towards our old garage and barn. I moved as quickly as I could (not all that quickly) laced up my boots, ran back to get a shovel and tried to fill a large bucket of water. I thought about turning the horses loose, but wasn't quite organized enough to take action. It probably took 5 minutes to get 200 yards with my tools and bucket -- climbing over one 5-foot fence along the way. That probably felt like an eternity for our neighbor. It turns out that his fire was burning perfectly when along came one big swirling gust of wind and carried a flame from his nicely contained fire just far enough to catch some dry grass on the far side of the ditch on fire. He had nearly controlled it when another gust of wind came up.

By the time I got there (spilling 2/3 of the bucket of water along the way) there was about 30 feet of ditch bank burning. Another neighbor showed up. We didn't have enough tools. We smashed our shovels down on the flames -- sometimes suppressing them, sometimes not. The part of the fire I was working with was spreading but not too fast, but on the other end the flames were already head high and out of control. It was looking hopeless when my neighbor called out "Should we call the fire department"? The answer was pretty obvious. In our respective near-panic, we both called -- and both had trouble explaining quite where we were. I couldn't remember his address, but the fire was hundreds of feet back from the road. We figured the smoke would make it obvious. The dispatcher asked so many questions and all I wanted to say is "Quite asking questions. Come NOW!". The next 7 minutes seemed like 70 but when the fire trucks finally arrived, the 4 of us had somehow managed to keep the fire out of the ponderosa pine and spruce woods along the ditch bank. The tall flames on the other end were diminishing. The wooden bridge was burning, but it was no longer heading for our barn. It felt like a small miracle had just happened -- a miracle enabled by calming winds and the fact that it had just snowed a lot earlier that week.

Of course, I could elaborate more, but let's just say we all thought we were being careful. Who would have thought just a few days after a big snowstorm that a fire could possibly get out of control. In the end, the fire department helped burn the rest of the debris and reassured us that we weren't as stupid as we felt. We were following proper procedures and had a valid burning permit. No barns, sheds, houses or trees burned. No one got hurt (but we did get to experience rapid heart beats). We all were very humbled. Three days later, we got another foot of snow.

We still have some more burning to do to get ready for irrigation water. I assure you I'll have a whole team of well equipped helpers.

Chicks

One other short story. Our hens are getting a little old and it's time for some replacements. We had a few eggs in an incubator, and they just hatched this last weekend (same time as the fire). We put the tiny chicks in a tub in the chicken coop under a heat lamp. Then along came the snow. Branches in the neighborhood took out our electricity for several hours. We tried to keep the chicks warm by carrying out hot water bottles, but after a few hours that got really old. The temperature dipped to a record shattering 17 deg F. Long story short, the chicks are now in our bathtub -- and doing fine, I might add. Hopefully we'll get them back in the chicken coop -- as soon as I stop writing e-mails. Next

comes figuring out which are hens and which are little roosters.

Rain gauge encouragement

Let me close by once again thanking you for helping -- or thinking about helping -- take rain gauge measurements. Together we are doing quite a remarkable job of mapping and tracking precipitation from coast to coast. Keep up the good work and spread the word as we attempt to fill the gaps that still appear in many areas of our CoCoRaHS maps.

Best wishes,

Nolan Doesken
Colorado State University