

# The Catch

## COCORAHS -- MARCH PROGRESS AND SPRING AHEAD

Fort Collins, CO —Wednesday, March 27, 2013

Dear CoCoRaHS rain (and snow) gaugers, friends and family:

The weather has been wintry lately in many parts of the country. What a huge difference this has been compared to last year! I just pulled up the statistics for Fargo, North Dakota. So far this month their average temperature is 15.3F (only slightly warmer than December was). They still have a foot and half of snow on the ground -- on the level. By comparison, this time last year, all snow was gone, the ground was already drying out, and March 2012 temperatures averaged a remarkable 41.6F. That is a 26.3 deg F difference from one year to the next -- AMAZING!

About 4,000 of us got to measure and report snowfall in the last few days including almost every single CoCoRaHS volunteer in Indiana! Hats off to you Midwestern CoCoRaHS volunteers who battled this last storm (wet, wind-driven snow) to get useful measurements. We appreciate it very much! We finally got a decent snow here in parts of Colorado, too. On Saturday we measured about 7.5" at our house. But snowfall varied from more than a foot to less than 3" depending on what part of town (Fort Collins) you lived in -- proving once again why we want and need so many volunteers in our ongoing effort to accurately measure, map and track precipitation.

### **Meager precipitation today**

After several days of cold and stormy weather, weather has settled down and the radar maps have had very little to show yesterday and today. There are a few narrow bands of light rain and snow showers here and there, but nothing heavy. Today was one of those days that only happens a few times a year. Not a single rain gauge anywhere in the country got over an inch (the heaviest rains being in Hawaii today).

Based on this morning's CoCoRaHS reports there were only a dozen rain gauges that received more than 0.25". By comparison, just three days ago on March 24th more than 3,000 of us measured over 0.25" of rain or melted snow, and nearly 200 CoCoRaHS volunteers reported more than 2.00" of rain that day.

### **More interesting CoCoRaHS statistics**

Here are a few more interesting stats. We've been reaching several new milestones lately. Earlier this month we passed the 40,000 mark. That's how many people have signed up to join CoCoRaHS since we started this volunteer network a few years ago. Of course, not everyone set up a gauge and got started, and others have dropped out along the way. But in the past year we've received precipitation reports from more than 17,000 different locations.

Another interesting statistic -- When I send out an e-mail update, it's now going to more than 30,000 fellow weather watchers. Wouldn't it be great if we could all get together for a weather observers workshop?

One more goody -- today or tomorrow, for the first time in CoCoRaHS history, we will reach the 1,000 mark. That's 1,000 new volunteers who have signed up this month during our annual "March Madness" recruiting campaign. A warm welcome to all of you who have just signed up this month and a big thanks to all of our enthusiastic volunteer leaders across the country, many at National Weather Service Forecast Offices or State Climate offices, who share our enthusiasm for getting the public involved.

### **Still struggling to hit 10,000**

Despite all these encouraging statistics, we seem to have hit a plateau again. We were getting more than 10,000 daily reports last summer and fall, but we're back down to only getting about 8,800 to 9,600 rain gauge reports a day. That's only slightly higher than this time last year. So please go out and polish up your rain gauge, practice using the CoCoRaHS website ([www.cocorahs.org](http://www.cocorahs.org)) and if you can, please start sending in your precipitation reports again. We're close to spring now and every storm makes a difference on our journey into the new "growing season". We need you.

We've notice a slight decrease in the number of "zero precipitation" reports. Remember, it's super easy to report your zero (0.00") on a dry day and it is very helpful. It's the default value so all you have to do is hit

the "submit" button. I realize there is no fun and little glory in measuring and reporting zero, but it is a huge help in accurately tracking and mapping precipitation. Because precipitation varies so much from place to place, we've learned long ago that we could not assume "no report means no precipitation". So if you didn't get any precip, let us know by reporting your zero.

### **"With so many volunteers, does my report even matter?"**

The answer is yes, yes and triple yes. No matter how many times I answer this, it is still the most asked question. People have trouble believing that measurements from our backyard rain gauges are useful and important. Let me say this -- our computer system is burdened every day by a constant barrage of users downloading data and feeding our rain and snow reports into all sorts of display tools, computer programs, databases, models, maps etc. Our data (your rain gauge measurements) are used to improve weather forecasts, predict river levels, assess drought conditions, anticipate crop yields and provide early warning for insect infestations -- just to name a few. Insurance companies utilize our precipitation data. We've even had sales managers from a major ice cream chain use our data to determine predictable relationships between rainfall frequencies and ice cream sales. And then, of course, is that rare but crucial situation where the big storm may be right over your neighborhood, and your rainfall report might be the one that helps weather forecasters issue flood warnings that could save the lives of people downstream. CoCoRaHS is fun, but it also has a very serious side. We appreciate your participation and your measurements more than you may ever realize.

We've even had questions like this "I see there is already two volunteers in my county, so why would you need my data?" Again, the answer is pretty obvious. How many times is rainfall uniform across your community, let alone the whole county? We can use interpolation methods and radar estimates to take a guess at how much moisture fell in each part of your county, but until we get actual reports, we never really know for sure.

In a few weeks we're going to run a series of "Messages of the Day" that will give more examples of how our data are used, and why our measurements are so important.

## **Severe weather season is here. Sign up for our next Webinar.**

This is prime time. The next three months account for the majority of the nation's hail and tornadoes. Please be aware and ready.

To help us all get ready for the 2013 severe weather season, we are hosting our next WxTalk (that means Weather Talk) webinar on April 18th.

*"Greg will give an overview of how the Storm Prediction Center forecasts severe weather in general and then concentrate on tornado forecasting specifically. We can learn a lot by looking at the historic record of tornado events in the United States. We also will take a look at why tornadoes form where they do in the U.S. and elsewhere and why twisters are much more common in North America compared to other parts of the world. We'll finish by looking at the current events during the spring of 2013 and take a look at what's ahead in terms of tornado forecasting and warning technology."*

This is a webinar you don't want to miss. Click this link to register. We can only accommodate 500 attendees, so please register soon. <https://www3.gotomeeting.com/register/849947638>

If you can't make it, we will record it and post it on our YouTube channel. <http://www.youtube.com/cocorahs/> . If you're ever bored, or are just craving more weather and climate information, we now have more than 40 videos, training animations, and top-notch webinars posted.

## **The Farm**

I can't tell you how happy we are with this recent snow. Finally there is some soil moisture to work with -- not a lot, but some. Our situation is trivial compared to "real farms and ranches" who make their living off the land. But it's been great to see drought conditions gradually easing in many parts of the country. (Don't forget to view and submit CoCoRaHS Drought Impact Reports)

I am happy to report that all the animals on our little farm are alive and doing well. I have no stories to share of hen house raids, goose attacks, great escapes, or anything of the like. Hopefully it will stay that way. Our winter garden is in good shape and we have fall-planted spinach, chard and kale ready to pick.

One thing I would like to share, though, is some observations of flies.

Where do they come from? All winter there are no flies. But the first day the temperatures rose to 60F (haven't had many of them, but a few) and then stayed above freezing at night (have only had a couple of them), the very next morning the manure flies were out in droves. They don't bother the horses or us humans. Instead they focus on their job at hand == the manure. They've all frozen and disappeared again with this recent cold and snow, but by tomorrow they'll probably be back. We count on a good supply of moist horse manure to fuel our many compost piles. But come summer, it only takes those flies a few hours to desiccate the manure. It's really quite amazing. When I'm out with the horses, I spend a lot of time observing the plants, the insects and the soil. There is nothing like a good barnyard to reveal the impacts of the ever changing water balance. For now, we have mud -- at last. But soon it will again be dust. The cycle continues.

### **Last call for March Madness**

We're down to the last four days now. Texas is winning the overall competition, and Wyoming is running away with the "per capita" competition. But many other states have done well -- New Mexico, Arkansas, Maine, North Carolina, the Dakotas. If you have any friends or family around the country who might find rainfall reporting rewarding, please send them a note and encourage them to sign up.

Best wishes to all and enjoy the smells and sounds of spring.

Nolan Doesken  
Colorado State University