

# The Catch

## **COCORAHS—STORMS ON THE PLAINS**

FORT COLLINS, CO — Tuesday, June 3, 2008

Greetings to all CoCoRaisins!

For those of you new to CoCoRaHS, the name "CoCoRaisin" started as a typo a few years ago but has subsequently been adopted as a friendly name for all of us rain gauge watchers. Tonight, the lightning is flashing late into the night out over the eastern plains of Colorado. Occasionally the rumble of distant thunder is audible here. It brings back those pleasant but scary memories of growing up in tornado alley -- loving yet fearing every storm and always trying to keep watching outside up to the last minute before racing for shelter.

It has been several weeks since my last message. In that time, more than 300 new volunteers have signed up for CoCoRaHS and we are now consistently getting 5,000 or more precipitation reports each day from volunteers across the country. I'm still dreaming of the day when that number will swell to 50,000 and where every county of the country will have at least ten dedicated volunteers -- but for now, 5,000 is DANDY and we're delighted. Thanks to all of you who are helping make this possible!!

### **Big storms, but we're OK**

This is a very hectic time of year with lots of project reports, funding proposals, conferences, and presentations at work. And for good measure, we need to move our library and hail pad analysis room to make way for construction and a new Atmospheric Science Department computer room. We're dealing with flooding from rapid snowmelt in parts of Colorado and flirting with drought in other areas. It is also the time to get the garden planted and the irrigation working at home. Our ditch water finally arrives Wednesday afternoon, so I'll need to get home to open the gates and lay out the pipe. And, of course, it's severe storm season as well.

I was out of state when the unusually large (for this part of the country) tornado struck Windsor, Colorado on May 22. That is only a few miles from here. After 47 years with no tornado fatalities in Colorado, we have now had killer storms

two years in a row. This was a weird one as it formed before noon and was preceded by fog and cold drizzle. Instead of being one of Colorado's many rope-like short-lived F0 or F1 storms, this one was a biggy -- wide, ominous, long-lived, hugging the ground, scary as all get out -- and to make matters worse it moved from the SSE towards the NNW moving towards the mountains. I haven't done all my homework to verify this, but I know of no other tornado to ever start east of I-25 and end up to the west. In fact, the storm system then approximately traveled up U.S. 287 and ended up inflicting damage in Wyoming as well. The upper level storm system spinning over the Great Basin last week, then sent days of storms to parts of eastern Wyoming with over 8" of rain and local flooding in parts of eastern Wyoming. Meanwhile, the final storm survey is being completed for the tornadoes around here and it looks like this tornado will be assigned EF3 (enhanced Fujita-scale category 3). Then just a few days later, a much more severe tornado destroyed a town in Iowa and may have been a rare EF5. This is proving to be a very bad year in the U.S. for tornadoes, damage and casualties. If storm warnings are issued for your area, please take heed, take cover and don't take stupid chances.

### **Something eerie about CoCoRaHS**

With all the tornadoes -- and with CoCoRaHS volunteers now spread over so much of the country, it seems that every time there is a bad storm, one of us is nearby to witness it and then provide help. In one way this is neat, but it is also unsettling knowing how close some of us have been to destruction. Some of our Windsor, Colorado volunteers have not been able to report yet since their tornado. Checking a rain gauge seems sort of trivial when you've just been through a tempest and have neighbors and community who need your help.

This year alone I've seen at least 6 and maybe more comments in our CoCoRaHS reports indicating tornado damage and lost or damaged CoCoRaHS rain gauges -- not to mention hail pads that were never seen again.

### **Speaking of hail**

I just checked our hail reports.

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

As of this evening there have already been 1,210 reports of hail submitted by CoCoRaHS participants this year. Many more of us mentioned hail in the comments of our daily precipitation report but did not enter a hail report. Please do enter a hail report if you experience hail. It really helps our research. Our 4th report of hail 4" diameter or greater arrived today -- from Burlington, Colorado. They've seen big hail many times before. In fact someone who grew up in

Burlington told about how when they were kids their dad built special hail shutters that they would hang up quickly before each big thunderstorm. They didn't save the roof, but at least they kept the windows from breaking.

Remember, you do NOT need to have hail pads to be able to submit very valuable hail reports. If you are having or have just had a hail storm, please submit a CoCoRaHS hail report -- even if the hail was small.

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

### **Heavy rain reports also appreciated**

More than 1600 reports of heavy precipitation have been submitted using the "Intense Precipitation Report" form.

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

The rain does not have to be ferocious for your report to be valuable. But reports of high intensity rain can serve very important flash flood warning purposes. Our heaviest rain reported so far has been over 3" in 50 minutes. Since the National Weather Service uses these reports to help correct and adjust radar estimates of rainfall, your data can be very helpful even for lighter rains. Based on a previous message sent out, some of you have begun submitting hourly rainfall reports during storms. The National Weather Service asked me to say thanks to those who have taken on this extra task.

### **Welcome Washington!!**

We are very pleased to welcome Washington State as our most recent addition to the CoCoRaHS network. This makes 32 states. Already a few dozen new volunteers have signed up. This is the dry season for the Pacific NW, but hopefully by next October hundreds of rain gaugers will be on board.

### **An update on Angel**

A few of you dog lovers have asked about our new addition -- the Great Pyrenees, Angel. She is now a contented member of the household next door. That was "Grandmas house". Mabel (my mother-in-law) passed away two years ago and we still miss her. She was the best gardener and food preserver of us all. We don't get to hear the stories of the Dustbowl or the Republican River Flood of 1935, or those wild Great Plains blizzards any more. But I have those old stories memorized now and I'll always thank her for sharing. Now my son

lives there with some other college-age boys, and Angel is pleased to guard the premises for them. And by the way -- she is afraid of thunder.

### **Our 10th Anniversary**

Ten years ago we were scrambling wildly to launch the first CoCoRaHS website. Three local high school students helped pull off this small miracle. One student created web pages, one built a database and a simple mapping function, and one helped recruit and train volunteers.

Ten years later let's celebrate by EVERYONE reporting your precipitation on Tuesday, June 17th. Make sure your gauge is set up and you know your username, password and how to log in. If you have forgotten, then please contact us or use "Find My Login" to get the info from the computer. Even if you haven't reported in months or years, get back into it for this one day. Then on the morning of June 17th lets everyone enter our daily reports -- even if it is zero. Let's shoot past the 6,000 mark to set a new record for most CoCoRaHS rainfall reports on one day.

### **Ready for the really big rain**

The hurricane season has officially begun. With it comes the opportunity for really, really big rains. The CoCoRaHS rain gauge holds a lot -- 11.30" (plus or minus a few hundredths) and that is a huge amount of rain. Most of us will never see that much rain in one day in our entire lives. But I assure you that at least one of us will get more rain than that in 24 hours -- sometime in the next 5 months. So think about this in advance. The last thing we want is to have the gauge spill over and not know for sure how much fell. But likewise, if it did rain that much could you safely reach your gauge? Think about this ahead of time. Be prepared to check and empty your gauge during a break in the storm. Add up the increments to get your daily report as accurate as possible.

### **Comments -- weather treasures**

Remember that you are all weather historians. Each day, feel free to type in a few words describing the past day's weather. Especially if you've had a storm or interesting event, please take a few seconds to type in a description of what happened in the "Comments" section.

### **Thanks for being CoCoRaHS recruiters**

Each week, we receive applications from new people wanting to join CoCoRaHS. Today 14 people signed up. Sometimes the notes say "my father told me about CoCoRaHS", or my son, or my mother, or my neighbor or my teacher. CoCoRaHS is a true grass-roots effort and word of mouth is a great way to spread the word. We appreciate the new volunteers that you help us find. Keep it up and don't be disappointed when you hear "You want me to volunteer to do what?!?!" CoCoRaHS is not for everyone, but for some of us it really is fun!

Less than 3 weeks to the longest day of the year -- and then it's all downhill from there :-)

I wish you well. Have a great summer.

Sincerely,

*Nolan Doesken*  
Colorado State University

P.S. There was one more thing I forgot to mention. Yesterday (June 2) was the first day since last fall where no CoCoRaHS observers had any snow left on the ground. Stations in Colorado and Wyoming still had snow on the ground going into this past weekend, but warm dry weather finally finished it off. Snow is wonderful stuff, but at this time of year it is best that it leave for awhile. Thanks to you handful of winter lovers who have stuck it out measuring snowfall and total depth of ground as well as water content all this long winter. Bless you.

And as for you southern folks who have chosen to escape snow -- well, I don't know what to say. The time does come in most of our lives where dealing with snow ceases to be much fun.