

# The Catch

## **COCORAHS—THE BIG STORM MOVES ON, AND WHAT WILL 2007 BRING?**

FORT COLLINS, CO — Monday, January 1, 2007

### **Happy New Year!!**

It is a glorious afternoon here in Northern Colorado—cool (upper 30s F), light winds, sunny, and snowy bright. We missed the weekend blizzard/snowstorm that hammered areas of New Mexico, southeast Colorado and western Kansas, but we still have 15" of snow on the ground ( a lot for here) and my measurement of SWE (snow water equivalent) this morning—a core sample of the snow left on the ground -- yielded 3.03"

My day began with an early AM trip to the Fort Collins official National Weather Service cooperative weather station on the campus of Colorado State University (3 miles from my house). Today is Day 1 of Year 119 for our weather station. We measure the basics (temperature and precipitation) but we've also been measuring winds, humidity, barometric pressure, sunshine, clouds, evaporation rates and soil temperature since 1889. The station was established in the early 1870s at the same time the old college was first created here. Colorado was not even a state then. It took until 1889 to get all the equipment and a good location for the station. We haven't missed a day since and the data we have collected is a gold mine for research.

### **Historical Perspective**

118 years of complete data from the same location provides great insight on our climate. It turns out that midwinter (Dec-Feb) is our driest season of the year here in the lee (on the east side) of the Rocky Mountains. At this time of year most storms come from the Pacific Ocean and move eastward across the continental U.S. These storms drop their moisture along the West Coast and inland in the mountains. They dry out east of the mountains, until they move towards the Midwest and begin tapping the Gulf of Mexico moisture source. Last year in December we measured 0.18" of precipitation that fell as 3.5" of snow. That's about half the long-term average. But this year has been different. Two storms eight days apart each moved slowly south of us, had time to pick up moisture from the south and from the Gulf of Mexico, and then hurled it back at us from the east. The results have been impressive amounts of precipitation

from New Mexico north to southeastern Wyoming. Our official total for December is 2.70" of precipitation falling as 29.3" of snow. Some of you accustomed to much wetter weather will chuckle, but this ranks as the 2nd wettest midwinter month in recorded history for Fort Collins, second only to the legendary month of December 1913 when huge snows fell from New Mexico to eastern Wyoming. That year over 40" of snow fell here with over 4" of water content. But 2.70" isn't too bad and we really needed the moisture. That lifted our annual total up to 11.20"—still the 17th driest year in the past 118, but a lot better than it looked like just 5 weeks ago. Interestingly, our mountains got off to a fast start on snow accumulation this fall, but now our snow is deeper here than in many of our mountain valleys.

### **SE Colorado CoCoRaHS Observers—Where are you?**

Calling all weather observers! I'm not sure if it was the holidays, or the magnitude of the recent storm, or power outages, or fear of being buried alive, but we haven't heard from many observers since the storm began. We had several reports of "*I have no idea how much we got!*" followed by comments of drift height, damage, etc. Reports like that are actually very helpful. We understand TOTALLY that blizzards are very hard to measure and that this storm was one of those old-fashioned "Can't see the house from the barn" kind of Great Plains blizzards. But even if you can't measure it exactly (which not even the most expert weather observer could), we really appreciate your "approximations". You can do that without going outdoors to risk your life. Don't be shy about making an estimate. Even the Pros do it. That at least gives us some idea what it's like in your community or on your farm/ranch. Thanks!

### **One foot, two feet, three feet—Please report your Total Depth of Snow on Ground**

Yes, Albuquerque is still decorated with a foot of snow today. Last year it hardly snowed at all there. This year it's a New Mexico winter wonderland. Santa Fe has two feet on the level (must have been fun last night strolling around the Plaza). And then there's Trinidad, Colorado—as best we can tell, the snow is still three feet deep on the level two days after the storm ended. Wowzers!! One of our very loyal observers e-mailed saying "*Sorry, I can't get the door open to go outside*". That got my attention.

Please remember to report the "Total Depth of Snow on the ground" even if you had no precipitation or new snow that day. The depth of old snow may need to be an average of several measurements or even a visual approximation, but it is very useful information to scientists, travelers, etc. If the snow is 2" deep in your sunny front yard but 6" deep in the back, then 4" might be your best estimate. Our computer automatically inserts "NA" for your total depth of existing snow on

the ground, but just type over that with your actual reading. If your ground is bare, please type in 0.0 and then we'll KNOW you have no SNOW!

### **CoCoRaHS 2007—What Lies Ahead??**

We do not know the future, but if past performance tells us anything, there will likely be a few thousand more "CoCoRaisins" by this time next year. You might even help recruit a couple of them. This year, we passed the 6000 mark, and more people have been signing every day (none yet today, however :-). New states that are likely to join this year are Nevada, Alaska, Wisconsin, Iowa, Kentucky, West Virginia and New Jersey. Other strong possibilities include New York, Utah, Florida, Georgia and Ohio. Any state that can put together a leadership team to support efforts to locally recruit, train and equip new volunteers is welcome to join the team.

We were thrilled to receive funding this fall (2006) from the National Oceanic and Atmospheric Administration Office of Education. This means that CoCoRaHS can move ahead and add more volunteers and more states as we work with NOAA on weather/climate/water education and outreach. Hopefully, we will drum up a bit more support in 2007 so we can keep Henry (our National Coordinator) and Julian (our web developer) and our two student employees very busy and also pay them. Having paid staff support to help with CoCoRaHS has really been great these past 3 years, and we hope this can continue.

We anticipate a large "upgrade" to the CoCoRaHS website and database in 2007. This will include some much needed improvements to our data reports and maps, and also some new ways of looking at and analyzing data. We will also be upgrading our quality assurance/quality control efforts. A lot of people use CoCoRaHS data these days, and they expect our data to be top notch.

Maybe a National CoCoRaHS Convention?? Well, it probably won't happen in 2007, but we're planning this for the future. It would be awesome to get to see fellow weather enthusiasts from all across the country face to face. That would be a blast! I can hear the weather stories flowing! It's still out of reach, but it's something we're starting to plan for.

The Big Storm! Every year, some places in the country experience their heaviest rains, biggest snows or worst droughts. It will happen again—it always does. As CoCoRaHS grows, the chances get better each year that one of us will be near the center of the next big storm or drought. Your measurements and timely reports may help save lives, save resources or at least improve the state of knowledge about our weather, climate and water. Your HELP IS APPRECIATED! Spread the word!

## **No Broken Bones for CoCoRaHS**

For those of us with snow on the ground, it will be melting, freezing, melting, freezing for weeks before it's all gone. This means patches of ice where you least expect it. Please don't hurt yourself in search of your rain gauge. And if you want to make sure you don't miss an observation, maybe call upon your 12 year old neighbor to help. They'll always remember that.

Best Wishes for the New Year! and thanks for your interest and involvement in CoCoRaHS.

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