

# The Catch

## **COCORAHS—START THINKING ABOUT HAIL—OR MELTING SNOW**

FORT COLLINS, CO — Friday, March 9, 2007

Greetings:

For the first time this year, our local weather forecast here in northern Colorado calls for a slight chance of thundershowers. We haven't heard the sound of thunder here since September, so this definitely puts me in the mood for spring.

### **Apologies for Climate Diversity**

I am sorry, but it is getting really hard to write weather-related messages that apply and make sense for all of us. With our latest CoCoRaHS expansion into Nevada and Wisconsin we now have volunteers signed up and measuring rain and snow from as far away as Eureka, Montana (up near the Idaho/Canada border) to Las Vegas, Nevada, Brownsville, TX, Leadville, CO, Rhinelander, Wisconsin, Caruthersville, Missouri (in the Boot Heel) and all the way east to Exmore, VA near the mouth of Chesapeake Bay. We're even getting reports daily from just a few miles from the Whitehouse in DC. This is amazing, when you think about it. This is a very big country, and we are having to learn our geography to keep up with CoCoRaHS.

Ever since we expanded eastward more than a year ago, there has not been a single day where it didn't rain or snow somewhere in a CoCoRaHS gauge. The farther we spread, the less the chance that we will ever have a day where none of us get rain. Likewise, it is just about impossible that we will ever have a day when all of us get precipitation the same day.

So if you don't mind, I will do my best but more often than not I will focus on what I can see out my window here in Colorado. Right now that happens to be mud, but the mud is drying out fast. Only a few patches of our old snow remain after 4 straight days of high temperatures in the 60s.

Our horse corral is still a mess, but I'm finally making progress with a winter's worth of mixed ice and manure—what fun.

As it dries out, and the forecast calls for temperatures near 70 degrees next week, reality hits and we realize that even after all this moisture it would only take a few weeks of dry weather before we're headed right back toward drought.

That's the tough part about living in a sunny but dry climate. Every day it doesn't rain or snow puts you one day closer to the next drought.

## **Let's Talk Hail**

There are very few weather observing networks or weather stations in the U.S. that specifically measure hail. CoCoRaHS is one of them. I just checked our "Days with Hail" report and already we've had 11 days this year when hail has been reported to CoCoRaHS. One station in Missouri and one in Indiana has already experience 1" diameter hail. Hail has also damaged the Space Shuttle a few days ago. The Kennedy Space Center currently has a network of CoCoRaHS hail pads near the launch pad to document their storms. A couple of their pads were dented badly. Last year, hail fell somewhere in the CoCoRaHS network, remarkably enough, on more than 200 days.

It is time to gear up for measuring hail! If you are here in Colorado or any of the other nearby states that help provide hail pads, then please make sure you have at least 2 new hail pads on hand and ready to put out.

Having 4 on hand is even better at this time of year. Our county coordinators should have hail pads available in your county. If not, please contact us ASAP. Actually, if you have a good undisturbed location, you might as well put out your hail pad already remembering to attach it very firmly so it can't blow away. I can't tell you how many people have sent apologies for missing hail storms by not getting their pad set out in time.

Because of the logistics involved, many states are not set up for distributing hail pads to volunteers. That doesn't matter, though. We (and the National Weather Service, too) hope you report the hail that you observe whether or not you have a hail pad. Use the CoCoRaHS "hail report" form.

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

We will soon be posting instructions on how to make your own hail pads. We use squares of name-brand Styrofoam plastic foam for floral and craft projects cut in 1 ft x 1 ft squares -- 1 inch thick. We buy it in bulk, but you can find it at major arts, crafts and floral supply stores in small quantities. In most of the country, two or three pads should be enough for the whole year although out on the High Plains and near the mountains we have a few places that have had over 10 hail storms in a single year.

Take your square of Styrofoam and smoothly wrap it with a sheet of EXTRA heavy duty aluminum foil 18" x 18" (it sounds easy, but it takes some patience and care). Use packing tape if you have it to secure the flaps on the back side of the pad. Heavy duty foil will work for small hail, but when the big storms come there

won't be much left of it. For consistency, and valid scientific data collection, stick with Extra Heavy Duty foil.

If you do make your own hail pads and you are not in a state adjacent to Colorado, then there is no need to send us the pad after a storm. Just keep it and use it to count and report the number of small (up to 1/4" diameter), medium (3/8 to 5/8"), large (3/4" to 1 1/4") and JUMBO (greater than 1 1/4 inch -- i.e. golf ball size or larger) stones that dent the pad. Just count the craters. You are welcome to take a digital photo of your pad and e-mail that to us as well. Then mount it on your wall as a conversation piece or sell it on e-Bay as a creative piece of art (just kidding . . . sort of).

When you have the time or inclination, feel free to check out CoCoRaHS hail data and analysis tools by going to: <http://www.cocorahs.org/ViewData/> Select one of the hail report options on the menu and experiment with what you can do to sort and view data.

### **Many New Volunteers**

Over 100 new volunteers have signed up to help measure rain, hail and snow in the past 9 days including many from our new states of NV and WI. If you are new to CoCoRaHS, each applicant is added to our e-mail list to keep up with current weather events and tips for better weather observations. If you would like to read past messages and catch up on CoCoRaHS news and correspondence, go to:

<http://www.cocorahs.org/Content.aspx?page=catch>

Click "Archives" to view past messages. If these messages seem too much like SPAM, then just send me a message and say "unsubscribe", or just hit the "Delete" key and don't worry about it.

Thanks again!!

Your efforts to learn more about weather, climate and water and to provide useful data for scientists and many others are greatly appreciated. Thanks very much for your help and your interest.

Sincerely,

*Nolan Doesken*  
Colorado State University