2006 HERE WE GO!

FORT COLLINS, CO — Saturday, January 7, 2006

Dear CoCoRaHS volunteers—past, present and soon to begin:

Beware, there is a lot of content in this message, so I hope you at least skim through it and read what you're interested in.

If you find our weather-related messages a waste of your time, please send me a quick e-mail saying "Unsubscribe" and we'll take you off the list.

A New Year!!

We are already 3 months into the 2006 Water Year, but for all you "Calendar Year" junkies, this is your new beginning. Things have been fairly slow in CoCoRaHS land these days but I'm sure they'll pick up. Today there were only 3 reports of measurable precipitation, and the greatest was a mere 0.09" of water content from 1.7" of snow in Westmont, PA. By the way, Pennsylvania seems poised to roll. We are getting new applications from there almost every day. Our Indiana coordinators are also just about ready to launch the project with training sessions planned for Indianapolis. I'm really going to have to learn my geography now. Is there a limit to how many county names we can remember??

Well, we hit 67 deg F today here in Fort Collins, after a record shattering 69 yesterday. What month is this? January?? Our "deep winter" is pretty shallow right now. Also, our precipitation totals here in the lee of the Rockies are also "shallow". We've only had 0.43" of precip. since October 22, and our seasonal snowfall totals is only 3.5". So much for our wet fall. Keep this up for a couple more months and the "D" word (Drought) will be back in our vocabulary here. Our friends in New Mexico are already troubled as well as TX and OK. Weather patterns often make a big change between mid and later winter, so let's hope that is the case again this year.

Nitrogen study—great response

We had an extraordinary response to our request in late December for help on a research project for the National Park Service studying nitrogen deposition up in Rocky Mountain National Park and tracing where that excess nitrogen (in the form of ammonia) is coming from. We have one or more volunteers signed up

already for almost every site where help is needed. We still may need help around Hygiene, Colorado. Thanks so much! The power of volunteerism is AMAZING!

Come to the National Western Stock Show!!

CoCoRaHS is headed for the Stock Show, Tuesday January 10th. On this the 100th anniversary of the Stock Show, we will be making our first appearance representing Colorado State University. We'll be staffing a display for just one day in the Hall of Education from 9 AM to 8 PM on the 10th. If you are one of the thousands of attendees from all across the country, then please stop by and introduce yourself. Also, if you have friends coming that day, tell them to visit us. We will be RECRUITING new observers, of course. :-)

CoCoRaHS training sessions!!

We know of two CoCoRaHS training sessions planned this month in Colorado plus some in PA and IN. If you are in easy range of either of these and need initial training, review, or just need some new hail pads or other supplies then please plan to attend. We'll be emphasizing snow measurement at both of these.

If you feel the need for a training session in your area and are out of range of upcoming events, please let us know. If you can get 5 or more folks together at any one place, we'll do our best to get a training session organized for you.

1) Saturday, January 14th 10 AM - Noon Denver, Colorado
The session will be held at KOSI-FM Radio, 4700 South Syracuse Street,
Denver, Colorado. Juice, coffee and cookies will be provided.
Please RSVP to Steve Hamilton at cocorahs@gmail.com as soon as you can

2) Wednesday, January 25, 2006 3-5 PM Greeley, Colorado
Island Grove Regional Park, Events Center West, Room B
Greeley, Colorado
This will be a part of the 2005 Colorado Farm Show. If you plan to attend, please RSVP to hreges@atmos.colostate.edu or call 970 491-1196
I am looking forward to meeting you there.

Characteristics of Precipitation

Have you noticed, it rains or snows somewhere in CoCoRaHS every day, but it never rains and snows everywhere in CoCoRaHS the same day.

CoCoRaHS has grown to cover more states, and as we have we have reached this point sooner than I expected. The closest we came in recent months to everyone being dry or wet on the same day was Dec 11 when there were only 2 reports of measurable precipitation out of 920 entries (plus 4 traces) and everyone else had ZERO. On the opposite side, and this was quite remarkable, was October 10 when 1128 (plus 17 traces) out of 1244 of you reported measurable precipitation the same day. The chances of everyone of us being dry for 24-hours is better than the chances that we all are wet at the same time, but the chances are still pretty low.

Things are different back east

Now that we have spread to several eastern states have you noticed that precipitation patterns at this time of year are much more uniform than they are out west. For example, when you look at the reports for Jan. 3 in VA, MD and PA you'll see that all 70 of the stations that reported that day had measurable precipitation. That hardly ever happens out west. But while precipitation was widespread and much more uniform, it was still plenty variable ranging from only 0.20" in western VA to 1.49" in Nazareth, PA. What fun!.

Reminder

If you want your data to appear on the CoCoRaHS maps, your observation needs to be completed by 9 AM. It doesn't matter when you get around to sending in your data, but the observation needs to be taken in the morning in order to show up on our maps.

Of course it's OK to read your gauge at other times. We have lots of new observers from the eastern states that prefer checking their gauge in the evening or even at midnight. Some have been doing this for many years and do not plan to change. That's fine, and some would say it would be great if we all read our gauges at midnight. But it's just not practical. When we started CoCoRaHS in 1998 we polled dozens of people and data users and found 7 AM to be the best compromise, so that's why we chose that time.

Thanks for checking your location

We had a good response to our request to check your station information. Many of you made the effort to use our new "Google Maps" feature to check the location of your station and many of you made corrections. Thanks very much. We want to make sure we are plotting your data in the right place, and who know better where you live than - - - you. I

If you haven't had a chance to check your location yet, it's never too late. Just let me know if we need to change your coordinates, and if you have an accurate elevation for your site, we want to add that information. You'll enjoy looking at the Google Maps and seeing what your community looks like from above.

CoCoRaHS -- can we make a difference?

I think so and I hope so.

CoCoRaHS was born out of adversity. On July 28, 1997 when more than 14 inches of rain fell in a very localized portion of Fort Collins, Colorado, no one including me made the effort to call to notify the National Weather Service of this extreme storm. We assumed they were on top of the situation. In fact, the storm was evident on radar and satellite, but seemed unimpressive compared to many other storms that evening. A few hours later 5 people were killed that might have been saved had a flash flood warning been issued earlier. I could have made a phone call. I knew it was an exceptional storm. I could have helped save lives. And I didn't.

I don't want this to happen again, and that's how CoCoRaHS came into existence. We started as a few dozen volunteers here in Colorado helping supplement the existing weather networks with more neighborhood reports. When you think of CoCoRaHS you may not think of a special emergency warning system, but sometimes just one simple report confirming the presence of heavy rain, hail or a tornado, is all the National Weather Service needs to make quick and critical decisions and issue public storm warnings.

You may not realize it, but each time you submit an "Intense Rain" or a "Hail" report via the CoCoRaHS website that report is immediately transmitted to the nearest National Weather Service Forecast Office. One of our volunteers who is a forecaster for the National Weather Service in Boulder, has written some nifty computer code that makes this possible -- and it's a big deal. We are not aware of having saved any lives yet, but during the past two years CoCoRaHS volunteers have been responsible for hundreds of intense rain reports and nearly 2000 hail reports. These reports have triggered several severe thunderstorm warnings that might not otherwise have been issued.

We want to do even better in 2006. If there is an extreme storm in your area, make sure it gets reported. If you find out that the National Weather Service will be in your county this spring training severe weather spotters, try to attend. The more training you get, the more skillful you will become. We could help save lives. We could help forecasters do a better job. We could help hydrologists do a better job predicting future floods. We could help municipalities save water. We could do a lot of things—and we should.

By next winter, we will also be adding "Heavy snow reports" so you can send in more frequent updates of heavy snow in your area. Radar and satellite are not terribly effective at detecting and estimating snowfall rates and quantities. CoCoRaHS could contribute a great deal for winter storm forecasts and warnings.

Etc. Etc.

Please know that your efforts are appreciated. It may seem that our reports of 0.00", 0.01" and the many other small amounts that we normally experience may not mean that much. But the information adds up. And when that once-in-a-lifetime storm that we dread or love, depending on our interests and past experiences, comes, hopefully we will be there to measure it well and report it quickly.

How are CoCoRaHS data used?

If you have questions about why we are doing this project and how the data are used and by whom, we are delighted you care. We have written several articles and e-mails about this and will have a summary posted on the CoCoRaHS website. Weather forecasters need all the data they can get their hands on and they need it NOW. Climatologists, like myself, are much more patient. We are looking at long-term trends and patterns. I look more at CoCoRaHS maps from past storms than from todays. But in between are many groups, agencies and individuals who benefit by knowing more about precipitation and how it varies. We, and our simple measurements, can help all of these.

Go, Fight, Win!

We currently have at least 40 faithful observers from southern New Mexico who have reported "0.00" for 83 consecutive days since their last rain October 16th. They have not given up. And as I check their local forecast, no rain is in sight. In fact, other than a few high cirrus clouds, there aren't even any clouds predicted for the next 7 days. But hang in there, and don't get too bored. We'll all celebrate when you finally get some rain (and hopefully even some snow—we don't want you missing all the fun).

So as 2006 gets rolling, stick with your precipitation measurements if you can. Sometimes this is not the most exciting thing to do with your time and we understand that. Sometimes failing health interferes with even the best intentions. If you sense that the time has come to give this up, that's OK. But if you can stick it out that would be great. This could be the year that one of your reports is the most important of all. And if your one of a couple thousand

CoCoRaHS volunteers that are currently inactive, maybe 2006 can be the year when you get started again—or when you find a neighbor to take over from you. After all, our goal of one or more volunteers per square mile over populated areas is yet to be achieved in most communities.

Happy New Year to all, and hope to see a few of you at the 100th National Western Stock Show.

Nolan Doesken