



# Placement and Installation of your Rain Gauge



## LOCATION! LOCATION! LOCATION!

1

### Ideal Placement of your Gauge



### Distance from obstacles

- In **open areas** strive to be **twice as far** from obstacles as they are high.
- In **developed areas** strive to be **as far** from obstacles as they are high.

## HEIGHT ABOVE THE GROUND

In **open areas** place the gauge top approx. **2 feet** off the ground.

2

This is to improve gauge catch by reducing wind speed

In **developed areas** place the gauge top approx. **5 feet** off the ground.

This is to improve gauge catch by reducing the impact of nearby obstacles

## LEVEL AND BEVEL

Make sure your gauge is **level**

3



**Bevel** the top of the post to reduce rain splashing into the gauge.



# REPORTING OBSERVATIONS

ON

The CoCoRaHS Web site

[www.cocorahs.org](http://www.cocorahs.org)

## 1 Login to CoCoRaHS

After you login, the screen will automatically take you to the Daily Precip. Report

2

Record your total precipitation measured in your gauge in hundredths (0.00)

Feel free to enter comments about the day's weather under "notes"

Feel free to enter snow information

Feel free to enter event details

3

Click "**Submit**" and your data is recorded on our site



# MEASURING RAINFALL

Gauges should be read between 5:00AM and 9:00AM with **7:00AM being preferred**

Other times are accepted, but they will not appear on CoCoRaHS maps

## Points to remember when reading your rain gauge

- 1 Your most common observation will be **zero**. It is important to please report all zeros.
- 2 When only a drop or two wet the gauge record a **"T" for Trace**
- 3 The **inner tube** holds 1.00 inch
- 4 Getting the decimal point correct is **ESSENTIAL**  
There are big differences between 0.04 and 0.40 and 4.00
- 5 Measure rainfall of **less than an inch** from the inner tube. Measured amounts from the inner tube will be between a few hundredths up to one inch.
- 6 When more than an inch of rain falls the precipitation will overflow into the outer cylinder. The whole gauge has a capacity to hold 11 inches.
- 7 To measure **greater than one inch** ...
  - Pour out the first inch from the inner tube and write it down.
  - Now pour the remaining water into the funnel & measure using the inner tube.
  - Continue until all of the water has been measured. Make sure you keep track of your amounts along the way
  - Then add up all of your measurements, for example: 1.00 inch + 0.97 inches + 0.88 inches + 0.92 inches = 3.77 inches
  - Report the Total = 3.77"

Always read the bottom of the **meniscus**





# MEASURING SNOWFALL

Gauges should be read between 5:00AM and 9:00AM with **7:00AM being preferred**

Other times are accepted, but they will not appear on CoCoRaHS maps

If snow is anticipated, remove the funnel and inner tube, otherwise snow will clog the funnel

## Measuring liquid water content from your gauge

- 1 When snow accumulates on the rim of the gauge, tap on the top of the gauge with a fly swatter.
- 2 Add some warm water to the inner tube and measure to the nearest hundredth of an inch. Record the value.
- 3 Add the warm water from the inner tube to the snow sample in the outer tube in order to melt the snow sample.
- 4 Pour melted snow sample into smaller tube and read to the nearest hundredth of an inch.
- 5 Subtract the amount of warm water that you initially added to the tube and record your results.



## Measuring Snow Depth

- 1 Measure snow depth with a yard stick in an area where the snow falls uniformly.
- 2 Preferably use the same location to measure the snow depth throughout the season.
- 3 If the snow depth measurement for a given day is greater than the previous day, enter the difference as "depth of new snow".

