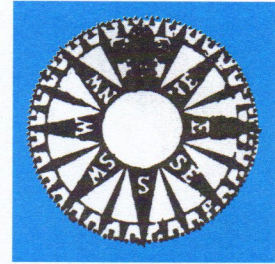




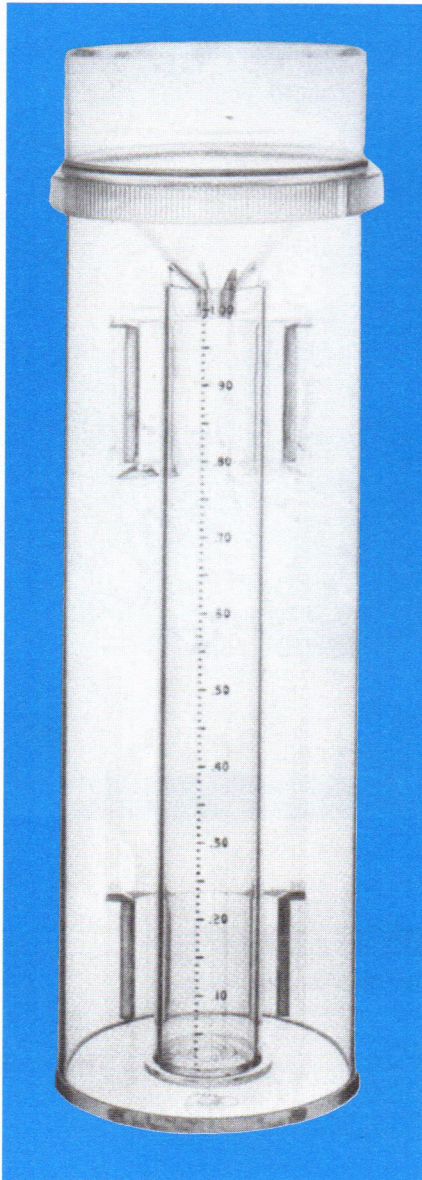
Productive Alternatives

1205 North Tower Road
Fergus Falls, MN 56537 (218) 998-5630



All Weather Rain Gauge

Metric Rain Gauge



The All-Weather Gauge is a precision weather instrument. With minimal care it should provide years of satisfactory service. Guard against extremely rough usage. Wash periodically with mild soap or detergent and warm water, using a household bottle brush. Do not use solvents or abrasives to clean the gauge and do not wash the gauge in your dishwasher. Do not allow accumulated water to freeze in the gauge.

Installation: Mount the gauge on a post that you walk past each day so you will be reminded to read and empty the gauge daily. Ideally, the post should be a 4" x 4" or 2-2" x 4" nailed together. Where possible do not mount near buildings or trees that would prevent rainfall from reaching the gauge. The gauge should be mounted so that the top of the gauge is level and is 6" higher than the top of the post.

Operation: The top funnel catches the rain and delivers it to the measuring tube. The measuring tube has a capacity of 25.4mm. Rainfalls of less than 25.4mm can be read directly from the measuring tube. Stand the measuring tube on a level surface. Read the amount to the nearest .2 millimeters. Record the rainfall in your log and discard the rain water.

If rainfall exceeds 25.4mm, the excess flows into the outer cylinder. To measure, empty the measuring tube containing the first 25.4mm, place the funnel into the measuring tube, then carefully pour in the excess rain water until the outer cylinder is empty. Record the amount measured in your log. Be sure to count the first 25.4mm of rain water that was in the measuring tube. In fact, it is a good idea to measure precipitation from heavy rains twice to insure accuracy. Just use an empty can or pan to receive the measured rain water, and measure again.

In colder weather, use only the outer cylinder to catch hail, sleet or snow. Melt the snow indoors. Then, using the measuring tube, measure the moisture content of the snow. You may also use the outer cylinder to get a measure of moisture of accumulated snow by pressing the cylinder into a level area of snow then melting the captured snow. Also - you may add a known amount of hot water to speed up the melting process. Measure the resultant water and subtract the amount of water you added to secure the moisture content of the snow.

Daily log: Whenever possible, take your readings at the same time each day. Record your readings on the daily log. Use the date on which you take the reading even though much or all of the rain may have fallen the preceding day - after you took your daily reading. Enter your reading in millimeters (.2, 4, 10.4, 215). If rainfall is less than .02mm enter "T" for trace in your daily precipitation log.

This information is available in alternative formats upon request

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