



# TRAINING CARD: RAINFALL



## A participatory approach to rainfall monitoring Measuring daily rainfall using a manual rain gauge

**Why measure rainfall?** Rainfall is highly variable and we have little data to capture this. If we know how much it has rained, it can help us understand how our streams and rivers are responding too.

**What equipment do I need?** You will need a **plastic manual rain gauge** which has a scale (usually 1 to 40 millimetres) clearly marked on the side. You might also need something to secure the rain gauge to a fixed position.



**Where should I place my rain gauge?** In your backyard, garden or field away from shelter (away from buildings, trees, high solid fences or other obstructions) and in the middle of an open space, away from other water sources. More accurate data will be collected if it is sited correctly and is left in the same place over the whole monitoring period.

Tip – rain gauges can blow over easily in the wind or pushed over by animals. It needs to be securely fastened to the ground or a fence post, upright and level to allow water to enter.

**How do I measure rainfall?** Determine how much rainfall has fallen by matching the water level with the scale on the side of the gauge container. It is very important to measure to the nearest millimetre (mm). Record your rainfall measurement on your monitoring sheet – an example monitoring sheet can be found on the back of this card. After you have taken a reading, empty the container.



Tip – record your observation as ‘T’ (trace) if there is evidence of only a few raindrops in the container, record as ‘E’ if you need to make an estimate and ‘Omm’ if the container was dry. It is important to know when it did not rain! If you missed a day, record the measurement as ‘No data’ or highlight how much has accumulated over the time period. If you know you will miss a day, is there anyone else you can ask to take the observation?

**When and how often should I take a measurement?** It is preferred that the observation is **taken every day at 9am**. If this is not possible, ensure a reading is taken at the same time each day (once every 24 hours). For example at 8am or 8.30am each day. Make a note of the time on your monitoring sheet.



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**Do I need to maintain my rain gauge?**

Yes but it is very minimal – just ensure it is in good working order, located in the same place and clear of debris. After each reading you take you will need to empty the container. At this stage (and if possible) it is a good idea to dry the inside of the container to remove any traces of rainfall.

**How do I submit my results and how often?**

It is suggested that you record your daily rainfall each day and submit a monitoring sheet at the end of each month to the shared Dropbox folder. You could also try using Twitter or the Android app to submit your data as soon as you have taken a reading so the community can benefit from this information, particularly if you have an interesting or unusual observation. You can also submit your observations using the ‘Red Burn Citizen Science’ webpage here: <http://bit.do/redburn-submit> if you prefer. Remember... Your observation should always be accompanied by a date, time and location.



#Rainfall

@RedBurnAcomb



**An example and suggested rainfall monitoring sheet..**

STATION NAME: <i>Low Woodside Farm</i>				
OBSERVERS NAME: <i>A. WOODS</i>				
LOCATION: <i>Low Woodside Farm, Bishops Hill, Acomb</i>			GRID REFERENCE / POSTCODE: <i>(<a href="http://gridreferencefinder.com/">http://gridreferencefinder.com/</a>) 393929 566853</i>	
MONTH / YEAR: <i>March 2015</i>				
OBSERVATION DATE (DD/MM/YYYY)	TIME OF OBSERVATION (24HR CLOCK)	RAINFALL (MM)	NOTES (T, E, NO DATA?)	BRIEF WEATHER DESCRIPTION (PAST 24 HRS)
<i>01/03/2015</i>	<i>09:00</i>	<i>4</i>		<i>Heavy rain over night</i>
<i>02/03/2015</i>	<i>09:00</i>	<i>0</i>	<i>T</i>	<i>Mostly dry, overcast. Some drizzle</i>



Did you know that ‘CoCoRaHS’ is a community-based network of volunteers observing daily rain, hail and snow across the US and Canada? Read more: <http://www.cocorahs.org/>

For further support and guidance please contact Action 4 Acomb – contact details can be found on the website: <http://www.action4acomb.co.uk/>



Action 4 Acomb