



## Litterfall Data Quality Assurance and Control Procedures



### General information

- **NOTE ANY CHANGES MADE** in the QAQCNotes column, along with your initials.
- Only begin the QA/QC process when an entire year's worth of data have been entered and checked
- Conduct the steps of the procedure in the order they are written

### Procedure

1. Ensure that each site is present for all twelve months of the year. If the data are completely missing, there should be rows with periods in all the blanks and an explanation as to why the data are missing in the DatasheetNotes column (can be as simple as "not collected").
2. Search for zeros in the total weight column. If the sum of individual weights  $> 0$ , enter that value in the total weight column.
3. Use the total weight column as a check for the reliability of the lab work (the sum of individual category weights will be used for formal analysis). If the difference between the sum of the individual weights and total weight is greater than 0.3, use the following rules:

#### FLAG DATA IF:

- Total weight and the sum of individual category weights are off by  $>0.3\text{g}$  and  $\leq 1.0\text{g}$
- Total weight is  $> 10\text{ g}$ , AND
  - within 5% of the sum of individual weights, OR
  - the weight of wood OR cottonwood leaves comprises about 50% or more of the sum of individual weights. In samples with large amounts of wood or cottonwood leaves, it is difficult to center the entire sample on the scale and drastically different readings can be obtained, but the sum of individual weights would typically still be reliable.
- The sum of individual weights is less than the total weight AND the discrepancy is between 0.5 – 2g, then count the number of categories with a non-zero number. Flag if some or all of the non-zero categories can be rounded up by 0.1 to resolve the discrepancy.

OTHERWISE, remove the data to a "removed data" tab.

4. Highlight all the data and do a search for nothing in all the cells. For any empty cells, enter a period for the missing data.
5. Do a search for two periods (..) to ensure that this typo does not exist in the dataset.
6. Search the comments for missing bags/collections/etc. Ensure that all categories on these lines are filled with periods instead of zeros.
7. Read through comments for anything unusual and ensure that no improper QA/QC was performed.
8. When all issues have been solved for an entire year's worth of data, append the individual year's data to the bottom of the master file (copy/paste)



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9. Update the metadata tab of the master file with the date of update, the new date range of the dataset, and, if applicable, review the entire metadata tab to ensure that all information is still accurate.

This procedure document has been approved by \_\_\_\_\_

Date \_\_\_\_\_