SUBMITTING DATA WITH THE MOBILE APP

The *Caterpillars Count!* app is free and available for both Android and iOS.

0) REGISTER. If you haven't already, you will first need to 'Register' an account with an email address and password. This can be done through the app, or through our website. You'll then need to confirm a registration email sent to that account.

1) LOGIN. Log in with your account information.

2) TIME and DATE. The Time and Date fields will autofill with the current time and date, and unless you are entering data that was collected on some other occasion, you will not need to adjust them.

3) TEMPERATURE. Enter a Temperature range that describes the current temperature.

4) SITE and SITE PASSWORD. Select the Site name at which you are conducting surveys, and enter the Site password that you were provided by the Site Coordinator. Note that data can only be submitted for established Caterpillars Count! sites. If you'd like to set up a new site, please contact us at caterpillarscount@gmail.com.

5) SURVEY TYPE. You may choose to do a Visual Survey (in which you inspect a set of 50 leaves and associated petioles and twigs), or a Beat Sheet Survey (which requires that you beat a branch over a "beat sheet" [assembly instructions available on the website]).

6) CIRCLE and SURVEY. The specific location of your survey at the site. Surveys are lettered A-E, and occur in groups of five called "Circles", which are labeled numerically. Survey A is located at the center of the circle, and Surveys B-E are located 5 meters (yards) away in each of the four cardinal directions. The tree branch for surveying should be labeled with this Circle-Survey combination.

7) NOTES. This is a space to enter notes about potentially relevant observations that might apply to the entire survey as a whole. For example, perhaps it just rained and all of the leaves on the survey tree are very wet. Or perhaps the branch was bent or disturbed since the last time it was surveyed. You can describe these things here.

8) ARTHROPOD ORDER INFO. For each new arthropod Order you observe, click on the "NEW" button to the right, and select the arthropod you observed from the dropdown menu. If the arthropod type is not listed, you may select "Other" and describe in the Arthropod Notes field what it was. If you are not sure what type of arthropod you observed, you may select "Unidentified", and can describe any relevant aspects of its appearance in the Notes.

Also record the length of the arthropod(s) you observed in millimeters, and the number of arthropods observed of this type and size. You may optionally take a photo of the arthropod. Click "Save" to add this observation record to your survey, and you will see a record of this observation displayed in the ARTHROPOD ORDER INFO section. For every new arthropod you see within this survey, fill out a new record by clicking "NEW".

Note that if you conducted a survey and saw 5 ants, four of which were 3 mm and one of which was 10 mm, and 1 caterpillar of 35 mm, that would require 3 separate records to fill out: 1 for the ants of size 3 mm, 1 for the ant of size 10 mm, and 1 for the caterpillar.

If you conducted a survey and saw NO ARTHROPODS, then you need not fill out this section and can move on to #9.

9) PLANT SPECIES. Enter the plant species that you surveyed if you know it, or if it is written on the survey tag hanging from the branch. If you do not know, you can write "Unknown".

10) LEAF COUNT. If you conduct a Visual Survey, this count will be 50 and cannot be edited. If you conduct a Beat Sheet Survey, please estimate the number of leaves that were hanging directly over the beat sheet when you beat the branch.

11) HERBIVORY. Give your 50-leaf sample an herbivory score based on how much leaf damage there is. Herbivory scores are as follows: 0 - none, 1 - trace (<5%), 2 - light (5-10%), 3 - moderate (10-25%), 4 - heavy (>25%). If you summed all of the observed leaf holes together over a 50-leaf survey and were able to cover 5 average leaves, that would be 10%. If leaf holes only sum to about 2 average leaves worth, that would be 4%, etc.

12) LEAF PHOTO. Please take a photo of an average sized leaf from the sample you just surveyed. This works best if you can rest it flat on a white sheet of paper so that there will be strong constrast between the leaf and its background, and it is helpful to have an object of known size in the photo for scale. We have a Leaf Photo Scale Sheet available on our website that can be printed out for this purpose.

13) Once you've recorded all arthropods observed, and the plant information for the tree you surveyed, SUBMIT and move on to the next survey!