

# CONDUCTING SURVEYS FOR *Caterpillars Count!*

**Caterpillars Count! surveys can only be conducted at established survey locations.** Create your own site or visit one near you ([caterpillarscount.unc.edu/getStarted](https://caterpillarscount.unc.edu/getStarted)).

## General sampling tips

- Arthropod length is from the **head to the abdomen**—we don't count the length of legs or antennae.
- We only care about arthropods **2 mm long or longer**. So don't spend time sweating the small stuff!
- It's ok to call something '**UNIDENTIFIED**'! Better to record it as unidentified than to not record it at all!
- Taking photos of the arthropods you find within the app is optional, but **we strongly encourage photos of caterpillars!**



## Visual surveys

- Be sure to check both the **upper and lower sides** of every leaf in your survey carefully.
- Don't forget that the survey also includes the associated **twigs and petioles**, so scan those as well.
- Many arthropods are cryptically colored and can look just like the leaf or twig they are on—you will have to be vigilant!
- When doing a survey, **disturb the branch as little as possible**. If you move it too much, arthropods may fall off or fly away from the leaves you are hoping to survey.



## Beat sheet surveys

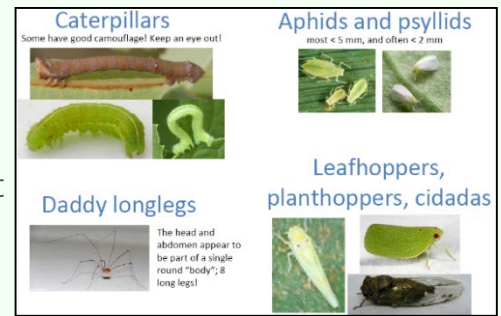
- Whack the branch strongly enough to knock off arthropods, but not so strongly that twigs and leaves are damaged.
- The branch should be whacked exactly **10 times**.
- Hold the beat sheet in one place during all 10 whacks.
- Spend at least a minute looking at your beat sheet—bugs that are small, or pale, or look like debris may not be obvious at first glance, especially if you are in poor light.
- Be aware that some insects may be knocked into your beat sheet very briefly but will then fly away. Do your best to estimate their type and length.



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## Arthropod identification

- Become familiar with the common arthropod orders before conducting surveys.
- Take the [Arthropod Photo ID Quiz](#) on our website until you can get at least 9/10 correct consistently.
- Print the [2-sided ID guide](#) to bring out in the field.



## Estimating arthropod length

- Make sure you are comfortable estimating lengths *in millimeters*.
- Familiarize yourself with basic reference points like the length of your pinky fingernail, length to first or second knuckle, etc.



## Using the app

- Use the mobile app to submit data if possible.
- Each sampling branch should be marked with a tag containing a three-letter code, or survey location code. The corresponding site name, survey circle, and survey location information should pop up automatically once the code is entered.
- Tap Visual Survey or a Beat Sheet Survey depending on the observation method your site manager has specified.
- The app will ask you to record information about the arthropods observed during the survey as well as the plant herbivory score, number of leaves surveyed, and average leaf length.
- For sites without cell service, surveys will be stored and will get submitted automatically when the user has an internet connection. See the [App User Manual](#) for details.
- If you are not able to use the app, make sure it is clear who (the individual participants, or you, the site administrator) will be entering data from the datasheets into the [website](#).

The screenshot shows a mobile application interface for 'Site information'. At the top, there is a navigation bar with a green leaf icon, a location pin icon, a refresh icon, a share icon, and a settings gear icon. Below the navigation bar, the title 'Site information' is displayed. The form contains several input fields: 'Survey location code:' with a text box, 'Site password:' with a text box, and 'Observation method:' with two buttons labeled 'Visual' and 'Beat sheet'. Below these is a 'Notes:' section with a text area. At the bottom, there is a checkbox labeled 'wet leaves' with a question mark to its right, and a large green 'Continue' button.

