SITE SETUP

Caterpillars Count!

ESTABLISH THE MONITORING AREA

1. **Choose an area that contains representative vegetation** of the common shrubs and trees at your location. (Woody vegetation only, no herbaceous plants.)

2. **Survey branches will be arranged in groups of 5 called "circles."**

3. Each of the **circles will be centered on a representative bush or small tree** that has leaves available for inspection.
   If working with a small area, it is okay for the circles to be close together. These circles may be arrayed in a loose grid, a line, or some combination depending on the configuration of vegetation at the site.

4. **Choose a survey method.**
   Decide whether participants at your site will primarily use visual or beat sheet surveys. Whichever type of survey you choose, we ask that you be consistent and conduct all surveys in the same manner.

SELECT TREES WITHIN THE MONITORING AREA

Before you head out, you might want to bring these materials:

- **Compass** (to find cardinal directions)
- Internet connected **smartphone or tablet** to use in tandem with the Arbor Day Foundation's Tree ID Guide

Each circle will consist of 5 survey locations.
While the center point for a survey circle may be chosen based on subjective criteria (seems like a good general location for surveys, vegetation is representative, etc), the other 4 survey locations should ideally be located in each of the 4 cardinal directions from the center point.

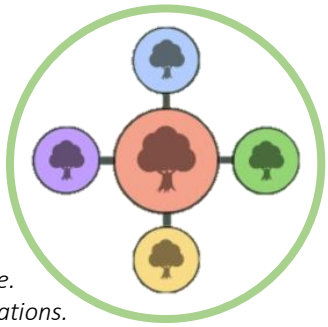


Figure 1. *Example of a survey circle. Each circle consists of 5 survey locations.*

TO SELECT THESE SURVEY POINTS

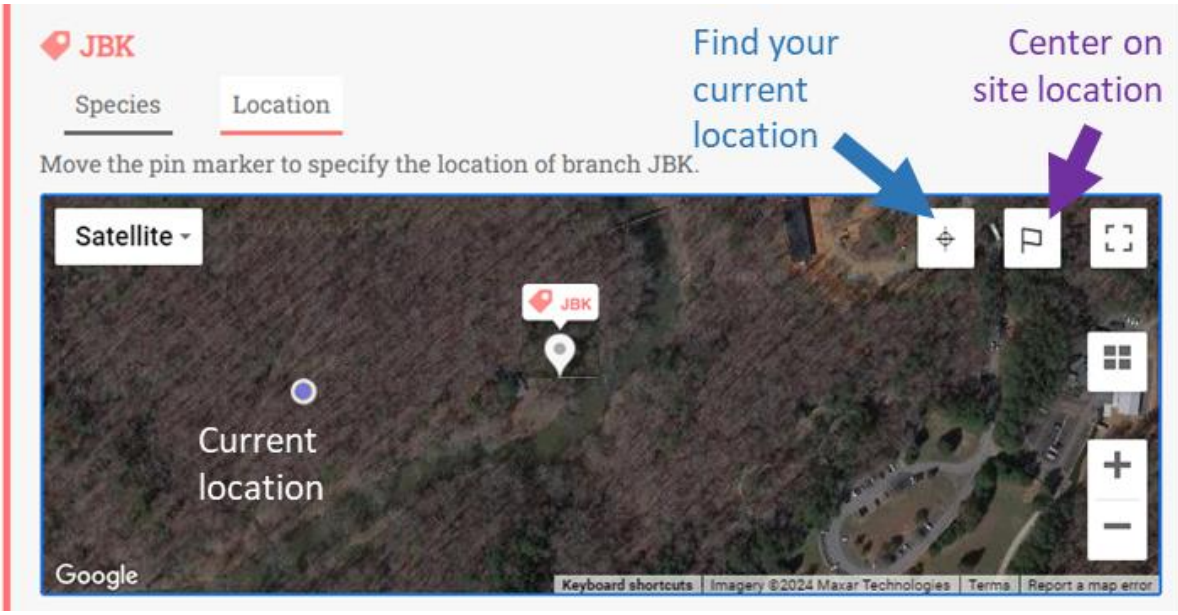
1. **Select the center survey tree (red in the diagram above).**

   When selecting the center survey, it is important to **choose a tree that can be easily surveyed**. You are in search of **a tree that has at least 50 leaves that measure at least 5cm (~2in.) in length** (or if a conifer, a branch with at least 100 cm of linear branch length).

   If finding 50 leaves to survey proves to be a challenge then you are probably better off choosing another tree. It is also important that the leaves are at a height that is easily

accessible. Using a ladder is not a practical way to gather data, so these should be leaves that you can see at eye-level.

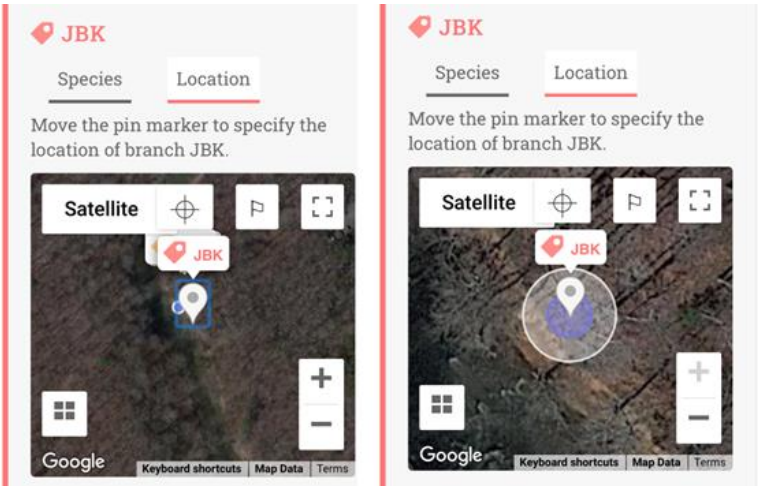
2. **Identify the 4 satellite survey trees.** Once you have selected the center (red) survey, walk 5 yards (approximately 6-7 steps) in one of the cardinal directions. The first plant with 50 leaves that are at least 5cm (~2in.) in length is the plant that you should survey. If there is not a plant directly in front of you, then you can use a plant that sits within 10 feet of your transect line. If there is no suitable vegetation at 5 yards and within 10 feet, continue walking along your transect line away from the center point until you find a tree with 50 leaves. Repeat this process until you have picked out all 4 satellite trees (blue, green, yellow, purple in the diagram). The colors of the 4 satellite trees can be arranged in any order.
3. **Identify survey trees.** See the Identification Skills page for resources to help identify your survey trees to species. Species names can be entered through the Manage My Sites page of the mobile app or website.
4. **Locate survey trees.** Go to the Manage My Sites page of the website, and then go to *Edit Survey Plants*. You have the ability to map your survey branches using the *Location* tab.



A tag with that branch code will initially appear on the map located at the site's central coordinates. Drag the tag, or double-tap on the map, to move it to the correct map location.

If you are outside standing by the actual survey branch, tap the target icon and a small blue dot will show your current location on the map based on your phone's GPS. You can then zoom in to place the tag in the center of the blue circle for maximum precision.

NOTE: Your phone's GPS may not always be accurate, especially if there is thick canopy cover, topography, or other structures that are interfering with the GPS signal. So do check that the locations make sense based on other landmarks and map features, and try tapping the target location button several times to make sure your phone's GPS has settled in to a single location and is not jumping around.



If you have no cell service at your site, then you may have to locate branches on the map from home based purely on features you recognize from the map itself. In some cases, toggling between ***Satellite*** and ***Map*** view may reveal different landmarks or reference points.

When you are finished locating survey branches, don't forget to hit the orange **Save All** button at the bottom of the page.

5. **Tag survey trees.** After creating a site, you'll receive an email with a link to print survey tags for that site. If you cannot find that email, retrieve and print the tags from the Manage My Sites page. Fill in the **Plant Species** name for each branch before printing to maximize the information on each tag. We recommend weather-proofing the tags by either laminating them, or covering both sides with clear packing tape. Hang tags on the relevant survey branches in a visible location.

Repeat these steps for each survey circle.

Figure 2. *Sample survey tags; when the 3-letter code is entered on the app, the site, circle, and species information associated with the survey are filled in automatically.*

NOW YOUR SITE IS READY TO BE SURVEYED!