i-Tree Academy Spring 2023

Session 3: The view from the top: i-Tree Canopy and OurTrees

Extended Learning Activity

This exercise is an opportunity to gain experience working with i-Tree Canopy and exploring the range of ways that you can use an i-Tree Canopy project.

1. Start by using i-Tree Canopy to understand the tree resource in your community. Using one of the boundary methods (drawing, selecting existing, or importing a shapefile) discussed during the session create an i-Tree Canopy project for a community or area you are interested in. Use the default cover classes or design your own that are more relevant to your community. Remember the classes must be things you can identify on the aerial imagery. Collect 100 points using this i-Tree Canopy project. Save regularly so you don't lose any of your work.

    a. What is the standard error for canopy cover when you reach 100 points? Is this precise enough for your application?

    b. Download and use Google Earth Pro to identify the date associated with your canopy cover estimate.

2. Knowing how much tree cover you have is a great place to start, but the next step is understanding what it takes to change that canopy cover.

    a. Look at the report for your i-Tree Canopy project. How many acres of tree canopy do you have (640 acres = 1 square mile)? How many more acres would you need to increase your cover 1 percentage point? How many acres would you need to increase canopy cover to a goal of 30%?

    b. Estimate how much more carbon would be stored by increasing your canopy 1%. To estimate this, take the total carbon storage estimate from your i-Tree Canopy results and divide it by the percent canopy cover. (e.g. Lancaster, PA has 45,230 tons of carbon stored and 28% canopy, that's 45,320 tons C / 28% = 1,554 tons C in 1% canopy).

    c. Estimate how many trees you would need to increase your canopy cover by 1%. Use MyTree to estimate the carbon sequestered over 20 years in a typical newly planted tree in your community. How many of these 20 year old trees would it take increase your canopy 1%? Hint: divide your answer from 2b by the carbon sequestered by a single tree from MyTree.