

Do you or your community, campus, or company have sustainability goals? Have you considered how trees may be able to help meet those goals? The i-Tree® software suite was designed to quantify the economic, environmental, and social benefits provided by urban and rural trees. i-Tree® tools are designed to highlight the significance of community trees and advocate for them as sustainable infrastructure. While carbon storage and sequestration are the primary benefits considered with sustainability goals, i-Tree® also provides estimates for pollution removal, human health impacts, building energy effects, hydrological effects, and more.



If you are wondering if the carbon estimates provided by i-Tree® are accepted by carbon credit/trading systems, the i-Tree® team is actively working on that. However, other organizations already recognize the estimates provided by i-Tree®. i-Tree® tools and estimates are officially recommended by the Green Building Council as part of their LEED building certification process. Additionally, the Planting tool through i-Tree® was designed to meet CalFire's greenhouse gas-related benefits for tree planting projects CalFire was funding.

i-Tree® is divided into three categories of tools: those designed to analyze individual trees, assess tree canopy, and assist with tree planting. Each tool has a specific methodology, ranging from in-depth field data collection to remote analyses. Bartlett Tree Experts (Bartlett) has arborists who are trained to conduct your desired i-Tree® analysis. These analyses can be performed independently of or in conjunction with a Tree and Shrub Care Plan, Tree Inventory and Management Plan, or other consulting project. Depending on the i-Tree® analysis desired, and the size of the location and number of trees, significant time and cost may be added to your project.

Individual Tree Analysis Tools

The following tools provide benefit information at an individual tree level. Depending on the tool selected, you can analyze a single tree or thousands of trees.

i-Tree® Eco

i-Tree® Eco is typically used to analyze multiple trees and provides information on the tree population's structure, function, and value based on attributes collected in the field. i-Tree® Eco projects can be conducted as a sample inventory (sample plots or areas) or a complete inventory (all trees). i-Tree® Eco can provide basic benefit estimates using only a few attributes collected in the field (the most cost-effective approach). i-Tree® Eco is also capable of providing detailed benefit results when the entire recommended attribute selection is included in field collection. This method provides the highest accuracy benefit estimate. i-Tree® Eco provides estimates for pollution removal, human health impacts, carbon storage and sequestration, building energy effects, hydrological effects, and more. i-Tree® Eco is the best tool to use if the most accurate benefit estimates are desired.

i-Tree® Design

i-Tree® Design helps with determining suitable tree species for planting based on your desired benefits. Utilizing the site location, a tree species can be selected to estimate the benefits and impacts on building energy usage. Existing trees can be included, and multiple trees can be analyzed within the same project. i-Tree® Design provides estimates for carbon dioxide, air pollution, stormwater impacts, and energy savings. Design is a great tool for determining what Tree species to plant and where on the site they should be installed on small properties or in specific locations.

MyTree

MyTree provides an easy tool to quantify the benefits of an existing tree or multiple trees. After entering the tree's location, basic species and size attributes are described. MyTree then provides estimates for carbon dioxide, air pollution, and stormwater impacts. MyTree is a great tool for existing trees on a residential property.

Tree Canopy Assessment Tools

The following tools are used to assess an entire urban or rural forest canopy. These tools assess all the trees in a specific area as a collective group where individual tree benefits are not provided.

i-Tree® Canopy

i-Tree® Canopy is used to assess large areas (cities, towns, counties, large campuses, etc.), estimate land cover types, and set tree canopy goals. i-Tree® Canopy uses aerial imagery to classify pre-determined land cover types. i-Tree® Canopy provides statistically valid land cover estimates, and carbon dioxide, air pollution, and stormwater impact estimates. i-Tree® Canopy is a great tool for communities to create benchmarks and monitor canopy change over time, set canopy cover goals, and inform individuals about specific benefits provided by their trees.

OurTrees

OurTrees is used to quickly understand the benefits that the trees in a specific community are providing. The only information needed is the city and state where the project is located. OurTrees provides carbon dioxide, air pollution, and stormwater impacts. OurTrees is a quick and easy tool for communities to identify the benefits their trees are providing.

i-Tree® Landscape

i-Tree® Landscape is used to assist communities with exploring their tree canopy, land cover, and population demographics. Landscape provides carbon dioxide, air pollution, and stormwater impacts. Tree planting areas can also be identified. i-Tree® Landscape is a detailed tool that is good for assisting with planning based on tree canopy coverage.

Tree Planting Tools

The following tools are used to help identify appropriate tree species to plant and estimate the benefits tree plantings may provide.

i-Tree® Planting

i-Tree® Planting is used to estimate the long-term benefits of a tree planting project. The project location, tree species, tree size, number of trees planted, and the lifetime for the project are required. i-Tree® Planting will then provide the estimated carbon dioxide, air pollution, and stormwater impacts along with energy savings. Planting is the best tool to estimate the future benefits of tree planting projects.

i-Tree® Species

i-Tree® Species is used to aid in tree species selection based on the potential benefits. i-Tree® Species uses plant hardiness zones for the specific location to generate options for tree selection. i-Tree® Species will rank tree species based on air pollution removal, air temperature reduction, carbon storage, building energy conservation, wind reduction, steam flow reduction, ultraviolet radiation reduction, and pollen allergenicity ratings. i-Tree® Species is an ideal tool for generating a list of tree species that custom fit the community's desired benefits.

Additional information can be found on the i-Tree® website: www.itreetools.org.

For more information, please contact Bartlett Consulting at consulting@bartlett.com or visit www.bartlett.com/bartlett-consulting.cfm.

Bartlett Consulting is a division of The F.A. Bartlett Tree Expert Company with Consulting teams located throughout the United States, Canada, the United Kingdom, and Ireland. This highly educated, experienced, and qualified team provide a wide range of services that include tree preservation, construction monitoring, creation of management plans, tree inventories, tree risk assessments and mitigation plans, and development and support for Bartlett's web-based tree management program ArborScope™.

