Tools for Assessing and Managing Community Forests

i-Tree Newsletter—February 2012

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i-Tree Version 5.0 Winter Construction Begins

Our Development Team has started production on i-Tree version 5.0 planned for release later this spring. Version 5 will feature enhanced integration of 2nd generation tools including the introduction of the i-Tree Forecast model.

Forecast simulates the growth of individual or populations of trees through time based on species and location-specific growth models, mortality, planting and regeneration rates. A beta version of Forecast will be available in i-Tree Design and later added to other i-Tree Tools.

In response to user feedback, v5 will feature a new data collection "web form" for the i-Tree Streets and Eco applications. This means that any device that has an internet browser, such as the iPhone, Android or tablets, can be used to collect and enter field data.

Some of the other upgrades and features that i-Tree v5 users will see in the near future include the following:

i-Tree Eco
- Google Maps-based sample plot generator
- i-Tree Pest Detection reporting
- Several new pest risk analyses
- Eco inventory report enhancements
- Standard PM 2.5 and BVOC reporting capability
- Web-based data collection system for mobile devices

i-Tree Design
- i-Tree Forecast integration

International Milestone—100 Countries of i-Tree

As people and governments around the world continue to plan for and measure the value of trees in their expanding urban areas, the i-Tree user base continues to grow internationally. Last November the nation of Hungary was the 100th country to join the i-Tree community of users, with Nigeria and Sri Lanka joining soon afterward. In addition, the first U.K i-Tree Eco pilot project report was recently released by the TreeCOnomics Team.

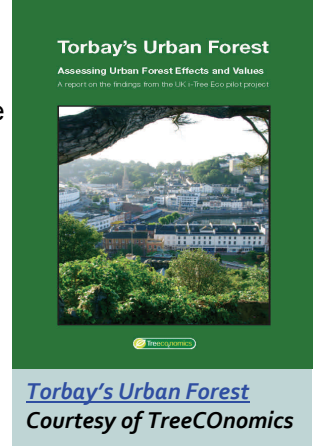*Torbay's Urban Forest*
Courtesy of TreeCOnomics

The majority of i-Tree international users select Eco, which is the most applicable for use outside the U.S. However, there are limitations and data requirements that must be considered by international users before proceeding with an Eco project. Many of these issues are discussed in detail in the Eco Manual (Appendix 5), the i-Tree Forum and the i-Tree Eco International webpage.
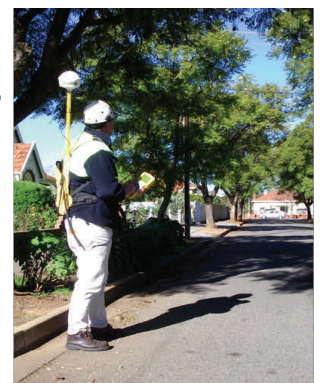

Australian i-Tree Eco Introduced

An Australian-compatible version of the i-Tree Eco application was introduced at the 2011 ISA Conference in Parramatta, Australia. This milestone marks the first i-Tree adaptation specifically designed for a country outside the US. Australian users in New South Wales and Victoria now have the same easy access and automated processing as Eco users in the United States.

Craig Hallam and Chris Spencer of Enspec Environment and Risk coordinated efforts with the i-Tree Development Team to collect species, location, environmental and economic data to retool i-Tree Eco for Australia. Though Eco is fully functional, and many former limitations have been overcome, there are some considerations users need to be aware of—namely the fact that tree-building energy interactions are based on US parameters. Thanks go to the Melbourne Urban Forests Accord Group and Arboriculture Australia who provided additional support and funding for the pilot project. Plans are in progress for further integration of additional Australian states.

Enspec data collection
Courtesy of Meg Caffin

Tools for Assessing and Managing Community Forests

i-Tree v5.0 Development

- Multiple tree and building entry capability
- Priority planting zones displayed
- Expanded winter/summer energy saving reports

i-Tree Canopy
- Development of Google Earth historical image canopy change analysis option
- Project area delineation tool
- User interface enhanced options

i-Tree Vue
- Integration of NLCD 2006 land class & impervious cover maps
- Refined reporting

i-Tree Hydro
- User interface improvements
- Integration of snow melt routine
- Allow customizable options for selecting dates

i-Tree Streets
- Web-based data collection system for mobile devices

As always, the i-Tree Team thanks the many users who provide feedback.

Upcoming i-Tree Presentations at Local Events

i-Tree presentations will be offered at the following venues or events.

Society of Municipal Arborists' Municipal Forestry Institute 2012, Lied Lodge, Nebraska City, NE Feb 19th–24th.

Southern Chapter ISA Conference, Birmingham, AL. Mar 17th– 20th.

During the past few months, the U.S. Forest Service Northern Research Station has processed i-Tree Eco data from Spain, the United Kingdom, the Netherlands, Finland, Australia, Switzerland, Mexico and Canada to name a few. Responding to this growing demand, the i-Tree Team continues its work to improve the suite of tools for international users.

Additional online articles and forum posts discussing i-Tree international applications are available on the following links: Overseas with i-Tree and i-Tree Abroad and Now at Home and Can i-Tree be used outside the U.S?

i-Tree Canopy Continues to Branch Out

By providing both US and international users statistically valid canopy cover estimates quickly and easily, **i-Tree Canopy** is quickly becoming one of the most popular i-Tree applications. A quick sampling of online visitors to the Canopy webpage is like passing through an international terminal hub with users from India, Canada, Turkey, Indonesia, the United Kingdom and more.

Since Canopy is online, there is no need to go through the normal i-Tree software installation process. Canopy users are only required to supply an ESRI ArcGIS shapefile boundary of their area of interest, and GIS software is not required. i-Tree users interested in using Canopy often network with local resources such as government agencies, universities and regional urban forestry coordinators to obtain a GIS shapefile for their city, campus or neighborhood. In version 5, users will not have to import a shapefile and will have the option to delimit a project area manually.

A canopy user can typically survey 500—1000 randomly generated points in a day. More complex analyses such as assessing individual neighborhoods or political wards may be done with separate surveys for each unit. Although this may take more time, these types of assessments will allow for comparisons of cover estimates between areas, which may enhance planning, management and advocacy efforts.

If your community, campus or county is interested in setting canopy cover goals as part of a sustainability initiative, Canopy will provide baseline information to establish realistic goals, timelines and action items. Communities within a region may also want to consider using Canopy to assess and compare cover with neighboring cities to set individual and regional canopy cover goals.