Tools for assessing and managing Community Forests

i-Tree Newsletter—October 2012

Greater Access to i-Tree in Canada and Australia

The release of i-Tree version 5.0 continues to build upon the spirit of international collaboration between the U.S Forest Service, the i-Tree Team, and Australian and Canadian cooperating partners to increase the accessibility and functionality of the i-Tree applications abroad. Here is a brief synopsis of the latest enhancements.

Since i-Tree was first introduced, the i-Tree Eco application and preceding UFORE model have been utilized by numerous Canadian cities, counties, and universities. The Canadian i-Tree Eco adaptation now offers users throughout Canada similar functionality and processing capabilities as Eco users in the United States. This milestone will enable greater accessibility for Canadians interested in pursuing an urban forest assessment project.

In addition, i-Tree Design has been upgraded to produce tree benefit estimates for Canadian addresses. The web-based application has been a very popular tool for engaging new audiences and introducing community tree benefit concepts in schools.

The Australian adaptation of the i-Tree Eco model is now available in all six Australian states as well as the Capital Territory and Northern Territory. With that expansion, Eco users throughout most of Australia can now expect the same functionality and same-day online processing as users in the

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New i-Tree version 5.0 Offers Many Advances

The i-Tree Team is excited to announce the release of i-Tree version 5.0! This latest upgrade to the powerful and versatile i-Tree software suite introduces cutting-edge features and adds a variety of enhancements based on user feedback and our own continuing quest to produce the most innovative and accessible tools for urban and community forest assessment, management, and advocacy. Here are a few version 5.0 highlights:

i-Tree Design enhancements allow users to locate multiple trees around a single parcel in order to compare tree benefits from alternate arrangements. Priority planting zones can also be displayed so you can instantly visualize optimal planting locations based on net tree benefits.
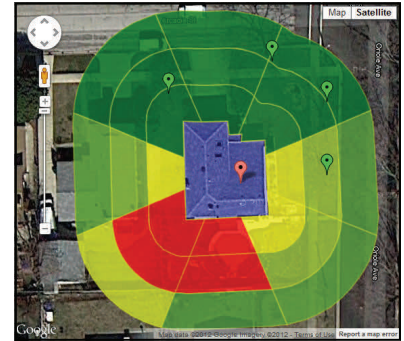
The new integrated **i-Tree Forecast** module enables i-Tree Design to estimate changes in tree benefits over time. And, the Design software now supports Canadian addresses.

Design v5.0 features multiple tree modeling and priority planting zones

i-Tree Canopy upgrades include a new process to conduct a cover change analysis with historical Google Earth images and exported Canopy survey points. A new online project area delineation tool is also now available so you can draw and define a survey area directly within the application using a Google Maps interface—no GIS required! Other new features include enhanced reporting and general refinements to the user interface.
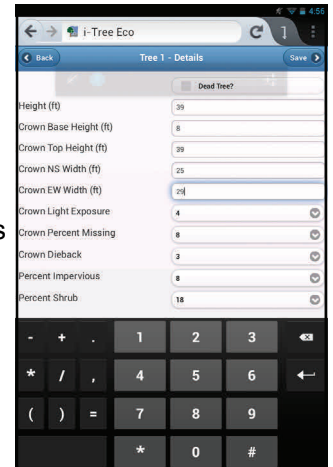
The **i-Tree Mobile Web form** data collection system is a cutting-edge innovation included in i-Tree version 5.0. The system enables both i-Tree Streets and Eco users to collect data with web-enabled mobile devices such as newer smartphones and tablets. The ability and flexibility to collect field data with devices that many people already own improves access to i-Tree applications and makes it easier to utilize volunteers and students in inventory and assessment projects.

i-Tree Eco mobile web form shown on a Google Nexus tablet

i-Tree Eco offers expanded functionality and many new analysis reports—including rainfall interception, pest risk and host susceptibility analysis, and estimates biogenic volatile organic compound (BVOC) emissions and air quality particulate matter (PM2.5). In addition, you can now calculate individual tree energy effects from inventory projects. The **i-Tree Pest Detection** module has now been fully

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States. Hundreds of Australian tree species were added to the program database. Australian weather and pollution data were also preprocessed and integrated into the Eco application to facilitate the adaptation.

Upgrading to i-Tree Version 5.0

i-Tree users working with version 4.0 can simply upgrade their current installation by selecting the "Check for Updates" option from the Help menu of one of the i-Tree applications. If you are new to i-Tree, you will need to first register online from the i-Tree homepage and then select "Get the Tools" from the page header to download and install the program. i-Tree Canopy and Design can be accessed online without registration or software installation.

Upcoming i-Tree Presentations at Local Events

i-Tree related presentations or working group discussions will be offered at the following upcoming events.

CUFC10
Canadian Urban Forest Conference
London Convention Centre
London, ON, Oct 2nd - 4th

Casey Trees'
Tree Canopy Symposium
FHI 360 Conference Center
Washington DC, Oct 18th

Arbor Day Foundation
Partners in Community Forestry
National Conference
Sacramento Convention Center
Sacramento, CA, Nov. 14th - 15th

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integrated, and there's also a new Google Maps-based random plot generator for simple random non-stratified projects. (Future versions will permit plot creation for stratified projects as well.)

i-Tree Eco also provides a public health related report based on the EPA's Environmental Benefits Mapping and Analysis Program (BenMAP). This new feature estimates incidence reduction and economic benefits resulting from tree effects on air quality improvement.

i-Tree Vue features several enhancements in the latest release. These include new summary reports for land cover statistics to provide a refined snapshot of relevant ecosystem service estimates and cover characteristics. A new land cover change tool is also available, allowing users to manually update the National Land Cover Data (NLCD) pixel classification to reflect more recent land cover characteristics based on current imagery.

Development work continues on the **i-Tree Hydro** model, which will be upgraded in the near future as a mid-cycle version 5 update. Check out the "What's New" page of the i-Tree website for more details on version 5.0.

Pennsylvania Workshops Provide i-Tree Streets Training

The Pennsylvania Department of Conservation and Natural Resources and its partners recently offered a pair of two-day workshops in Allentown and New Kensington, PA focusing on basic tree inventory skills and the fundamentals of the i-Tree Streets application. Participants tested out a beta version of the new application, featuring a mobile web form data collection system.

Workshop participants practice i-Tree Streets field data collection. Photo courtesy of Abby Grosslein, TTF Watershed Partnership, Inc.

The participants represented a diverse group of community forestry and allied organizations, including municipalities, non-profit entities, state agencies, community colleges, consultants, private land managers, shade tree councils, and more. In addition to providing two days of hands-on learning in the classroom, field, and computer lab, the i-Tree Team got valuable feedback on the functionality of the new mobile data collection system, which was tested on several devices. The pre-release feedback allowed our developers to address several issues and enhance system operation.

Thanks to all participants, instructors, and especially Ellen Roane, PA Urban & Community Forestry Coordinator, and Christine Ticehurst, TreeVitalize Program Administrator, for their amazing efforts in coordinating the workshops held at opposite ends of the Keystone State. We look forward to hearing how participants are able to apply the tools and workshop lessons in the future!