

# Tools for assessing and managing Community Forests



## i-Tree Newsletter—April 2009

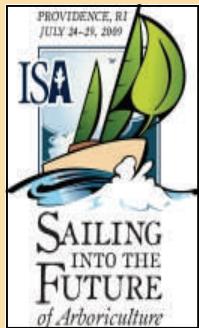
### i-Tree Version 3.0 Workshop Scheduled for ISA Annual Conference in Providence, RI

An i-Tree workshop will be offered on Sunday July 26th, 2009 at the [ISA's Annual Conference and Trade Show](#).

The 4-hour workshop will allow participants to interact with principle developers of i-Tree. An in-depth overview of the latest release of i-Tree will be provided with ample time for participants to ask specific questions and interact with members of the i-Tree Team including Dr. Dave Nowak, Dr. Dave Bloiniarz and Scott Maco.

The workshop is aimed at both new and existing i-Tree users and will provide a stepwise introduction to the newly released version (3.0) of i-Tree focusing on the following elements:

- i-Tree Streets
  - i-Tree Eco
  - i-Tree Storm
  - i-Tree Utilities
- Including i-Tree Species Selector and the i-Tree NLCD Analysis Tool



This workshop will include case studies of how others have successfully used i-Tree to advance urban forest management in their communities and will address the future of i-Tree—its development and opportunity for collaboration.

Additionally, there will be an opportunity for workshop attendees to submit questions and discussion ideas to the

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### Dr. David J. Nowak on The Future of Urban Forestry

Dr. David J. Nowak, Project Leader for the US Forest Service's Northern Research Station shared his vision of the future of urban forestry with attendees at the Society of Municipal Arborists' annual conference last October in San Diego, CA. Here is a timely recap of Dr. Nowak's "Top 10" list of challenges and opportunities for urban forestry to consider as we move into the future.

#### 10. Adopt a Systems Approach

A systems approach requires that urban foresters understand the effects of urban trees and forests within the context of the entire urban ecosystem. The ability to link urban forests with numerous other elements of the landscape (e.g., air, water, soils, people, buildings) will be critical to integrating urban forests with numerous larger environmental and social issues.



Dr. David J. Nowak

#### 9. Measure and Analyze

Quantifying and evaluating structural and functional aspects of community trees is the first step in proper urban forest management. Understanding what the urban forest is (e.g., species composition, number of trees, tree health) and what it does (e.g., air quality improvement, energy conservation) provides a starting point for good forest management. Improved data analysis and modeling capabilities will increase our understanding of important associations between urban forest structure and critical environmental benefits.

#### 8. Data Standardization

Establishing international standards related to urban forest data collection will reduce the costs of urban forest data collection and analyses, facilitate the development of new urban forest tools and comparisons among cities, aid in sharing of data and tools, and help promote urban forest management internationally.

#### 7. Look to the Future

The political and physical climate in which urban forests operate is changing. Managers need to look to issues of the future to make plans now to help sustain urban forest health and programs to meet future societal needs. These future issues include global climate change, exotic pest infestations, catastrophic storms, wild fires, environmental quality and social equity.

#### 6. Long Term Management Plans

An urban forest management plan is a road map allowing one to navigate from where an urban forestry program is today—to where the forest should be

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presenters prior to the workshop, so that the session can focus on addressing the materials that are of interest to the participants. Once [registered](#), you will receive information via e-mail, on the process of submitting your ideas and questions to the presentation team.

## i-Tree Version 3.0 Update: Release Scheduled for Late-May

The i-Tree Development Team is progressing with work on i-Tree version 3.0 which is scheduled for release in late-May 2009. A preview of some of the features can be viewed on the ["What's New"](#) page of the [i-Tree website](#).

### i-Tree Hydro Update

The new i-Tree Hydro application, which will allow users to simulate the effects of changes in tree and impervious cover characteristics within a watershed on stream flow and water quality, will be available this summer as an update to i-Tree v3.0. The Team is working on resolving weather data acquisition and verification procedures needed for this model.

### i-Tree National Land Cover Data (NLCD) Analysis Tool

The i-Tree Development Team is excited to offer a new addition to the i-Tree v3.0 package. An i-Tree NLCD Analysis Tool will be a stand alone utility utilizing freely available National Land Cover Data satellite imagery.

It will provide users with a simple way to examine the amount of existing canopy cover over a region by visualizing current canopy distribution, maximum canopy potential, and the amount of tree cover needed to meet community goals.

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in the future. These plans should detail means to attain specific goals and metrics that can be measured and accomplished based on community needs and desires.

### 5. Monitoring

Monitoring of the urban forest is critical to ensure or verify that long term management goals are attained and to detect urban forest change and destructive pest infestations. Monitoring information will provide essential data in a timely manner to allow managers to adjust management plans to sustain urban forest health and canopy cover for future generations.

### 4. Regional Perspective

Urban forests are part of a larger regional ecosystem. The urban forest affects this surrounding ecosystem and is affected by this ecosystem. Urban foresters need to understand this connection and integrate and work with regional groups to sustain both local and regional environmental quality.

### 3. Integrate with Environmental Programs and Regulations

Cities and states are required to meet various environmental regulations. Urban forests affect the local and regional environment and can improve environmental quality. Urban foresters should tie the impacts of their urban forest more directly to these environmental regulations to help cities and states meet these environmental standards. Urban forests can potentially help meet [clean air standards](#), clean water standards (e.g., total maximum daily load requirements) and can potentially have an impact on existing or future carbon reduction initiatives.

### 2. New Public Investments

As urban forests provide environmental benefits to the general public, new and innovative means for funding public investment in urban forests needs to be created to facilitate the creation and maintenance of urban forests in cities throughout the United States.

### 1. Coordination, Integration, and Education

Urban foresters need to identify and capitalize on opportunities for collaboration and integration with local and regional initiatives that exists with organizations such as:

- [ICLEI Local Governments for Sustainability](#)
- [US Conference of Mayors](#)
- [LEED performance criteria](#)
- US EPA and other governmental programs
- City and regional planners
- Others entities where community trees can be connected

In addition, urban forestry and its environmental impacts need to be integrated within K-12 school programs to help educate future generations on the importance, maintenance, and impacts of this vital resource. This integration and education will be vital to enhancing a healthy and well-managed urban forest through the coming decades.

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## i-Tree Academic Initiative Update

The i-Tree Academic initiative continues its development with the introduction of a beta version of a high school level laboratory exercise that utilizes i-Tree data collection procedures.

This beta exercise was distributed to a group of 40 teachers from across the country, who attended the National Science Teachers Association (NSTA) Annual Conference in New Orleans in March. The release of Version 1.0 of the laboratory exercise is planned for late June, based on feedback from this pilot test group.

In addition to this effort, development of the i-Tree Academic web-based resource site is planned for launch in late-May. This web tool will provide educators at the college level with templates for classroom and laboratory exercises, as well as provide a User's Forum for educators and other members of the i-Tree Academic community.

The launch of the web resources will provide a single source of information, tools and educational resources for use in the college setting.

Finally, a late-April web session is being planned to bring together i-Tree Academic partners before the end of this semester. Details on this session are upcoming and will be posted on the i-Tree website and forum.

## Marketing i-Tree Results Strategically

i-Tree project managers often have to make difficult decisions to successfully plan, implement and complete an i-Tree urban forest assessment project. As budgets and available resources continue to diminish due to an uncertain economic outlook, project managers may consider eliminating or reducing non-essential components of a project. However, an often-overlooked but equally important aspect of project planning is how to effectively market i-Tree results once a project is finished.

During the past months, we have been learning from communities who have successfully completed i-Tree projects to influence decision makers, advance policy and raise awareness. During our discussions, we discovered that there is an advantage in marketing your i-Tree results strategically to reach and influence a target audience such as politicians, administrators, potential program donors and local residents.

Many people are familiar with the [“Trees Pay Us Back” price tag campaign](#) which was originally created by C.E.L., a public relations and marketing firm, for

the Minnesota Department of Natural Resources after completing the Minneapolis i-Tree Pilot Project in 2006. This concept was highly successful as a media hook because it was simple, visually compelling and memorable. Many communities have since adapted this approach along with other innovative ways of delivering their tree-benefit message to a targeted audience.

More recently, the [Friends of Pittsburgh’s Urban Forests](#) presented a giant check to Mayor Ravenstahl for 2.4 million dollars payable to the “City of Pittsburgh residents” from the [“Street Trees of Pittsburgh”](#) which received wide media coverage. The [City of Stevens Point, WI](#) utilized several creative marketing methods including developing informational brochures and displaying bus signs to promote awareness of the value of their community trees after completing a STRATUM analysis of the city’s 7100 street trees. The City of Milwaukee is currently developing a thought-provoking electronic billboard campaign intended to educate citizens and promote tree benefit awareness after completing a UFORE analysis of their community tree resource.

Please continue to share your ideas with others by letting us know and we will feature more in the near future.



City of Stevens Point, WI buses displaying “Tree-mendous Benefits” signs courtesy of Todd Ernster.

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