

## UK i-Tree Eco pilot

**A high-profile computer program that quantifies the ecological benefits provided by trees and shrubs is to be trialled in the UK this summer. Kenton Rogers of Hi-Line Consultancy outlines the project.**

**In 2005 the Millennium Ecosystem Assessment concluded that we systematically undervalue the ecosystem services that are provided by our natural assets, and as a result in the last 50 years we have degraded two-thirds of them.**

The recent Trees and Climate Adaptation Seminar held in London highlighted the need for trees to be more widely appreciated for their beneficial contribution to the environment. At the 2009 World Forestry Congress the role of trees in mitigating climate change was also stressed during the plenary sessions on urban and peri-urban forests. In addition, many recent publications and prominent voices from within the industry have highlighted shortfalls and knowledge gaps.

Yet without any means of measuring these ecosystem services no baseline can be established from which to monitor

future progress. If you can't measure your resource, then how can it be managed?

This summer in Torbay we will be running a pilot i-Tree Eco project to measure the value of the ecosystem services that the town's trees provide. The project will apply a system that has been successfully used in other countries but which has not yet been adapted for the UK climate and growing conditions.

Since hearing about the system at last year's World Forestry Congress, we have been engaging with the Davey Tree Expert Company (the US developers of the program) and Forest Research to get a UK pilot off the ground in order to address the current limitations of the model when used in the UK. Most significantly, we need to collate UK-region-specific data on species growth rates, energy use, pollution and climate. These factors need to be incorporated into the model. In April the project team visited the US to see how

this might best be achieved and to receive technical training and review case studies.

Once the pilot is complete the i-Tree model can be run without these limitations, thereby improving its validity and ensuring that the data it produces is as accurate and as relevant as possible.

i-Tree will be updated with our data by the Davey Group (in the US) and Forest Research so that future UK projects can be undertaken with a specific UK benchmark and the system can be applied to other towns and cities here.

The results from the Torbay project will be available by early 2011. It will constitute a very useful exercise in quantitatively measuring the ecosystem services of Torbay's trees and assessing their worth. However, even greater benefit will be realised when there are other UK i-Tree Eco projects from which comparisons can be drawn.

This UK pilot is being delivered as a partnership between Hi-Line, Forest Research, Natural England and Torbay Council. Hi-Line is happy to share the experience, can provide project assistance and is able to offer a point of training in the UK. If you are interested in setting up an i-Tree Eco project visit [www.hilineconsultancy.co.uk](http://www.hilineconsultancy.co.uk).

[kentonrogers@hi-lincontractors.co.uk](mailto:kentonrogers@hi-lincontractors.co.uk)



Neil Coish (Torbay) receiving instruction on i-Tree Eco from Al Zelaya (Davey).

### What is i-Tree?

i-Tree is a peer-reviewed software suite (originally The Urban Forest Effects Model (UFORE)) designed by the United States Forest Service. i-Tree has been used to quantify urban forest structure, function and values in numerous communities throughout the world. Randomly generated plots stratified by land use type combined with local pollution and meteorological data can quantify the ecological benefits provided by trees and shrubs.

By understanding the local, tangible ecosystem services that trees provide, i-Tree users can link urban forest management activities with environmental quality and community livability. i-Tree provides the baseline data that can be used to demonstrate value and therefore set priorities for more effective decision-making.

More information is available at: [www.itreetools.org](http://www.itreetools.org).