

Implementation of i-Tree Eco in the Netherlands: a three year study in 14 cities

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ABSTRACT

It is well known that trees are beneficial for the environment and wellbeing of people and i-Tree Eco can help with the recognition of these benefits for citizens or policy makers. Inspired by other i-Tree reports around the world, Platform i-Tree Netherlands originated as a unique collaboration between government, scientific institutions and arboricultural consultancies. Over the last three years this collaboration performed two pilot studies and 14 cities entered these studies. The objective of the first pilot was to understand and be able to use i-Tree Eco in the Netherlands using data collected in the field in complete inventories. During the second pilot the aim was to study the minimalisation of fieldwork using satellite data and to further look into the ecosystem services of trees. For each of the 14 cities one or several project areas were chosen and a complete inventory was done on the registered trees in that area. Missing data from tree inventories, supplied by the cities, were supplemented by data using formulas based on literature or data from the first pilot. Location data and benefit prices for the Netherlands were checked. Satellite data and formulas for stem diameter and base height were validated for their use in i-Tree Eco in the Netherlands. In conclusion, i-Tree Eco can be successfully applied in the Netherlands in complete inventories using satellite data. The results stress the importance of the size of a tree and not the number of trees.

BIOGRAPHY

Wendy Batenburg is an arboricultural consultant and involved in research & development at Terra Nostra. She worked as a senior research scientist at an academic institution for years and published many scientific papers in international journals. In 2015 she started working in arboriculture at Terra Nostra, knowledge center for trees and soil. Terra Nostra is an innovative arboricultural consultancy in the Netherlands involved in scientific research and product development. Over the last few years Terra Nostra has been involved in the implementation of i-Tree Eco in the Netherlands as project leader and with Wendy as the project coordinator.