PROJECTOVERVIEW

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UNRI
The Urban
Natural
Resources
Institute

www.unri.org

Tree Facts

Serving Size: 27 in DBH (68.6 cm)
Species: Red Maple, ***Acer rubrum***

Amount Per Serving	
Carbon sequestered 222 lbs	avoided 466 lbs
	% Annual Value*
Total Carbon 690 lbs	
O3 $4.24	
VOC(Volatile Organic Compounds) $ 1.57	
NO2(Deposited) $ 1.83	
NO2(Avoided) $ 6.06	
SO2(Deposited) $ 0.54	
SO2(Avoided) $ 2.37	
PM10(Deposited) $3.83	
PM10(Avoided) $ 0. 71	
Conserved Kilowatt/hours 155 KwH	
Reduced oil/natural gas consumption 56 therm(s)	
Stormwater intercepted 3,472 gallons	
Property value increase $168.00	Natural Gas $79.09
Storm water $27.77	Electricity $21.76

*It should be noted that trees themselves emit biogenic volatile organic compounds (BVOCs) which can contribute to ground-level ozone production. This may negate the positive impact the tree has on ozone mitigation for some high emitting species (e.g. Willow Oak or Sweetgum). However, the sum total of the tree's environmental benefits always trumps this negative.

Source
www.treebenefits.com/calculator/ReturnValues.cfm?climatezone=Northeast

USDA Forest Service's Center for Urban Forest Research

i-Tree Tools CD ROM http://www.itreetools.org/

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Tree Nutrition Labels

A Summary of Tree Benefits

prepared by David Bloniarz, USDA Forest Service and Christopher Pineau, University of Massachusetts/Amherst

The USDA Forest Service Urban Natural Resources Institute (UNRI), in partnership with the University of Massachusetts, the Massachusetts Department of Conservation and Recreation (DCR) and the Town of Amherst, MA have recently completed a unique public awareness project that involved the development of 'Tree Benefits Labels" to illustrate the ecosystem services provided by urban trees. The labels, which are modeled on the food nutrition labels found on grocery products, provide a listing of benefits provided by the trees, in a format that is familiar to many.

The Nutrition Labels utilize the scientific calculations developed in the i-Tree Streets software tools, and provide a varied summary of the ecosystem services provided by a tree growing in an urban setting. The idea of the project is to provide the general public with information in a creative and attention getting manner. The inclusion of a 'bar-coded' scanning identifier on the label helps to get a person's attention as they pass by the labels which are hung from tree trunks in conspicuous public locations.

The Nutrition Labels were first used at the Amherst, MA Sustainability Festival, which was recently held on a public common in the center of the town, which is home to the University of Massachusetts. Over 40 trees were initially surveyed, and the benefits for each was calculated using the Tree Benefits Calculator developed by Casey Trees in Washington, DC. The labels were then produced and printed in large format, mounted on recycled materials, and hung from each tree on the public common. Hundreds of individuals attended the event and were able to view the labels throughout the day.

It is anticipated that communities and organizations that will be holding events for the public will utilize this concept to demonstrate the importance and quantifiable benefits provided by trees in urbanized settings.

For more information, please contact David Bloniarz, UNRI Project Coordinator at dbloniarz@fs.fed.us or visit www.itreetools.org