

- Conservation Magazine - <http://www.conservationmagazine.org> -

Tree Fall

Posted By [dmalakoff](#) On February 8, 2012 @ 12:06 am In [Cities,Conservation Science,Flora+Fauna](#) | [2 Comments](#)



^[1]Urban development may have thrown a kink into novelist Betty Smith's central metaphor for life: It might not be so easy for a tree to grow in Brooklyn today. A new analysis of aerial photographs taken from above 20 cities shows an alarming and not-green trend. Trees seem to be dwindling across urban America.

Trees, from broad-leafed maples to tall oaks, give urbanites a little shade and eye candy. They can also help to freshen a bustling city's air. But these leafy plants are expensive to sow, and are easily felled by fierce winds, old age and new development. Cities that don't restock their walnut or cottonwoods may soon begin to run out, say David Nowak and Eric Greenfield at the U.S. Department of Agriculture's Northern Research Station in Syracuse, New York.

To see just how well U.S. cities are keeping pace, the researchers turned to a series of wide panoramic shots taken from high above urban areas, including Chicago, New York and New Orleans. These towns differed wildly in their green cover, ranging from Atlanta—whose surface is more than half tree—to Denver—less than 10%. The team poured through the images like before and after weight-loss photos, gauging the growth or spread of shade during the mid-to-late 2000s.

On the whole, tree cover shrank in 17 out of the 20 cities. The losses amounted to about 7,900 hectares of greenery per year or 4 million trees, the researchers report in the current issue of *Urban Forestry & Urban Greening*. New Orleans had the most fallen timber, they add, for a very obvious reason—Hurricane Katrina. Between 2005 and 2009, close to 30% of the city's existing tree cover was washed away.

But it wasn't all bad news. Trees took root across Syracuse's neighborhoods from 2003 to 2009, covering an extra 1% of the northern town's area. Most of this bonus shrubbery was dominated by European buckthorn (*Rhamnus cathartica*), a hedge-like plant newly arrived in the United States. That suggests that the city's gains may be accidental, not the result of concerted planting efforts, Nowak and Greenfield say.

For many towns, extensive planting may not be an option, the researchers say. Los Angeles, for instance, lacks the water to sustain hundreds of new trees. But a little prevention could go a long way, they add: More responsible grass mowing practices, for instance, can give trees a better shot at surviving their first years. With a little luck, new trees could grow in Brooklyn, after all. — **Daniel Strain | February 8, 2012**

Source: Nowak DJ and Greenfield EJ. (2012). Tree and impervious cover change in U.S. cities. *Urban Forestry & Urban Greening*, 11(1). <http://www.sciencedirect.com/science/article/pii/S1618866711000999>. DOI: 10.1016/j.ufug.2011.11.005.

Image © Yuryz | Dreamstime.com

- [Share/Bookmark](#) ^[2]

Article printed from Conservation Magazine: <http://www.conservationmagazine.org>

URL to article: <http://www.conservationmagazine.org/2012/02/tree-fall/>

URLs in this post:

[1] Image: <http://www.conservationmagazine.org/wp-content/uploads/2012/02/Tree-small.jpg>

[2] Share/Bookmark: http://www.addtoany.com/share_save?linkurl=http%3A%2F%2Fwww.conservationmagazine.org%2F2012%2F02%2Ftree-fall%2F&linkname=Tree%20Fall

Copyright © 2010 Conservation Magazine. All rights reserved.