

GLOBAL GREENING: Scientists Find ‘Lost’ Forests The Size Of Seven Texas

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Scientists looking at forest cover in some of the world’s driest places found something astounding — “lost” forests covering an area nearly seven times the size of Texas.

“We found new dryland forest on all inhabited continents, but mainly in sub-Saharan Africa, around the Mediterranean, central India, coastal Australia, western South America, northeastern Brazil, northern Colombia and Venezuela, and northern parts of the boreal forests in Canada and Russia,” biologists Andrew Lowe and Ben Sparrow wrote of their study, which had 28 other co-authors.

“In Africa, our study has doubled the amount of known dryland forest,” Lowe and Sparrow wrote in a recent oped for The Conversation detailing how they “found” millions of acres of “lost” forests not accounted for in previous research.

Lowe and Sparrow’s study found that 1.3 billion hectares of drylands with more than 10 percent tree cover in 2015, which is a 40 to 47 percent increase from previous estimates. Finding 1.2 billion acres of “missing” forests is equivalent to nearly seven Texas.

“This increases current estimates of global forest cover by at least 9%,” reads the study’s abstract. Lowe and Sparrow say the increase in forest cover means forests hold up to 20 percent more carbon dioxide than previously thought.

The co-authors say previous studies missed the vast amounts of forests on drylands because they were based off “older, low-resolution satellite images that did not include ground validation.” These forests also have relatively low tree density.

Patrick Michaels, a climate scientist with the libertarian Cato Institute, said the study reinforces the argument that man-made carbon dioxide emissions are causing global greening, in contrast to the global browning predicted by climate models.

“This may lead to a remarkable hypothesis — that one of the reasons the forested regions were undercounted in previous surveys (among other reasons) is that there wasn’t enough vegetation present to meet Bastin’s criterion for ‘forest,’ which is greater than 10% tree cover, and carbon dioxide and global warming changed that,” Michaels wrote in a blog post.

Lowe and Sparrow say climate models predict drylands to expand as human activities cause the Earth to warm, and argue dryland forests should be conserved to help fight global warming.

But previous studies suggest the same emissions scientists blame for global warming may also be increasing vegetation and tree cover through carbon dioxide “fertilization.”

A 2016 study by an international team of scientists found about half the Earth's landmass showed "significant" greening while only 4 percent was browning.

"We were able to tie the greening largely to the fertilizing effect of rising atmospheric CO2 concentration by tasking several computer models to mimic plant growth observed in the satellite data," Ranga Myneni, a study co-author, said in a statement.

That same study found that while climate models incorrectly predicted browning to occur in the western U.S., satellite observations showed widespread greening in the region.

A 2013 by Australia's Commonwealth Scientific and Industrial Research Organisation found "CO2 fertilisation correlated with an 11 per cent increase in foliage cover from 1982-2010 across parts of the arid areas studied in Australia, North America, the Middle East and Africa."