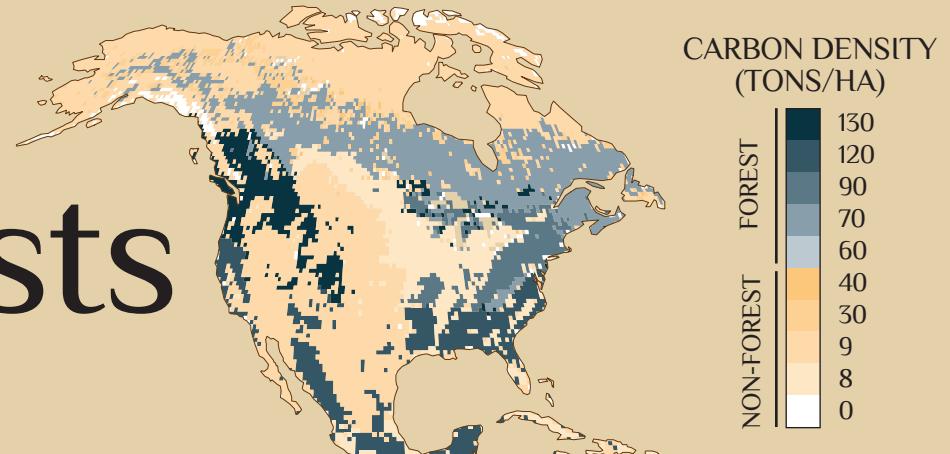


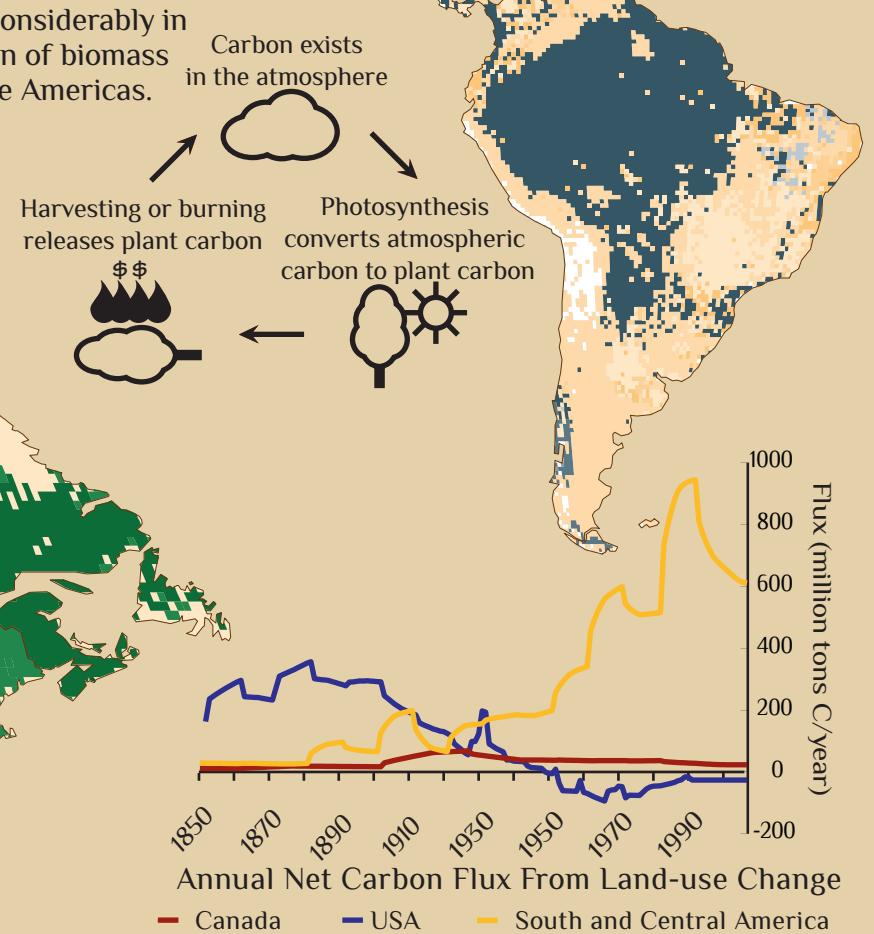
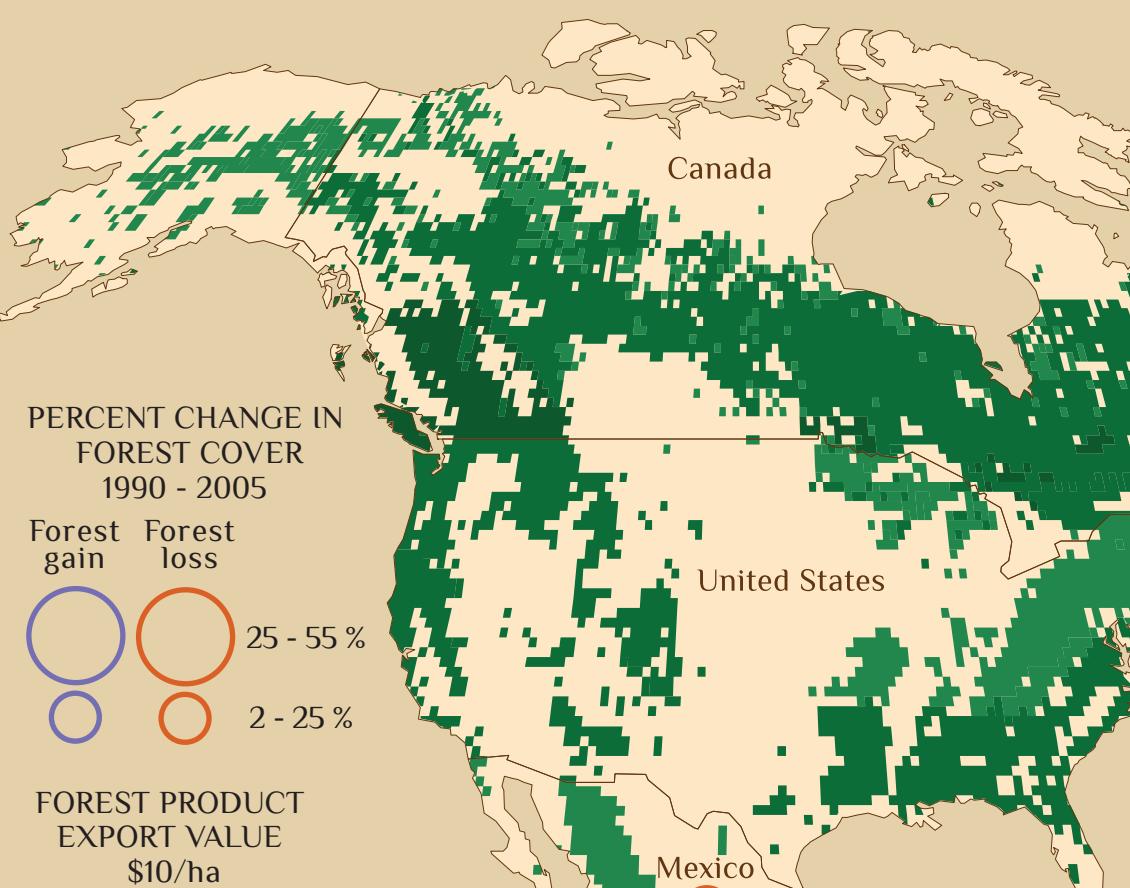
# The Value of America's Forests





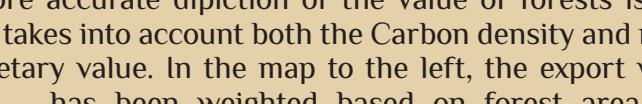
## 1. FORESTS AND THE CARBON CYCLE

Forests are the product of photosynthesis, where plants convert atmospheric Carbon to plant tissue, or biomass. When land is cleared, or forest products are harvested, the Carbon stored in the biomass is often released, returning the Carbon to the atmosphere. The forests of America vary considerably in the total amount of biomass in a given area. The map to the right shows the distribution of biomass density in forests and non-forest areas throughout the Americas.



### 3. A COMBINED LOOK AT FOREST VALUE

A more accurate depiction of the value of forests is one that takes into account both the Carbon density and monetary value. In the map to the left, the export value for Haiti has been weighted based on forest area and Carbon density, with high Carbon having greater weight. This information, combined with the percent change in forest cover allows us to better understand Carbon emissions from 3 regions, seen in the graph above.



The map shows the island of Hispaniola, which includes the Dominican Republic and Haiti. The northern part of the island (the Dominican Republic) is shaded in green, while the southern part (Haiti) is shaded in yellow. A red circle highlights the northern region, specifically the Dominican Republic. Below the map, there is a small graphic of a person's head and shoulders, with a red circle drawn around it.



## 2. SELLING FOREST PRODUCTS

Forests have economic value due in part to timber and other products that can be extracted and sold. While a traditional view of forest export value by country, seen to the right, shows the pattern of forest value across all countries, it does not associate the value to forested areas. There is no information about the very forests the values are representing.

Produced by  
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February 2012

Carbon density:  
Olson's Major World Ecosystems  
ranked by Carbon in Live  
Vegetation: An Updated Database  
from the GLC2000 Land Cover Product.  
Available at  
[diacornl.gov/epubs/ndp/07b.html](http://diacornl.gov/epubs/ndp/07b.html) from the Carbon  
Allocation Analysis Center, Oak Ridge  
National Laboratory, Oak Ridge, Tennessee, U.S.A.

Forest export value and area coverage:  
World Resources Institute. 2007. EarthTrends: Environmental Information. Available at [<http://earthtrends.wri.org>]. Washington DC: World Resources

Houghton, R.A. 2008. Carbon Flux to the Atmosphere from Land-Use Changes: 1850–2005. In TRENDS: A Compendium of Data on Global Change. Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, U.S. Department of Energy, Oak Ridge, Tenn., U.S.A.