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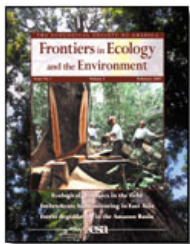
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Jonathan A. Foley, Gregory P. Asner, Marcos Heil Costa, Michael T. Coe, Ruth DeFries, Holly K. Gibbs, Erica A. Howard, Sarah Olson, Jonathan Patz, Navin Ramankutty, and Peter Snyder. 2007. Amazonia revealed: forest degradation and loss of ecosystem goods and services in the Amazon Basin. *Frontiers in Ecology and the Environment* 5: 25–32. [http://dx.doi.org/10.1890/1540-9295\(2007\)5\[25:ARFDAL\]2.0.CO;2](http://dx.doi.org/10.1890/1540-9295(2007)5[25:ARFDAL]2.0.CO;2)

Reviews

Amazonia revealed: forest degradation and loss of ecosystem goods and services in the Amazon Basin

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The Amazon Basin is one of the world's most important bioregions, harboring a rich array of plant and animal species and offering a wealth of goods and services to society. For years, ecological science has shown how large-scale forest clearings cause declines in biodiversity and the availability of forest products. Yet some important changes in the rainforests, and in the ecosystem services they provide, have been underappreciated until recently. Emerging research indicates that land use in the Amazon goes far beyond clearing large areas of forest; selective logging and other canopy damage is much more pervasive than once believed. Deforestation causes collateral damage to the surrounding forests – through enhanced drying of the forest floor, increased frequency of fires, and lowered productivity. The loss of healthy forests can degrade key ecosystem services, such as carbon storage in biomass and soils, the regulation of water balance and river flow, the modulation of regional climate patterns, and the amelioration of infectious diseases. We review these newly revealed changes in the Amazon rainforests and the ecosystem services that they provide.

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