

Curriculum Vitae
Ruth S. DeFries

Contact information

Ecology, Evolution, and Environmental Biology
Columbia University
New York, NY 10027
tel: 1 212 851 1647; fax: 1 212 854 8188
rd2402@columbia.edu

Current Appointment

Denning Professor of Sustainable Development, Columbia University, New York

Previous Appointments

Associate Professor and Professor (1999 - 2008), University of Maryland, College Park
Joint appointment in Department of Geography and Earth System Science Interdisciplinary Center
Associate Research Scientist (1992-1999), Department of Geography, University of Maryland, College Park
Senior Project Officer (1983 - 1992), National Research Council, Washington, D.C.
Research Associate (1981 - 1983), Environmental Science and Engineering Group, Indian Institute of Technology,
Bombay, India
Hydrologist (Oct 1979 - Oct 1980), United States Geological Survey, Baltimore, MD

Education

Ph.D. (1980), Dept of Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD
B.A., *summa cum laude* (1976), Washington University, St. Louis, MO (major in earth science)

Areas of Expertise

Consequences of land use change in the tropics on ecological processes;_Characterization of land cover and anthropogenic land use change with remote sensing;_Interactions between human activities, the land surface, and ecosystem services that regulate the Earth's habitability.

Fellowships and Honors

MacArthur Fellowship "genius" award, 2007
Member, National Academy of Sciences (elected 2006)
Fellow, American Academy of Arts and Sciences (elected 2010)
Fellow, American Association for the Advancement of Science (elected 2008)
Fellow, American Geophysical Union (elected 2009)
Fellow, Aldo Leopold Leadership Program of the Ecological Society of America (2001)
Fulbright Award for Research in India (2007)

Representative Recent Publications

DeFries, R. and C. Rosenzweig, 2010. Toward a whole-landscape approach for sustainable land use in the tropics. *Proceedings of the National Academy of Sciences* **107**,46: 19627-19632.
DeFries, R., Rudel, T., Uriarte, M., and Hansen, M. 2010. Deforestation driven by urban population growth and agricultural trade in the twenty-first century. *Nature Geosciences* 3: 178-181.
Rudel, T. K., DeFries, R., Asner, G. and W. Laurance. 2009. Changing drivers of deforestation and new opportunities for conservation. *Conservation Biology* 23: 1396-1405.
Asner, G., Rudel, T., Aide, T.M., DeFries, R. and R. Emerson. 2009. A contemporary assessment of global humid tropical forest change. *Conservation Biology* 23: 1386-1395.
DeFries, R., and D. Pandey. 2010. Urbanization, the energy ladder and forest transitions in India's emerging economy: Trade-offs and synergies for ecosystem services and human well-being. *Land Use Policy* 27: 130-138.
DeFries, R. 2008. Terrestrial vegetation in the coupled human-earth system: Contributions of remote sensing. *Annual Review of Environment and Resources* **33**:369-390.
DeFries, R., F. Achard, F. Brown, M. Herold, D. Murdiyarso, B. Schlamadinger and C. M. Souza. 2007. Earth observations for estimating greenhouse gas emissions from deforestation in developing countries. *Environmental Science and Policy*. 10: 385-394.