Curriculum Vitae

Ruth S. DeFries
Department of Ecology, Evolution, and Environmental Biology
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Current Appointment

Co-founding dean, Columbia Climate School (2021-present)
Denning University Professor of Sustainable Development, Columbia University, New York (2008-present)

Previous Appointments

Chair, Earth Institute Faculty (2018-2021)
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

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

Climate change, land use and tropical forests; conservation; social-ecological systems; sustainability science

Fellowships and Honors

MacArthur Fellowship (2007)
Member, National Academy of Sciences (elected 2006)
University Professor (highest faculty rank), Columbia University (2016)
Fellow, Ecological Society of America (elected 2012)
Distinguished Scholar Award, American Association of Geographers (2015)
Oosting Lecture, Duke University (2016)
Honorary Doctorate, McGill University (2016)
Honorary Doctorate, University of Leuven Belgium (2017)
Breakthrough Paradigm Award (2014)
Fellow, American Academy of Arts and Sciences (elected 2010)
Fellow, American Geophysical Union (2009)
Fellow, American Association for the Advancement of Science (elected 2008)
Fellow, Aldo Leopold Leadership Program of the Ecological Society of America (2001)
Fulbright Award for Research in India (2007)

Representative Recent Publications

DeFries, R., M. Agarwala, S. Baquie, P. Choksi, S. Khanwilkar, P. Mondal, H. Nagendra, and J. Urpelainen. 2021. Improved Household Living Standards Can Restore Dry Tropical Forests. *Biotropica*.

DeFries, R. and H. Nagendra. 2017. Ecosystem management as a wicked problem. *Science*, 356**,** 265-270.

DeFries, R., J. Fanzo, R. Remans, C. Palm, S. Wood, and T. Anderman. 2015. Metrics for land-scarce agriculture: Nutrient content must be better integrated into planning. *Science* **349**:238-240.

DeFries, R., E. C. Ellis, F. S. I. Chapin, P. A. Matson, B. L. Turner II, A. Agrawal, P. J. Crutzen, C. Field, P. Gleick, P. Kareiva, E. Lambin, D. Liverman, E. Ostrom, P. Sanchez, and J. Syvitski. 2012. Planetary opportunities: A social contract for global change science to contribute to a sustainable future. *BioScience* **62**:603-606.

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.K., Uriarte, M., and Hansen, M., 2010. Deforestation driven by urban population growth and agricultural trade in the twenty-first century. *Nature Geoscience*, 3, 178-181.

Books for Popular Audiences

DeFries, R. 2021. *What Would Nature Do?: A Guide for Our Uncertain Times*. Columbia University Press. 264.pp.

DeFries, R. 2014. *The Big Ratchet: How Humanity Thrives in the Face of Natural Crisis*. Basic Books. 288 pp.

Silver, C and DeFries, R. 1990. *One Earth, One Future: Our Changing Global Environment*. National Academy Press. Washington, D.C. 196 pp. (translated into French, Portuguese, Arabic, and Japanese)