

DANIEL NEPSTAD

Education/Qualifications

PhD, 1989 Forest Ecology, Yale University
MS, 1983 Plant Ecology/Botany, Michigan State University
BS, 1979 Botany, Kalamazoo College

Relevant Professional Experience

Director, Earth Innovation Institute (Formerly the IPAM International Program). (October 2010-present); Founding President of Board of IPAM.
Visiting Distinguished Scientist. Woods Hole Research Center. (2010-present)
Senior Scientist. Woods Hole Research Center. (1999 – 2008, 2009 – 2010)
Chief Program Officer, Environmental Conservation Program, Gordon and Betty Moore Foundation. (July 2008 – July 2009)
Visiting Professor. Universidade Estadual de Mato Grosso, Nova Xavantina. (2007-present)
Lecturer. Yale University, School of Forestry & Environmental Studies. (2000-2005)

Leadership and Advisory Roles Relevant to the Proposal

Governors Climate and Forest Taskforce Fund, Board of Directors (2012-present)
California Air and Resources Board Working Group on REDD. Designing REDD architecture linking CA AB32 (cap-and-trade) with Acre and Chiapas REDD programs. (Jan 2011-present)
Acre State Government, REDD Program. Science and Technical Advisory Committee (2010-present)
Intergovernmental Panel on Climate Change. Lead Author, Working Group 2, Chapter 4 (Terrestrial and Inland Water Systems), AR5 (2010-)
World Bank. External Advisory Group. Forest Sector. (2010 to present)
Responsible Soy Roundtable (RTRS). Founding Board Member (2006-2007)
RTRS. Elected to international criteria development group (2007-2008)
Aliança da Terra (Land Alliance), Co-Founder (conservation NGO comprised of cattle ranchers and soy farmers)
Forest Trends, Board of Directors (2010 to present)
Pew Scholar Award in Conservation and Environment (1994 – 1997)

Languages

English (native speaker), Portuguese (advanced high reading, writing, speaking), Spanish (intermediate reading, speaking)

Key Publications (128 peer review papers and books published)

Nepstad, D. C., W. Boyd, C. M. Stickler, T. Bezerra, and A. Azevedo. 2013. Responding to climate change and the global land crisis: REDD+, market transformation, and low emissions rural development. *Philosophical Transactions of the Royal Society*.

Nepstad, D. C., D. G. McGrath, and B. Soares. 2012. Systemic Conservation, REDD, and the Future of the Amazon Basin. *Conservation Biology* **25**:1113-1116.

Nepstad, D. C., P. Moutinho, W. Boyd, A. Azevedo, T. Bezerra, B. Smid, M. C. C. Stabile, C. Stickler, and O. Stella. 2012. *Re-framing REDD+: Unlocking jurisdictional REDD+ as a policy framework for low-emission rural development: research results and recommendations for governments*. IPAM-IP, San Francisco.

Nepstad, D. C., W. Boyd, A. Azevedo, T. Bezerra, B. Smid, R. M. Vidal, and K. Schwalbe. 2012. *Overview of State-based Programs to Reduce Emissions from Deforestation and Degradation (REDD) as part of the Governors' Climate and Forest Task Force*. EPRI, Palo Alto, CA.

Soares-Filho, B., R. Silvestrini, D. Nepstad, P. Brando, H. Rodrigues, A. Alencar, M. Coe, C. Locks, L. Lima, L. Hissa, and C. Stickler. 2012. Forest fragmentation, climate change and

understory fire regimes on the Amazonian landscapes of the Xingu headwaters. *Landscape Ecology* 27:585-598.

- Stickler, C. M., T. P. R. Bezerra, and D. C. Nepstad. 2012. *Global rules for sustainable farming*. IPAM and the Roundtable for REDD (RT-REDD) Consortium.
- Stickler, C., D. C. Nepstad, M. C. C. Stabile, A. Azevedo, and T. Johns. 2012. Slowing Climate Change through Better Farming. Instituto de Pesquisa da Amazonia, Brasilia.
- Balch, J. K., D. C. Nepstad, L. M. Curran, P. M. Brando, O. Portela, P. Guilherme, J. D. Reuning-Scherer, and O. de Carvalho Jr. 2011. Size, species, and fire behavior predict tree and liana mortality from experimental burns in the Brazilian Amazon. *Forest Ecology and Management*, 261:68-77.
- Brando, P. M., S. J. Goetz, A. Baccini, D. C. Nepstad, P. S. A. Beck, and M. C. Christman. 2011. Seasonal and interannual variability of climate and vegetation indices across the Amazon. *Proceedings of the National Academy of Sciences of the United States of America* 107:14685-14690.
- Lewis, S. L., P. M. Brando, O. L. Phillips, G. M. F. van der Heijden, and D. Nepstad. 2011. The 2010 Amazon Drought. *Science*, 331:554-554.
- Nepstad, D. C. 2011. Recognizing and Managing the Tropical Agricultural Revolution in Latin America and the Caribbean, *Technical Notes*, pp. 16. Inter-American Development Bank.
- Nepstad, D. C., D. G. McGrath, and B. Soares-Filho. 2011. Systemic Conservation, REDD, and the Future of the Amazon Basin. *Conservation Biology* 25:1113-1116.
- Silvestrini, R., B. Soares-Filho, D. Nepstad, M. Coe, H. Rodrigues, and R. Assuncao. 2011. Simulating fire regimes in the Amazon in response to climate change and deforestation. *Ecological Applications* 21:1573-1590.
- Soares-Filho, B. S., P. Moutinho, D. Nepstad, et al. 2010. Role of Brazilian Amazon protected areas in climate mitigation. *Proceedings of the National Academy of Science*, www.pnas.org/cgi/doi/10.1073/pnas.0913048107
- Balch, J., D. Nepstad, P. Brando, A. Alencar. 2010. Comment on "The Incidence of Amazon Fire with Implications for REDD". *Science* 330:1627.
- Merry, F., B. Soares-Filho, D. Nepstad, G. Amacher, and H. Rodrigues. 2009. Balancing conservation and economic stability: the future of the Amazon timber industry. *Environmental Management* DOI DOI 10.1007/s00267-009-9337-1
- Brando, P., D. Nepstad, E. Davidson, D. Ray, S. Trumbore, P. Camargo, P. Moutinho. 2008. Drought effects on litterfall, stemwood production, and belowground carbon cycling in an Amazon forest: results of a throughfall reduction experiment. *Philosophical Transactions of the Royal Society - B* 363:1839-1848.
- Nepstad, D., B. Soares-Filho, F. Merry, A. Lima, P. Moutinho, J. Carter, M. Bowman, A. Cattaneo, H. Rodrigues, S. Schwartzman, D. McGrath, C. Stickler, et al.. 2009. The end of deforestation in the Brazilian Amazon. *Science* 326: 1350-1351.
- Stickler, C.M., D.C. Nepstad, M.T. Coe, D.G. McGrath, H.O. Rodrigues, W.S. Walker, B.S. Soares-Filho, and E.A. Davidson. 2009. The potential ecological costs and cobenefits of REDD: a critical review and case study from the Amazon region. *Global Change Biology* 15:2803-2824
- Balch, J., D. Nepstad, P. M. Brando, L. M. Curran, O. Portela, O. Carvalho, Jr., P. Lefebvre. 2008. Negative fire feedback in a transitional forest of southeastern Amazonia. *Global Change Biology* 14, 1-12, doi: 10.1111/j.1365-2486.2008.01655.x
- Nepstad, D.C., C.M. Stickler, B. Soares-Filho, and F. Merry. 2008. Interactions among Amazon land use, forests and climate: prospects for a near-term forest tipping point. *Philosophical Transactions of the Royal Society - B*. doi:10.1098/rstb.2007.0036
- Nepstad, D., C. Stickler. 2008. Managing the tropical agriculture revolution. *Journal of Sustainable Forestry* 27 (1-2): 43-56.
- Nepstad, D. C., O. Carvalho, Jr., J. Carter, A. Moita, V. Neu, G. Cardinot. *Manejo e recuperação de mata ciliar nas regiões florestais da Amazônia*. 2007. (Management and recuperation

- of riparian zone forests of Amazon forest regions). Instituto de Pesquisa Ambiental da Amazonia, Belém, Brazil. 68 pages
- Gullison, R. E., P.C. Frumhoff, J. G. Canadell, C. B. Fields, D. C. Nepstad, et al. 2007. Tropical forests and climate policy. *Science* (Policy Forum) Pages 1-3/10.1126/science.1136163
- Lima, E., F. Merry, D. Nepstad, G. Amacher, C. Azevedo-Ramos, P. Lefebvre, F. Resque Jr. 2006. Searching for sustainability: forest policies, smallholders, and the Trans-Amazon highway. *Environment* 48(1): 26-38.
- Nepstad, D., S. Schwartzman, B. Bamberger, M. Santilli, P. Schlesinger, P. Lefebvre, A. Alencar, D. Ray, E. Prinz, A. Rolla. 2006. Inhibition of Amazon deforestation and fire by parks and indigenous reserves. *Conservation Biology* Vol. 20(1): 65-73.
- Nepstad, D., C. Stickler, O. Almeida. 2006. Globalization of the Amazon beef and soy industries: opportunities for conservation. *Conservation Biology* 20(6): 1595-1603.
- Soares-Filho, B., D. Nepstad, L. Curran, G. Cerqueira, R. Garcia, C. Ramos, E. Voll, A. McDonald, P. Lefebvre, P. Schlesinger. 2006. Modeling Amazon conservation. *Nature* 440: 520-523.
- Nepstad, D., C. Azevedo-Ramos, A.C. Barros, D. McGrath, C. Pereira, F. Merry. 2005. Managing the Amazon timber industry. *Conservation Biology* 18(2): 1-3.
- Santilli, M., P. Moutinho, S. Schwartzman, D. Nepstad, L. Curran, C. Nobre. 2005. Tropical deforestation and the Kyoto Protocol: an editorial essay. *Climate Change* 71: 267-276. (Presents "Compensated Reduction", precursor to REDD)
- Nepstad, D., D. McGrath, A. C. Barros, A. Alencar, M. Santilli, M. C. Vera. 2002. Frontier governance in Amazonia. *Science* 295:629-630.
- Nepstad, D., G. Carvalho, A. C. Barros, A. Alencar, J. P. Capobianco, J. Bishop, P. Moutinho, P. Lefebvre, U. L. Silva Jr. 2001. Road paving, fire regime feedbacks, and the future of Amazon forests. *Forest Ecology & Management*.154: 395-407.