

Amy E. Daniels, Ph.D.

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EDUCATION

Ph.D.	2009	Interdisciplinary Ecology	4.0/4.0	Univ. of Florida
M.S.	2004	Interdisciplinary Ecology	4.0/4.0	Univ. of Florida
B.A.	1999	Biology	<i>Summa Cum Laude</i>	Wesleyan College

Dissertation, funded by a NASA Research Fellowship:

Patterns & processes of land cover change: understanding tradeoffs among ecosystem services. Univ. of Florida. Gainesville, FL, USA. Supervised by Dr. Jane Southworth.

Example coursework: Spatial Landscape Modeling, Multivariate Statistics, Forests & Remote Sensing, Land Use & Land Cover Change Seminar, Land & Water Use Seminar, International Environmental Law, Comparative Environmental Law, Protected Areas, Land Tenure Administration, Tropical Forest Policy & Options for REDD

Thesis, funded by a Fulbright Fellowship:

Protected area management in a watershed context: a case study of Palo Verde National Park, Costa Rica. Univ. of Florida. Gainesville, FL, USA. 140 pp. Supervised by Dr. Hugh Popenoe

Example coursework: Ethnoecology, Landscape Ecology, Tropical Botany, Statistics, Remote Sensing, GIS

RECENT EXPERIENCE

National Program Leader for Landscape Science, US Forest Service. Arlington, VA. (*Jan 2012 – present*)
Coordinate landscape science across research stations and serve as two-way liaison between management and research branches of the agency. Respond to budget information requests, conduct technical reviews of strategic documents, and represent Forest Service Research & Development interests and capabilities in interagency forums. Synthesize the state of knowledge on various landscape science topics and coordinate the delivery of cutting-edge science to internal and external stakeholders. Highlights:

- **Budget:** First four-months of this position spent in an out-year budget training detail preparing the agency's FY13 budget justification. Worked closely with agency leadership to articulate persuasive, consistent and cogent priorities in the budget request. Prepared comparative analyses and other briefing materials to support Congressional budget hearing preparation.
- **Science Synthesis & Delivery:** Developed a landscape science website. Currently conducting policy-level science delivery for [Climate Projections FAQ](#) publication through webinars to field offices, partners and targeted briefings to agency leadership. Currently writing a road ecology synthesis to publish in *Issues in Ecology*.
- **Leadership:** Selected to co-lead the Washington Office Research & Development Realignment Team charged with recommending alternative organizational structures and functions.

Climate Change Specialist, US Forest Service. Arlington, VA. (*Jan 2010 – Jan 2012*)

Responsible for technical and policy review of climate-related science, policy and processes. Fulfilled this position through as a Presidential Management Fellow based in the Research & Development branch with developmental rotations to other parts of the agency. Highlights:

- **Policy:** Co-authored the USFS [Roadmap for Responding to Climate Change](#) and developed guidance for implementing the Climate Change Scorecard, to measure unit-level implementation performance.
- **Science:** Conducted an agency-wide inventory of downscaled climate data. Lead a team of scientists in developing technical guidance on the availability and appropriate use of downscaled climate projections.
- **Representation:** Served as agency representative on the Adaptation Science Interagency Working Group and collaborated to draft recommendations included in the Presidential Interagency Adaptation Task Force Report.

OTHER WORK EXPERIENCE

Latin American Forest Policy and Management Coordinator, Amazon Conservation Leadership Initiative, Moore Foundation. Santa Cruz, Bolivia. *(Jan 2009 – Dec 2009)*

Collaboratively designed a Spanish-language course for an interdisciplinary group of Latin American professionals from nine countries. Directed planning trip in Bolivia; facilitated partnerships with local institutions; supervised logistics staff; Designed course website; designed repeated-measures evaluation to analyze program impact; and drafted final grant report for USAID & USFS International Programs.

Instructor for Physical Geography, Univ. of Florida. Gainesville, FL. *(July 2005-May 2006)*

Solely responsible for three-credit undergraduate course in physical geography, including designing the curriculum, lecture materials and web component.

Remote Sensing Technician, U.S. Geological Survey. Gainesville, FL. *(May – Aug 2004)*

Designed protocol for georectification of historic aerial photo collection of Everglades region and trained technical team to use the protocol.

Development Specialist, U.S. Agency for International Development. Sonsonate, El Salvador. *(May-Aug 2003)*

Agricultural & community development specialist responsible for developing participatory natural resource management curriculum in Spanish (e.g., composting latrines, erosion prevention, water quality issues) in conjunction with locally-hired community promoters. In turn, we sponsored workshops in 36 communities of a larger post-earthquake housing project.

Conservation Biologist, Asociación de Rescate y Conservación de Vida Silvestre. Peten, Guatemala. *(April-Sept 2000)*

Responsible for vegetation mapping, archaeological site registration, translating for visitors to the wildlife center.

Resource Management Biologist, Apalachicola National Estuarine Research Reserve. Eastpoint, FL. *(May-Aug 1999 and Oct 2000-Dec 2001)*

Co-lead of multi-year study on control and elimination of invasive wetland plant. Received prescribed fire certification and assisted in prescription burning on state-managed pine flats. Researched and published oral history on significant state land acquisitions. Worked as field technician for wetlands mapping and coordinated with sea turtle patrol team for nest monitoring program.

PUBLICATIONS

Hall, J.M., T. Van Holt, **A.E. Daniels**, V. Balthazar, and E.F. Lambin. 2012. [Trade-offs between tree cover, carbon storage and floristic biodiversity in reforesting landscapes](#). *Landscape Ecology*. (forthcoming, published online as pre-print on July 10, 2012).

Daniels, A.E., J.F. Morrison, L.A. Joyce, S.C. Chen, N.L. Crookston, and S.G. McNulty. 2012. [Climate Projections FAQ](#). USDA Forest Service. Gen. Tech. Rep. RMRS - 277. Ft. Collins, CO. 32 p.

Hines, S., and A.E. Daniels, 2011. [Forest Stewardship and Climate Change](#). US Forest Service Climate Change Resource Center.

Tkacz, B., H. Brown, A. E. Daniels, et al. 2011. [National Roadmap for Responding to Climate Change](#). U.S.Forest Service (FS-957b). February 2011.

Daniels, A.E., V. Esposito, K. Bagstad, et al. (2010) [Understanding the impacts of Costa Rica's PES: Are we asking the right questions?](#) *Ecological Economics* 69(11): 2116-2126.

Farley, J., A. Aquino, A.E. Daniels, et al. (2010) [Global mechanisms for sustaining and enhancing schemes of payments for environmental services](#). *Ecological Economics* 69(11): 2075-2084.

Daniels, A.E. (2010) [Forest expansion in northwest Costa Rica: conjuncture of the global market, land-use intensification and forest protection](#). In Nagendra, H. and J. Southworth, editors. *Reforesting Landscapes: Linking Pattern and Process*. Springer, New York, New York, USA.

Daniels, A.E. and G. Cumming. (2008) [Conservation or conversion? Understanding wetland change in northwest Costa Rica](#). *Ecological Applications* 18(1): 49-63.

Daniels, A.E., K. Painter, and J. Southworth. (2008) [Milpa imprint on the tropical dry forest landscape in Yucatan, Mexico: remote sensing and field measurement of edge vegetation](#). *Agriculture, Ecosystems and Environment* 123: 293-304.

Daniels, A.E. (2006) [Incorporating domain knowledge and spatial relationships into land cover classification: a rule-based approach](#). *International Journal of Remote Sensing* 27(14): 2949-2975.

Daniels, A.E. (2005) [Conservation: a balance. Introduction and framework for innovation](#). *Ecology* 86(10): 2841-2844.

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GRANTS & AWARDS

	US Forest Service Budget Presentations Award. Awarded three days of annual leave for outstanding performance on Fiscal Year 2013 budget justification team.
	U.S. Presidential Management Fellowship. Selected in a three-tier competition for a fellowship in the Global Change Research Program of the U.S. Forest Service (2009)
\$ 5,000	Short-course Award (National Science Foundation 0221599). Funding to participate in course on Reduced Emissions from Deforestation & Degradation (REDD) in Bolivia (2008)
\$ 5,000	Short-course Award (National Science Foundation 0606461). Funding for intensive research course on rice in relation to global rice crisis at the International Rice Research Institute, Los Banos, The Philippines (2008)
\$ 3,000	NASA Mini Research Award. Funding for research at NASA's Goddard Space Flight Center (2007)
	Excellence in Teaching Award. Department award for superior teaching evaluations (2006)
\$90,000	NASA Research Fellowship. multi-year research grant (2006)
\$ 1,000	Phi Kappa Phi Honor Society Award. Small grant for research (2005)
\$ 5,138	National Science Foundation DGE-0221599. Funding for preliminary dissertation research (2005)
\$ 250	1st Place Oral Paper Competition. Award at Florida Society of Geographers (2005)
\$66,000	UF Alumni Fellowship. 4-year graduate fellowship for PhD (2004)
\$ 3,000	John G. Ruge Fellowship. Field grant for PhD (2003)
\$ 6,000	Coca-Cola World Citizenship Fellowship. (2003)
\$17,000	Fulbright Research Fellowship. Funding for 11 months of M.S. fieldwork in Costa Rica (2002)
\$ 1,500	Tropical Conservation and Development Grant. Summer field grant for M.S. research (2002)
\$ 1,000	Tinker Foundation Travel Grant. Summer international travel grant for M.S. research (2002)

- \$ 2,000 **Friends of the Apalachicola Reserve Fellowship.** Fellowship for M.S. research (2001)
\$ 6,000 **Delta International Scholar.** Arctic biology award, Univ. of Iceland, Reykjavik, Iceland (1998)

SELECTED CONFERENCE PAPERS

- Daniels, A. November 18-19, 2010. Social dimensions of market-based environmental incentives. Charles Darwin University. Darwin, Australia. (*Participation funded by Charles Darwin University*)
- Daniels, A. July 22, 2009. Oportunidades en manejo forestal sostenible para países en vías de desarrollo. Universidad Autónoma de Yucatán. Mérida, México.
- Ayala-Crespo, J., A. Becerra-Vargas, K. Biedenweg et al. Sept. 3, 2008. Política forestal en Bolivia: oportunidades y desafíos de REDD. IV Reunión Nacional de Investigación Forestal. Cobija, Bolivia.
- Daniels, A. Aug. 10, 2008. Cambio climático, bosques y el concepto de REDD. Política y práctica: manejo forestal en Bolivia. Cobija, Bolivia. (*Participation funded by Moore Foundation*)
- Daniels, A. July 23, 2008. Forest expansion in Costa Rica: conjuncture of the global market, land use intensification and forest protection. NASA Research Symposium. Baltimore, MD.
- Daniels, A. June 27, 2008. Ecosystem services at the landscape scale: payments for environmental services as a land-use planning tool. Environmental and Land-use Law in Costa Rica and Florida. Joint Meeting of the Florida & Costa Rican Bar Associations. University of Costa Rica. San José, Costa Rica.
- Ahn, E., A. Daniels, C. Dresser et al. June 6, 2008. PAG-ASA: a holistic approach to enhance and sustain food security in the Philippines. CGIAR Center, International Rice Research Institute. Los Baños, Philippines.
- Daniels, A. and G. Cumming. July 17, 2007. Predicting wetland conversion: a spatially-explicit model for northwest Costa Rica. NASA Research Symposium. Cleveland, OH.
- Daniels, A. April 17, 2007. Environmental services as non-exclusionary goods: the role of institutional scale in conservation. Association of American Geographers. San Francisco, CA.
- Daniels, A. March 14, 2007. Pagos por servicios ambientales y reforestación en La Cuenca Tempisque. Centro Internacional de Política Económica para el Desarrollo Sostenible. Universidad Nacional. Heredia, Costa Rica.
- Daniels, A. and K. Painter. March 11, 2006. The imprint of milpa agriculture on the dry tropical forest landscape in Mexico's Yucatán Peninsula. Association of American Geographers. Chicago, IL.
- Daniels, A. and C. Romero. Oct. 14, 2005. Cross-site comparisons of Environmental Service Payment Programs: Insights from Costa Rica and Ecuador. Working Forest in the Tropics, Conservation and Development Forum. Gainesville, FL.
- Daniels, A. Feb 22, 2005. El efecto del Parque Nacional Palo Verde sobre el destino de humedales en la Cuenca Tempisque: conservación o conversión? Congreso Internacional en Manejo de Vida Silvestre. Heredia, Costa Rica.

LANGUAGES

- English (native tongue)
Spanish (oral & written professional fluency certified by the State Department's Foreign Service Institute 7/8/08)
Portuguese (elementary reading & aural comprehension)

REFERENCES

Available upon request.