# ERIN O. SILLS

Department of Forestry & Environmental Resources

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#### **EDUCATION**

**Duke University**, Department of the Environment

Ph.D., Natural Resource and Environmental Economics, 1998

M.A., Natural Resource Economics and Policy, 1996

Princeton University, Woodrow Wilson School of Public and International Affairs

B.A., International Development and Latin American Studies, High Honors, 1990

#### PROFESSIONAL EXPERIENCE

# **North Carolina State University**

Department of Forestry & Environmental Resources

Department Head and Professor, July 2021 -

Interim Head and Professor, July 2020 – June 2021

Associate Head and Professor, January – June 2020

Edwin F. Conger Professor, 2018 –

Director of International Programs and Professor, 2013 - 2019

Associate Professor 2005 – 2013, Assistant Professor 1999 – 2005, Instructor 1997 – 1998

# Department of Agricultural and Resource Economics

Center for Environmental and Resource Economic Policy, Faculty Affiliate, 2009 -

Economics Graduate Faculty, member, 2016 -

University of Gothenburg, Department of Economics, Malmsten Visiting Professor, August - Dec 2014

Virginia Polytechnic Institute & State University, Department of Agricultural Economics

Research Associate, Economic Impacts of Migrant Labor Force, January-August 1992

### Federal University of Pará, NAEA (Brazil)

Associate Researcher, August 1990- August 1991

# **HONORS**

Edwin F. Conger Professorship, 2018

Jackson Rigney International Service Award, 2018

Alumni Association Outstanding Research Award, 2017

Outstanding Global Engagement Award, 2011

Phi Beta Kappa (Honors, 1990), Xi Sigma Pi (Forestry, 1999),

Sigma Iota Rho (International, 2002), Sigma Xi (Science, 2002)

#### University Administration and Service

## University

Member, Department Head Advisory Committee to the Provost (2022 – present)

Member, search committee for Director of Faculty Global Engagement, 2022

Member, external review committee for Crop and Soil Sciences, 2022

Chair, Research Leadership Academy, 2020 - 2021

College representative, International Operations Council, 2018 – 2020

Faculty affiliate, WaSH (Global Water, Sanitation and Hygiene) Cluster, 2018 -

Faculty affiliate, Master of International Studies, 2017 –

Faculty affiliate, Southeast Climate Adaptation Science Center, 2023 -

Member, South Asia Faculty Group, 2012 – 2019

Member, Internal Advisory Committee, Genetic Engineering and Society Cluster, 2020 -

Co-coordinator, R.L. Rabb Symposium on Sustainable Cities, 2018

Member, University Council on Undergraduate Education, 2015 – 2018

Member, cluster search committees for Genetic Engineering and Society in 2013 and WaSH in 2016 - 2017

Chair, University Committee on International Programs, 2003 – 2004 (co-chair in 2002-03)

Co-Chair, Association of Women Faculty, NC State University, 2001 – 2002

Member, search committee for vice-provost of international affairs, 2000

## **College of Natural Resources**

Member of ad-hoc committees

Working Group on Land and Water, 2014 - 2015

College Strategic Planning Committee, 2013 - 2014

College International Task Force, 2001 – 2002

Diversity Task Force, 1999 – 2000

Member of RPT committee for Parks, Recreation and Tourism, 2016

### **Department of Forestry and Environmental Resources**

Member of committee for Faculty Workload and Rewards Project (FWRP), 2018 - 2019

Mentoring committees for junior faculty (chair for Martin, member for Forrester), 2017 - 2019

Member of search committees for policy in 2000, wildlife science in 2010, head in 2013, and silviculture and director of Forest Productivity Cooperative in 2015

Member of post-tenure review (2006, 2013, 2017) and tenure (2007-2008) committees

Co-chair of RPT committee for faculty member in Genetics and Society Cluster (2015), member of RPT committees for faculty members in Public Science and Genetics and Society clusters (2019)

Member of graduate studies committee, 1997 – 2011

Director of International Programs, 1997 - 2019

Committee on International Programs and Endowments: Chair 2002 – 2005, 2007 – 2019

Masters International Program: established and coordinated program that integrated Peace Corps service into masters degree programs, 1998 – 2016

Forestry Collaboration with Chile: obtained funding, established, and co-coordinated program that included faculty exchange, study tours, graduate student research, undergraduate internships, and language training, 2005-2009

Forest Ecosystem Services Exchange Program with Brazilian universities (UFPR, UFMG, UFT): departmental coordinator, 2008 – 2012

International Society of Tropical Foresters: advised student chapter, including their annual spring symposium, meetings with international organizations, and participation in conferences

Supervised student webmaster for international section of department website

Promoted study abroad and advised student participants

# Managed endowments and funds

Bruce and Barbara Zobel Endowment for International Forestry Studies (mini-grants for international research by undergraduate and graduate students)

Gunnar and Lillian Nicholson Graduate Fellowship and Faculty Exchange Fund (faculty and student exchange with Sweden, doctoral fellowships for Swedish students, summer study abroad in Sweden, and seminar series)

Laarman International Gift Fund (mini-grants for international research by graduate students) Sunny and Lee Allen Fund (study abroad scholarships)

### Inter-institutional

Member, Steering Committee for Inter-institutional Climate Education Symposium at Duke. 2023 -

Member, Multi-disciplinary group on financing, governance, and delivery of global public goods, comprised of faculty from Duke, UNC, and NC State, supported by an Intellectual Community Planning Grant from the Provost's Office of Duke University. 2023 -

Affiliate, Energy Access Program, Duke University. 2021 –

Co-coordinator of Tri-HET (Triangle Working Group on Household Energy Transitions), network of economists and engineers from NC State, UNC-CH, Duke, RTI, EPA, and NIEHS, 2018 – 2019 Coordinator, Triangle Working Group on REDD+, 2010 - 2012

Faculty Advisor, Triangle Pan-Amazon Discussion Group, 2004 – 2007

BRIDGES: Academic Leadership for Women, professional development program, 2003

# SERVICE TO THE PROFESSION

**CIFOR** (Center for International Forestry Research)

Research Associate

Member of Core Research Team for the Global Comparative Study of REDD+, including impact evaluation of 22 REDD+ projects in six countries

**IMAZON** (Instituto do Homen e Meio Ambiente da Amazônia)

Associate Researcher

Coordinated market research on non-timber forest products

Coordinated and co-taught short course on "Forest Economics: Practical Methods for Policy Analysis," to 20 students from 13 different agencies, NGOs, and institutes in the Brazilian Amazon, June 2006

**EfD** (Environment for Development)

Co-founder of network of Women in Environmental Economics for Development (WinEED):

 $\underline{https://www.efdinitiative.org/programs/women-environmental-economics-development-wineed/about/about}$ 

Organized inaugural workshop at WCERE in Gothenburg, Sweden (June, 2018); workshops and special sessions at EfD annual meetings in Vietnam in 2018 and Colombia in 2019

Associate Researcher of the Central American Center

Co-PI of research on increasing the efficiency of the Costa Rican PES system

#### **Editorial boards**

Conservation Letters, Member of Editorial Board, 2015 –

Frontiers in Forests and Global Change, Specialty Chief Co-Editor for People, forests and livelihoods, 2018 - Forests, Member of Editorial Board, 2017 –

International Review of Environmental and Resource Economics, Member of Editorial Board, 2021 - PlosOne, Member of Editorial Board, 2018 -

## **Boards of directors**

Tropical Forest Foundation, 2013 – 2014 Terra Viva Grants (terravivagrants.org), 2018 - 2023

#### **TEACHING**

Research Methods (graduate) co-taught 1 semester 2022

Climate Change and Sustainability (undergraduate) co-taught 3 semesters 2018 – 2019

Survey Methods (graduate mini-course) 5 semesters 2009 – 2019

World Forestry (undergraduate) 17 semesters 1998 – 2018 (with graduate sections in 2009-2014)

Forest Economics (undergraduate) 13 semesters 1997 – 2019 and (graduate) 4 semesters 2004, 2012, 2015, and 2019

Conservation & Sustainable Development (graduate), co-taught and offered jointly with Duke and UNC, 1 semester 1998

Introduction to Natural Resources (undergraduate) 1 semester 1997

# **Special topics**

Sustainable Development Goals (graduate and undergraduate) co-taught 1 semester 2018

Science, Technology, and Global Sustainability (graduate) co-taught 2 semesters 2011 at TERI University (India) and 2012 at NCSU

Impact Evaluation (graduate) 1 credit mini-course, 1 semester 2013

Non-market valuation methods (graduate) 1 credit mini-course, 1 semester 2010

Collaborative Research on REDD+ (graduate), co-taught with Duke and UNC, 1 semester 2010

Conservation and Development (graduate) 1 credit mini-course co-taught with doctoral student, 2008

Economics & Ecology of Invasive Forest Pests (graduate) distributed graduate seminar sponsored by National Center for Ecological Analysis & Synthesis, 1 semester 2007

Global Forest Sustainability and Certification (graduate) co-taught 1 semester 2005

Agroforestry (graduate) 3 semesters 2000 – 2003

### Study abroad

Chile, focus on intensive plantation forestry, March 8 - 16, 2003, 17 students

Costa Rica, focus on environmental service payments, August 6 –17, 2002, 16 students

Ghana, focus on local forest benefits, May 12-28, 2004, 12 students

Paraguay, focus on agroforestry and wood processing, March 9 – 18, 2001, 19 students

Mexico, focus on range of natural resource management systems, March 10 –17, 2000, 10 students

# MENTORING AND ADVISING

Mentored and funded post-doctoral scholars Charlotte Ham, Pedro Pires de Matos, Katrina Mullan, Pushpendra Rana, Bruno Kanieski Da Silva, and Mintewab Bezabih (2004 - present)

Mentored undergraduate research projects on environmental voting in NC legislature (2002), woodland holiday products (2004-2005), opportunities and barriers to forestry on heir property (2018), community forestry and market integration in Nepal (2023)

Mentored visiting international scholars, including Daniel Urzedo (Brazil) in 2015, Delgerjargal Dugarjav (Mongolia) in 2019, and Bruno Schettini (Brazil) in 2020

Served on masters and doctoral student committees in Applied Ecology, Center for Geospatial Analytics, Economics, Forest Biomaterials, Forestry & Environmental Resources, Parks Recreation and Tourism, and UNC Program in Public Policy

Advise three doctoral students (Anukram Adhikary, Logan Richardson, Mariana Vedoveto) and one masters student (Jime Ribeiro), co-advise two doctoral students (Ana Cubas, Wiza Munthali) and serve on six other PhD committees, as of March 2023

# Former graduate advisees (13 PhD, 22 MS, and 13 masters of)

Ana Cubas Baez, MS 2022, Impacts of forest-based climate change mitigation strategies

Adam Bahtiar, MS 2019, Monetizing Watershed Services Provided by Forests in Indonesian Protected Areas Elena Beckman, MNR 2019, The Cost of Growing Energy: An econometric analysis of timber prices Vivi Selviana, MS 2019, Learning Lessons from a REDD+ Initiative in Central Kalimantan, Indonesia Tarik Durmus, MS 2019, Forest Farming of Shiitake Mushroom Yu Wu, PhD 2018, Essays on Deforestation and Forest Ecosystem Services Natasha James, PhD 2018, Payments for Ecosystem Services: Targeting and Procurement Auctions Stephanie Chizmar, MS 2018, Comparative economic assessment of silvopasture systems in Peru and NC Ti'Era Worsley, MNR 2017, Integrating Active Learning Methods through Environmental Education in Peru David Solis, PhD 2017, Quasi-experimental impact evaluation: timber concessions and REDD+ Sadharga Koesbandana, MF 2017, Analysis of Forest Development Program Impacts on NC's Economy Mary Elmer, MNR 2016, Local Perspectives a Food Security Program in the Comarca Ngäbe-Buglé, Panamá Christopher Galik, PhD 2015, Institutional Design and Decision-Maker Response: Env Policy and Research Connor Rice, MS 2015, The Ecosystem service of forests improving air quality: A literature review Andreanne Meley, MS 2014, Sustaining Florida's Forest Ecosystems: Impacts of Forestry Ordinances Sarah Wiener, MS 2014, Traditional Natural Resource Use and Modern Lifestyles in the Post-Apartheid Era Cody Burnett, MS 2013, Evaluation of a Conservation Education Program in Cape Verde Matleena Vuola, MS 2013, Regional Markets for Non-timber Forest Products in the Brazilian Amazon Alicia Raimondi, MS 2013, Assessing Ecotourism in a National Forest of the Brazilian Amazon Liwei Lin, PhD 2012, Geography of REDD+ at Multiple Scales: Country participation and project location Hanna-Lotta Heikkonen, MS 2012, Developing Guidelines for an Ideal Eco-label for Wood Products Simon Hall, MS 2012, Beef Consumption in Curitiba, Brazil: Willingness to Pay for Sustainable Production. Akhilesh Khopkar, MNR 2011, Wood Fuel, Carbon Markets, and Black Carbon Simone Bauch, PhD 2010, Evaluation of conservation policies in the Brazilian Amazon Karnjana Sanglimsuwan, PhD 2010, Essays in Environmental Health Charlie MacIntyre, MS 2010, Sustainability in Amazonian Development Susan McIntyre, MNR 2009, Extending Government Assistance to a Diverse Audience Koffi Bassan, MF 2009, Constraints to Technology Adoption in Rural West Africa Kevin Bigsby, MS 2009, Anthropogenic Drivers of Gypsy Moth Dispersal Nia Atmadja, PhD 2008, Discount Rate Estimation and Role of Time Preference Rodrigo Arriagada, PhD 2008, Payments for Ecosystem Services in Costa Rica Amanda Rogers, MNR 2008, Rural Adaptation to Climate Change in Guinea, West Africa Shubhayu Saha, PhD 2008, Spatial Externalities: Evidence on Social Interactions Tzu-Ming Liu, PhD 2007, Economic Analysis of Bioinvasion in the Pacific Region Jill Braly, MS, 2007, Bloodroot supply on the Waynesville watershed in Western NC Nevin Dawson, MS 2006, Identifying early adopters of cashew agroforestry in Senegal Arthur Green, MS 2005, Natural resource management in Tchabal Mbabo, Cameroon Kelly Jones, MS 2005, Technology adoption in West Africa: soybeans in Togo and Benin Rodrigo Arriagada, MS 2004, Estimating Profitability and Fertilizer Demand in Costa Rica Nia Atmadja, ME 2004, Looking for a win-win: meta-analysis of poverty and deforestation Saeko Makino, MNR 2004, Linking Forests to Markets: Chain of Custody Certification Kelly Mance, MNR 2004, Outreach to Limited Resource Forest Landowners Luis Carrasco, MS 2002, Analysis of Environmental Impact Statements in North Carolina Kirsten Cassingham, MS 2001, Landowner Participation in NC Natural Heritage Program Deepak Chhabra, PhD 2001, Scottish Highland Games: Authenticity & Economic Impact Erin Mirrett, MNR 2000, Agroforestry Practices on Organic Farms in the U.S.

Ginger Deason, MNR 1999, Non-Timber Forest Products & Selective Logging in Belize

Niken Sakuntaladewi, PhD 1998, Community Based Forest Management in Indonesia

# GRANTS (Career total of ~\$5 million in external funding)

- Environment for Development Initiative. Funded by SIDA through the University of Gothenburg, \$335,997, January 2021 December 2024.
- BCS-DISES: Influence of Community Forestry on the Dynamics of Integrated Socio-Environmental Systems. Co-PI: Rajan Parajuli. Funded by NSF through UNC. Sub-contract budget: \$185,964, August 2021 July 2024.
- Lessons for the Recovery: Evaluating the Impacts of the COVID-19 Pandemic on the Forest-based Rural Economy in the Southern United States. Co-PI: Rajan Parajuli. Funded by USDA NIFA, \$648,000, January 2022 December 2025.
- The Sociohydrological System of a Tropical Forest Frontier: land-climate-water feedbacks and farmer adaptation. Funded by NSF through University of Montana. Sub-contract budget: \$282,224, September 2018–August 2023.
- Confronting Energy Poverty: Building an Interdisciplinary Evidence Base, Network, and Capacity for Transformative Change. Co-PIs: Andrew Grieshop, Steve Kelley. Funded by NSF through UNC. Subcontract budget: \$934,979, August 2017 December 2023.
- Innovations in the Theory and Application of Models for Human and Natural Caused Disturbances in Forests. Funded by the US Forest Service, \$257,711, June 2019 October 2023.
- Johns Island Community Conservation Initiative: Ecosystem Services Mapping & Land Protection Toolkit. Co-PI: Jelena Vukomanovic. Funded by the Gaylord & Dorothy Donnelley Foundation through the Lowcountry Land Trust. Sub-contract budget: \$79,986, February 2018 January 2020.
- Determining Use, Economic Impacts and Value of Game Lands in North Carolina. Co-PIs: Nils Peterson, Yu-Fai Leung, Krishna Pacifi. Funded by the NC Wildlife Resources Commission, \$341,697, January 2017 June 2020.
- Valuation of Forest Ecosystem Services. Co-PIs: Fred Cubbage and Susan Moore. Funded by the USFS, \$164,400, August 2013 September 2015.
- Harnessing Secondary Socio-Economic Data to Analyze Forest Conservation Interventions. Funded by CIFOR, \$73,000, August 2013 July 2014.
- Improving models for Forecasting Suppression Expenditures by Federal Land Management Agencies. Funded by the USFS, \$266,000, August 2011 August 2019.
- Systematic Development of a Software System for Suppression Expenditure Forecasts for Federal Land Management Agencies. Funded by the USDA Forest Service, \$71,000, July 2014 April 2018.
- Sustaining Florida's Forest Ecosystems: Impacts of Local Land Use Ordinances. Co-PI: Fred Cubbage. Funded by the USDA Forest Service, \$40,000, June 2011 January 2014.
- Living with Deforestation: Analyzing Transformations in Welfare and Land Use on an Old Amazonian Frontier. Co-PIs: Caviglia-Harris (Salisbury) and Roberts (UCSB). Funded by NSF, \$560,000, July 2008 June 2013.
- Learning from REDD+: Global Comparative Analysis. Funded by CIFOR, \$17,000, Dec 2010 Dec 2011.
- Forests and Climate: Meta-Analysis of REDD+ Projects. Funded by CIFOR, \$19,500, June 2009 Dec 2010.
- Triangle Working Group on REDD+. Co-PIs: Brian Murray (Duke University), Pam Jagger (UNC-CH), and Robert Beach (RTI). Funded by Research Triangle Institute, \$14,200, Dec 2009 September 2010.
- Assessing Willingness to Pay for Sporting Licenses and Non-Game Conservation in NC. Co-PIs: Nils Peterson and Fred Cubbage. Funded by NC Wildlife Resources Commission, \$84,466, June 2008 June 2010.
- Economic Assessment of Ecosystem Services Provided by Cocoa Systems in Central America. Co-PI: Fred Cubbage. Funded by USDA Forest Service, \$25,000, September 2008 June 2010.
- Graduate Education in Forest Resource Decision Sciences: Preparing professionals to meet global needs. Co-PIs: Roise, Warren, Bullock, Cubbage, Steelman, Peterson. Funded by USDA CSREES, \$172,000, September 2008 August 2013.
- Strengthening Global Competence of Students & Faculty through Collaboration in Forestry. Co-PIs: Lee Allen, Doug Frederick, and Susan Moore. Funded by USDA CSREES ISE, \$100,000, April 2005 –

- September 2009.
- Assessment of the Economic Feasibility of the Gypsy Moth Slow the Spread Project. Funded by USDA Forest Service, \$50,000, October 2006 February 2008.
- Economics of sustainable forest management in the Brazilian Amazon. Funded by USDA Forest Service, \$28,380, May 2005 September 2007 (supplemented by grant from the European Union directly to collaborating organization IMAZON in Belém, Brazil).
- Private Provision of Public Goods: Applying Matching Estimators to Evaluate 'Direct Payments' for Tropical Forest Conservation. Funded by NSF for \$36,000 and FONAFIFO (Costa Rican Government) for \$46,800, August 2005 February 2007.
- Econometric Evaluation of Costa Rica's Payments for Environmental Services: Scaling up Sample Size and Study Area. Dissertation Enhancement Grant for Rodrigo Arriagada, funded by NSF, February December 2007.
- Development of the Milk and Beef Processing Sectors: Implications for Land Use by Small Farmers in the Amazon. Dissertation Enhancement Grant for Shubhayu Saha, funded by NSF, May 2006 July 2007.
- Long Term Sustainability of Bloodroot Supply on the Qualla Boundary Lands of the Eastern Band of Cherokee Indians. Co-PIs: Fred Cubbage and Jill Braly, funded by RTCAR, May 2006 May 2007.
- Mining, Biodiversity, and Forest Livelihoods in Orissa, India. Funded by World Bank through RTI International, \$18,500, December 2005 July 2006.
- Global Forest Sustainability and Certification Course: International Teaching Collaboration. Co-PI: Susan Moore. Funded by NCSU Faculty Center for Teaching and Learning, \$2000, May December 2005.
- Dynamics of Household Land Use and Economic Welfare on the Amazon Frontier. Co-PI: Jill Caviglia-Harris, funded by NSF, \$168,678 administered through Salisbury University, Mar 2005- Dec 2008.
- Poverty Mapping in Sri Lanka. Funded by the World Bank through RTI International. Sub-contract budget: \$3,000, December 2004 January 2005.
- Developing Low-Literacy Extension Materials to Target Underserved Audiences. Co-PI: Kelly Mance, Funded by Small and Part-time Farm Fund, \$7,500, April September 2004.
- Curricular Development in Temperate and Subtropical Sustainable Forest Management and Forest Certification. Co-PIs: Fred Cubbage and Susan Moore. Funded by International Partnership for Forestry Education Development Grant, \$16,500, March October 2004.
- Criteria and Indicators: Evaluating Data Sources for the US South. Funded by USDA Forest Service Southern Research Station, \$12,700, October 2003 August 2004.
- Evaluating US Forest Policies: New Econometric Tools from "Program Evaluation." Co-PI: S. Pattanayak. Funded by USDA Forest Service Southern Research Station, \$25,000, August 2003 August 2004.
- Developing Low-Literacy Extension Materials to Target Underserved Audiences. Co-PIs: Susan Moore, Bob Bardon, Rick Hamilton. Funded by NC Program of Renewable Resources Extension Act, \$10,000, May September 2003.
- Environmental Assessment of NAFTA's Impacts in the Forest Sector, Co-PI: Gary Blank. Funded by USDA Forest Service International Programs Office, \$10,000, February 2002 March 2003.
- Determining the Potential for International Forestry Education Through Distance Learning. Co-PI: Bill Dvorak, funded by NC State DELTA (Distance Education and Learning Technology Applications), \$10,000, January June 2002.
- Indicators of Forest Condition: Measuring Amenities, Aesthetics, and Sustainability. Co-PI: S. Pattanayak. Funded by USDA Forest Service Southern Research Station, \$50,000, August 2001 February 2004.
- Econometric Methods for Tree Planting Models. Co-PI: S. Pattanayak. Funded by USDA Forest Service Southern Research Station, \$28,000, August 2001 August 2003.
- Sustaining ecological and economic diversity among limited resource landholders by expanding opportunities for management of productive woodlands. Co-PI: Sarah Warren. Funded by USDA Southern Region Sustainable Agriculture Research and Education Program, \$180,430, May 2001 May 2004.
- Collaborative Research on Forest Use in India: Building International and Interdisciplinary Linkages. Funded by NC State Internationalization Seed Grant, \$4,000, January 2000 January 2002.

- Economics of Low-Impact Logging: Cost & Benefits of Certified Timber Production in Belize. Funded by NC State Faculty Research and Professional Development Grant, \$4,990, March 2000 December 2001.
- Protecting Soil and Water Resources with Agroforestry: Econometric Techniques for Analyzing Soil Conservation Benefits. Co-PI: S. Pattanayak. Funded by USDA Forest Service Southern Research Station, \$20,000, August 1999 January 2001.

### **PUBLICATIONS**

# **Edited books**

- Sills, E. S. Moore, F. Cubbage, K. McCarter, T. Holmes, D. Mercer, eds. 2017. *Trees at Work: Economic Accounting for Forest Ecosystem Services in the US South*. Gen. Tech. Rep. SRS-226. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. 103 pp.
- Sills, E., S. Atmadja, C. de Sassi, A. Duchelle, K. Demetrius; I. Resosudarmo, W. Sunderlin, eds. 2014. *REDD+ on the ground: A case book of subnational initiatives across the globe*. Center for International Forestry Research, Bogor, Indonesia. 505 pp.
- Angelsen, A., M. Brockhaus, M. Kanninen, E. Sills, W. Sunderlin, S. Wertz-Kanounnikoff, eds. 2009. *Realising REDD+: National strategy and policy options*. Center for International Forestry Research, Bogor, Indonesia. 361 pp.
- Sills, E., K. Abt, eds. 2003. Forests in a Market Economy. Kluwer Academic Publishers, Dordrecht. 379 pp.

## **Articles (peer reviewed)**

- Sunderlin, W., S. Atmadja, C. Chervier, A. Duchelle, M. Komalasari, I. Resosudarmo, and E. Sills. 2024. REDD+ carbon effectiveness: combinations of interventions and their impacts. *Global Environmental Change*, 84, 102777.
- Naime, J., A. Angelsen, E. Sills, and D. Rodriguez-Ward. 2024. Participation, anticipation effects and impact perceptions of two collective incentive-based conservation interventions in Ucayali, Peru. *Ecological Economics*, 217, 108052.
- Rana, P. and E. Sills. 2024. Inviting oversight: effects of forest certification on deforestation in the Brazilian Amazon. *World Development*, 173, 106418.
- Balmford, A., P. Brancalion, D. Coomes, B. Filewod, B. Groom, A. Guizar-Coutiño, J. Jones, S. Keshav, A. Kontoleon, A. Madhavapeddym Y. Malhi, E. Sills, B. Strassburg, T. West, C. Wheeler, and T. Swinfield. 2023. Credit credibility threatens forests. *Science*, 380 (6644), 466-467.
- Bruck, S., R. Parajuli, S. Chizmar, and E. Sills. 2023. Impacts of COVID-19 pandemic policies on timber markets in the Southern United States. *Journal of Forest Business Research*, 2(1), 130–167.
- Casola, W. R., M.N. Peterson, L. Pacifici, E. Sills, and C. Moorman. 2023. Conservation motivations and willingness to pay for wildlife management areas among recreational user groups. *Land Use Policy*, *132*, 106801.
- Chizmar, S., R. Parajuli, S. Bruck, G. Frey, and E. Sills. 2023. Forest-based employment in the Southern United States amidst the COVID-19 pandemic. *Forest Science*. https://doi.org/10.1093/forsci/fxad042
- Das, I., T. Klug, P. Krishnapriya, V. Plutshack, R. Saparapa, S. Scott, E. Sills, N. Kara, S. Pattanayak, and M. Jeuland. 2023. Frameworks, methods, and evidence connecting modern domestic energy services and gender empowerment. *Nature Energy*. https://rdcu.be/c9mys
- Sills, E. and R. Kramer. 2023. Tiger protection brings carbon benefits. *Nature Ecology & Evolution*. https://rdcu.be/dcZQd
- West, T., S. Wunder, E. Sills, J. Börner, S. Rifai, A. Neidermeier, and A. Kontoleon. 2023. Action needed to make carbon offsets from forest conservation work for climate change mitigation. *Science*. 381 (6660).

- Atmadja, S. S., A.E. Duchelle, V. De Sy, V. Selviana, M. Komalasari, E. Sills, and A. Angelsen, A. 2022. How do REDD+ projects contribute to the goals of the Paris Agreement? *Environmental Research Letters*, 17(4), 044038.
- Casola, W.R, M.N Peterson, Y. Wu, E. Sills, B.S. Pease, and K. Pacifici. 2022. Measuring the Value of Public Hunting Land Using a Hedonic Approach. *Human Dimensions of Wildlife*, 1-17.
- Casola, W. R., M.N. Peterson, E. Sills, K. Pacifici, and C.E. Moorman. 2022. Economic contributions of wildlife management areas in North Carolina. *Forest Policy and Economics*, 140, 102747.
- Jagger, P., J.Z. Cheek, D. Miller, C. Ryan, P. Shyamsundar, and E. Sills. 2022. The Role of Forests and Trees in Poverty Dynamics. *Forest Policy and Economics*, 140, 102750.
- Peroff, D.M., D.B. Morais, E. Sills. 2022. The Role of Agritourism Microentrepreneurship and Collective Action in Shaping Stewardship of Farmlands. *Sustainability* 2022, 14, 8116.
- Shyamsundar, P., Cohen, F., Boucher, T. M., Kroeger, T., Erbaugh, J. T., Waterfield, G., Clarke C., Cook-Patton, S., Garcia, E., Juma, K., Sunpreet, K. Leisher, C., Miller, D., Oster, K., Saigal, S. Siikamaki, J., Sills, E., Thaung, T. Trihamdojo, B., Veiga, F. Vincent, J., Yuanyuan, Y., & Zhang, X. X. 2022. Scaling smallholder tree cover restoration across the tropics. *Global Environmental Change*, 76, 102591.
- Caviglia-Harris, J., T. Biggs, E. Ferreira, D. Harris, K. Mullan, K., and E. Sills. 2021. The color of water: The contributions of green and blue water to agricultural productivity in the Western Brazilian Amazon. *World Development*, 146, 105607.
- Chizmar, S., R. Parajuli, G.E. Frey, R.E. Bardon, and E. Sills. 2021. Allocation versus completion: Explaining the distribution of the Forest Development Program Fund in North Carolina. *Forest Policy and Economics*, 132:102594.
- James, N., L. Lundberg, & E. Sills. 2021. The Implications of Learning on Bidding Behavior in a Repeated First Price Conservation Auction with Targeting. *Strategic Behavior and the Environment*, 9(1-2), 69-101.
- Mullan, K., J. Caviglia-Harris, and E. Sills. 2021. Sustainability of agricultural production following deforestation in the tropics: Evidence on the value of newly-deforested, long-deforested and forested land in the Brazilian Amazon. *Land Use Policy*, 108, 105660.
- Pattanayak, S. K. and E. Sills. 2021. A 'middle way' for Indonesian fires. Nature Sustainability, 4(2), 83-84.
- Razafindratsima, O., J.F.M. Kamoto, E. Sills, D. Mutta, C. Song, G. Kabwe, S. Castle, P. Kristjanson, C. Ryan, M. Brockhaus, and T. Sunderland. 2021. Assessing the evidence on the roles of forests and tree-based systems in poverty dynamics. *Forest Policy and Economics*, 131, 102576.
- Solis, D., P. Cronkleton, E. Sills, D. Rodriguez-Ward, A. Duchelle. 2021. Evaluating the impact of REDD+ interventions on household forest revenue in Peru. *Frontiers in Forests and Global Change*. March.
- Wu, Y., K. Mullan, T. Biggs, J. Caviglia-Harris, D. Harris, & E. Sills. 2021. Do Forests Provide Watershed Services for Farmers in the Humid Tropics? Evidence from the Brazilian Amazon. *Ecological Economics*. 183, 106965.
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# Panels organized

- Matching the means to the ends: choosing appropriate methods for valuation of forest ecosystem services. *International Society of Forest Resource Economics*. Raleigh NC, April 2016.
- REDD+ (Reducing Emissions from Deforestation and Forest Degradation plus Conservation of Forests in Developing Countries). *International Society of Forest Resource Economics*. Raleigh NC, April 2016.
- Deforestation in the Amazon: Dynamic Analyses and Recent trends, methods, and research. *Association of American Geographers Meeting*. Seattle WA, April 2011.
- Impact Evaluation in Practice. NAREA session at *Agricultural and Applied Economics Association Meeting*, Pittsburgh PA, July 2011.
- Causal effects of conservation investments: Applications of matching methods in Latin America. International Section of the *Agricultural and Applied Economics Association Meeting*, Orlando FL, July 2008.
- Minority Landholders and Working Forests in the South. *Society of American Foresters Convention*, Winston-Salem NC, October 2002.
- The International Experience: Natural Resource Education Overseas. *University Education in Natural Resources Conference*, Raleigh NC, March 2002.
- Fate of the Forest: Birdwatchers, Blowguns, or Beef? *Southeastern Council on Latin American Studies Annual Meeting*, Chapel Hill NC, March 1995.

# **Selected conference presentations**

- Sills, E, K. Lawlor, S. Atmadja, L. Lin, and K. Songawathan. 2019. "SDG 1: End Poverty Impacts on Forests," presented at the *IUFRO World Congress*, Curitiba, Brazil, September.
- Rana, P. and E. Sills. 2018. "Does Certification Change the Trajectory of Tree Cover in Working Forests in The Tropics? An Application of the Synthetic Control Method of Impact Evaluation," presented at the *World Congress of Environmental and Resource Economists*, Gothenburg, Sweden, July.
- Sills, E. 2017. "Communicating Science and Public Policies for Natural Resource Conservation: Building an evidence base that bridges conservation, development, and health" presented at the *IAAE Inter-Conference Symposium on Agricultural Productivity, Climate Change and Sustainable Resource Management*, Talca, Chile, October.

- Sills, E. 2017. "Local responses to federal forest policy: the green municipality program in the Brazilian Amazon" presented at the 3<sup>rd</sup> FLARE Meeting, Stockholm, Sweden, October.
- Masatsugu, L., A.A.D. Putri, E. Sills, and S. Pattanayak. 2017. "Household cooking technologies and REDD+ across the tropics" presented at the *European Association of Environmental and Resource Economics Annual Meeting*, Athens, Greece, June.
- James N, E Sills, T Capitan, F Alpizar, A Salas, and P Rigg. 2016. "How designing PES for efficiency affects equity: participation in Costa Rica's PES System" presented at the *EfD Annual Meeting*, Pucon, Chile, November.
- Luttrell, C., E. Sills, R. Aryani, A.D. Ekaputri, and M.F. Evinke. 2016. "Who will bear the cost of REDD+? Evidence from subnational REDD+ initiatives" presented at the *Association of Tropical Biology and Conservation*, Montpellier, France, June.
- Dwi Putri, AA, A. Khopkar, E Sills, A Duchelle, C de Sassi, D Kweka, and W Sunderlin. 2016. "REDD+ and Household Energy Transitions" presented at *Workshop on Sustainable Energy Transitions in Developing and Emerging Economies*, Durham NC, April.
- Alpizar, Francisco and E. Sills. 2014. "Combining state of the art science with practitioner's wisdom in the design of PES schemes: Lessons from the Costa Rican experience" presented at the *Environment for Development Annual Meeting*, Dar es Salaam, Tanzania, October.
- Arriagada, R., E. Sills, P. Ferraro, and S. Pattanayak. 2013. "Why Participate in PES? Socioeconomic Impacts of Costa Rica's Program" presented at the *International Workshop on Evaluating Forest Conservation Initiatives*, Barcelona, Spain, December.
- Bauch, S., E. Sills, and S. Pattanayak. 2012. "Promoting Conservation Compatible Livelihoods: Causal Impacts of an ICDP in the Brazilian Amazon" presented at the *AERE Conference*, Asheville, NC, June.
- Sills, E. E. Mercer, T. Haines, P. Matos, F. Cubbage, and A. Raimondi. 2011. "Local regulation: determinants of land use ordinances in Florida" presented in the AERE sessions of the *Southern Economics Association Conference*, Washington DC., November.
- Arriagada, R., E. Sills, P. Ferraro, S. Pattanayak, and E. Ortiz. 2011. "Heterogeneous Impacts: Identifying and Interpreting Regional Variation in the Impact of Payments for Ecosystem Services In Costa Rica" presented at *Agricultural and Applied Economics Association Meeting*, Pittsburgh PA, July.
- Bauch, S., S. Pattanayak, and E. Sills. 2010. "The road less traveled: Does forest conservation reduce malaria in the Brazilian Amazon?" presented at the *World Congress of Environmental and Resource Economics*, Montreal, Canada, July.
- Sills, E., S. Bauch, J. Weber, and S. Pattanayak. 2008. "Forest-based Micro-Enterprise in the Brazilian Amazon: Assessing the Welfare Impacts of Integrated Conservation and Development" presented at the *European Association of Environmental and Resource Economists*, Gothenburg, Sweden, June.
- Sills, E., S. Bauch, J. Weber, and S. Pattanayak. 2008. "Increasing returns to community forestry: Estimating the impacts of micro-enterprise development in the Brazilian Amazon" presented at the *American Agricultural Economics Association Meetings*, Orlando FL, July.
- Sills, E. 2008. "Balancing Costs and Benefits of Slowing the Spread of Gypsy Moths" presented at the *USDA Interagency Research Forum on Invasive Species*, Annapolis MD, January.
- Sills, E., S. Pattanayak, S. Saha, K. Sanglisuwan, J. Yang, and A. Singha 2007. "Mine over matter? Health, wealth, and forests in a mining area of Orissa" presented at the *International Conference on Comparative Development*, Delhi India, December.
- Sills, E., S. Pattanayak, P. Ferraro, R. Arriagada, E. Ortiz, and S. Cordero. 2007. "Testing Pigou: Private Provision of Public Goods" presented at the *AERE Workshop on Valuation and Incentives for Ecosystem Services*, Mystic CT, June.
- Sills, E., K. Jones, S. Pattanayak, K. Alger, J. Alvarez, K. Cassingham, J. Krishnaswamy, and N. Phillips. 2006. "Watershed protection by forests: Vital ecosystem service or smoke and mirrors?" presented at *Tercer Congreso Chileno de Ciencias Forestales*, Concepción Chile, November.
- Sills, E., R. Arriagada, S. Pattanayak, P. Ferraro, L. Carrasco, E. Ortiz, S. Cordero, and K. Andam. 2006. "Program Evaluation of Costa Rica's Pago de Servicios Ambientales (PSA): Impacts on Forest

- Cover" presented at *Ecosystem Services in the Neotropics: State of the Art and Future Challenges*, Valdivia Chile, November.
- Sills, E. 2006. "Payments for Environmental Services in Costa Rica" presented as part of the symposium "How do we know it's working? State of the art program evaluation for conservation science and policy" at the *Society for Conservation Biology Annual Meeting*, San Jose CA, June.
- Shanley, Patricia and E. Sills. 2005. "Market Myths and Forest Livelihoods" presented at *Working Forests in the Tropics*, Gainesville FL, February.
- Pattanayak, Subhrendu, E. Sills, and D. Whittington. 2004. "Cost-recovery for Water Supply: Understanding how time preferences affect financing options in Kathmandu, Nepal" presented at the *Northeastern Universities Development Conference*, Montreal, October.
- Sills, Erin, S. Atmadja, S. Warren, and R. Estevez, 2004. "Sustaining Diversity: Limited-resource Forest Landowners in the Southern United States" presented at the IUFRO Conference on *Human Dimensions Family and Farm Forestry*, Pullman WA, March.
- Sills, Erin and S. Saha. 2004. "Rubber subsidies for extractive reserves: Sign of Failure or Success?" presented at the *ISTF Conference People and Parks*, New Haven CT, March.
- Sills, Erin and S. Pattanayak, 2003. "Markets, modernization, and the Mentawai: Explaining Differences in Forest Dependence," presented at the *Northeastern Universities Development Conference*, New Haven CT, October.
- Arin, Tijen and E. Sills, 2002. "Financing conservation and development with tourism: Park entrance fees in the Republic of Georgia" presented at the *World Congress of Environmental and Resource Economists*, Monterey CA, July.
- Sills, Erin, S. Pattanayak, T. Holmes, and S. Lele, 2002. "Collecting Clues from Limited Data: non-timber forest product collection in labor and land limited situations" presented at the *Southern Forest Economics Workshop*, Virginia Beach VA, March.
- Sills, Erin, S. Pattanayak, C. Mansfield, and K. Cassingham, 2002. "What Drives Voluntary Preservation?" presented at the *World Congress of Environmental and Resource Economists*, Monterey, CA, July.
- Sills, Erin, K. Potter, K. Jones, and D. Wear, 2002. "Assessing Forest Sustainability with Questions and Criteria" presented at the *Society of American Foresters Convention*, Winston-Salem, NC, October.
- Sills, Erin, E. Romero, and W. Sabido, 2002. "Financing Conservation with Certified Timber: the Experience of Programme for Belize" presented at *Working Forests in the Tropics*, Gainesville, FL, March.
- Caviglia, Jill L. and E. Sills, 2000. "Forest Management Practices by Indigenous and Migratory Populations: Diversification and Deforestation" presented at the *Western Agricultural Economics Association Meetings*, Vancouver, Canada, July.
- Kramer, Randall, E. Sills, and S. Pattanayak, 1998. "National Parks as Development Projects: Gauging Local Support" presented at the *World Congress of Environmental and Resource Economists*, Venice, Italy, June.
- Sills, Erin and T.P. Holmes, 1998. "Household Responses to New Opportunities in Non-timber Forest Product Markets" presented at the *American Agricultural Economics Association Meeting*, Salt Lake City, UT, August.
- Sills, Erin and R.A. Kramer, 1998. "Tourism, Conservation, and Development of Siberut National Park, Indonesia" presented at the *Allied Social Science Associations Meeting*, Chicago, IL, January.

### Selected posters

- Wu, Y. and E. Sills. 2016. "Drivers of Deforestation in the Western Brazilian Amazon." *3rd Latin American Research Symposium*. NC State University, NC, February.
- Lin, L., E. Sills, S. Pattanayak, S. Atmadja, and J. Streck. 2010. "Sub-national Geography of REDD+ Projects." *ISTF Conference*. Yale University, CT, February.

- Anderson, C. J., M. N. Peterson, E. Sills, D. Cobb, and H. Bondell. 2009. "Assessing willingness of North Carolina hunters and anglers to increase license fees." 16<sup>th</sup> Annual Conference of the Wildlife Society, Monterey, CA, September.
- Bigsby, K. P. Tobin, and E. Sills. 2008. "Anthropogenic Influences on Gypsy Moth Dispersal" *Annual Gypsy Moth Review*, Tacoma, WA November.
- Ambrose, M. S. Bauch, K. Bigsby, Y. Wu, E. Sills, and P. Tobin. 2008. "Estimating the Cost of Gypsy Moth Sex in the City" *USDA Interagency Research Forum on Invasive Species*, Annapolis, MD January.
- Atmadja, S. and E. Sills 2008. "Meta-Analysis of Deforestation & Poverty: What is the Consensus?" European Association of Environmental and Resource Economists, Gothenburg, Sweden, June.
- Bauch, S.C., Barroso, M., Sills, E. 2008. "Harnessing Rural Radio Networks for Working Forests." *Working Forests in the Tropics*, Gainesville, FL, March.
- Saha, S., E. Sills, J. Caviglia-Harris, and S. Pattanayak. 2008. "Can milk markets reduce deforestation?" *American Agricultural Economics Association Meetings*, Orlando FL, July.
- Warren, S., E. Sills, and S. Moore. 2007. "New Forestry Outreach Approaches for Limited-Resource, Underserved, and Beginning Landowners." *Outreach Scholarship Conference: Access through Engagement*. Madison, WI, October.

### **INVITED LECTURES**

- Reconsidering forest carbon offsets. Triangle Resource & Environmental Economics (TREE) Seminar. Research Triangle Park, NC, October 2023
- On carbon offsets from forest conservation. Keynote lecture at the 17<sup>th</sup> Annual Meeting of Environment for Development. Accra, Ghana. October 2023.
- Performance-based conservation finance: lessons from REDD+. Keynote lecture at XXIV Annual BioEcon Conference, Santiago de Compostela, Spain. August 2023.
- Forest Carbon Accounting and Impact Evaluation. Invited presentation in Bonn Climate Change Conference (SB58) Side Event on High Integrity Forest Carbon Markets: from global stock-taking to advancing science. Organized by CIFOR, Bonn [virtual], <a href="https://youtu.be/DQhg3UZuT0s">https://youtu.be/DQhg3UZuT0s</a>, June 2023.
- Synthetic Control Method. Invited presentation in Monitoring, Evaluation and Learning (MEL) Science Workshop. Organized by the Nature Conservancy, Durham, NC, May 2023.
- Methods comparison and challenges for accounting systems. Invited presentation in panel on Myths, realities, and solutions towards high-integrity forest carbon credits. Organized by CIFOR at the Global Forest Observations Initiative Plenary, Rome [Virtual], <a href="https://www.cifor-icraf.org/event/myths-realities-and-solutions-towards-high-integrity-forest-carbon-credits/">https://www.cifor-icraf.org/event/myths-realities-and-solutions-towards-high-integrity-forest-carbon-credits/</a> May 2023.
- Causal inference, conservation science, and carbon offsets. Invited lecture in the Faculty of Land and Food Systems, University of British Colombia, April 2023.
- Synthetic Control Methods in Conservation Science. Invited lecture in virtual seminar series Tuesdays with Team Counterfactual, Society for Conservation Biology, <a href="https://vimeo.com/760425293">https://vimeo.com/760425293</a>, October 2022.
- Laundering logs: the role of concessions and the effect of field inspections in Peru, Invited lecture in the Forest Resources and Environmental Conservation Seminar Series, Virginia Tech, March 2021.
- How do we include learning components (cost-effectively) into implementation? Invited lecture at The Nature Conservancy, Arlington, VA, February 2020.
- REDD+ in the real world: learning from a pan-tropical sample of pilots, Invited Bugas Lecture in the Frontiers of Economics, University of Wyoming, February 2019.
- Local Responses to Federal Forest Policy: The Green Municipality Program in the Brazilian Amazon, Invited lectures in the Duke University Amazon Frontiers Conference, Durham, NC, April 2018, and the Salisbury University Economics and Finance Seminar Series, October 2018.
- Enabling Local Governments to Respond to a Federal Environmental Mandate: Evaluation of the Green Municipality Program in the Brazilian Amazon, Presentations to the CenREP Colloquia, Raleigh, NC,

- April 2018, and the INRA CEE Workshop on Measuring the effects of forest policies and interventions, Montpellier, France, March 2018.
- 3E+ Evaluation of REDD+: Findings from a pan-tropical sample of pilot projects, Invited lectures in the Faculty of Forestry, UBC, Vancouver, Canada, November 2017; the Seminar Series IIES-CIGA, UNAM, Morelia, Mexico, August 2017; and the School of Natural Resources and Environment, University of Michigan, Ann Arbor, MI, April 2017.
- Formulating policy and management around ecosystem services, Invited Lecture at Policy Day of CESIEP, Talca, Chile, November 2016.
- What works in tropical forest conservation: evaluating impacts on carbon and co-benefits, Invited Lecture at ASU, Tempe, AZ, November 2016.
- Valuation of Forest Ecosystem Services, Invited Lecture at the Launch of CESIEP, Valparaiso, Chile, November 2015.
- An Overview of Current Knowledge about the Impacts of Forest Management Certification, Invited lecture to Duke University Student Chapter of SAF Annual Fall Symposium on "A Closer Look at Forest Certification," October 2015.
- Evaluación de impactos de las políticas sobre la deforestación tropical utilizando el método de control sintético, Environment for Development Seminar Series, CATIE, Costa Rica, February 2015.
- Understanding REDD+: What and how can we learn from pilots? Invited keynote lecture at SANDEE Workshop, Kathmandu, Nepal, December 2014.
- Evaluating local innovations in forest policy: Application of the synthetic control method to tropical deforestation, Department of Economics Seminar Series, University of Gothenburg, November 2014.
- Potential and Pitfalls of Panel Surveys, CIFOR livelihoods retreat, Istanbul, Turkey, June 2014.
- Expanding global markets, Virginia Forestry Summit, Williamsburg VA, April 2014.
- The Xingu Seed Network: How does harvest of tropical tree seeds affect household livelihoods?, Lecture at FAPESP Week North Carolina, NCSU, Raleigh NC, November 2013.
- Understanding REDD: what and how can we learn from pilot projects?, Keynote lecture for the Environment for Development Annual Meeting, CATIE, Costa Rica, October 2012.
- Dynamics of deforestation and development on the Amazon frontier, Department of Economics Seminar Series, University of North Carolina at Greensboro, November 2012.
- How is REDD+ unfolding on the ground? An exploration of social, political & biophysical issues. UNFCCC Side Event, Durban, South Africa, 30 November 2011.
- A Guide to Learning about Livelihood Impacts of REDD+ Projects. UNFCCC Side Event, Cancun, Mexico, 2 December 2010.
- Panelist for "Carbon Markets, Forestry & Forest Products: A Briefing for North Carolina Decision-makers," Raleigh NC, October 2009.
- Co-evolution of deforestation and development: evidence from spatial panel data on the Amazon frontier, Development Economics Seminar Series, University of Wisconsin, March 2008.
- Trazendo beneficios por meio da comercialização dos PFNMs para as comunidades e a cidade, Café Não-Madeireiro, CIFOR, Belém, Brazil, February 2007.
- Bosques, Ambiente, Economía y Sociedad, Public Symposium hosted by Universidad de Concepción, Concepción, Chile, November 2006.
- Impact of the PSA Program on Land Use, World Bank Workshop on EcoMarkets, San Jose, Costa Rica, September 2006.
- Impacts of Iron Ore Mining on Livelihoods: Evidence from Orissa, Indian Statistical Institute, Delhi, India, August 2006.
- Evolução da Fronteira: Valor da Terra em Ouro Preto do Oeste, Rondônia, IMAZON, Belém, Brazil, June 2006.

- Evolution of an Amazon Forest Frontier: Determinants of Land Value in Rondônia, Brazil, Department of Geography Colloquia on Human-Environment Interactions, University of North Carolina, March 2006.
- A Dinâmica da Agropecuária e do Bem-Estar Familiar em Rondônia, Associação dos Produtores Alternativos, Ouro Preto do Oeste, Brazil, July 2005.
- Market Myths and Forest Livelihoods, ESSD Week, Forest Livelihoods and Vulnerability Session, World Bank, Washington, DC, March 2005.
- Culture, commerce, and conservation in forest fringe communities, Department of Environmental Sciences, University of California Riverside, October 2004.
- Panelist for Seminar on State of the World's Natural Resources, Food and Agriculture, NC State University, Oct 2002.
- Tropical Deforestation: Causes, Consequences, Responses, ENCORE Continuing Education Program, NC State University, April 2002.
- Tropical Deforestation, Athens Drive High School and Enloe High School, NC, September and October, 2001.
- Ecotourism and Development in Brazil, Duke University Conference "Can Community Development Protect Biodiversity in the Tropics?" NC, March 2001.
- Economics of Forest Resources: An Assessment of Non-Timber Benefits in the Tropics, Institute of Life Sciences, Utkal University, India, November 2000.

#### **OUTREACH PUBLICATIONS AND WORKING PAPERS**

- "Status and Perspectives of Maasai Women in Ngorongoro Conservation Area, Tanzania," 2022, with Albers, Campoverde, King, Alais, Kirama, Kreinbrink, Lokina, and Mtenge. EfD Discussion Paper 22-17. Gothenburg, Sweden: Environment for Development. Available from:

  <a href="https://www.efdinitiative.org/publications/status-and-perspectives-maasai-women-ngorongoro-conservation-area-tanzania">https://www.efdinitiative.org/publications/status-and-perspectives-maasai-women-ngorongoro-conservation-area-tanzania</a>
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- "A Review of Current Knowledge about the Impacts of Forest Management Certification and a Proposed Framework for its Formal Evaluation," 2013, with Romero, Putz, Guariguata, Cerutti, Lescuyer. CIFOR Occasional Paper No. 99. Available from: <a href="http://www.cifor.org/online-library/browse/view-publication/publication/4188.html">http://www.cifor.org/online-library/browse/view-publication/4188.html</a>
- "Energy, Gender and Development: What are the Linkages? Where is the Evidence?," 2011, with Kölhin, Pattanayak, and Wilfong. World Bank Policy Research Working Paper No. 5800 Available from: <a href="http://go.worldbank.org/BWBRP91A50">http://go.worldbank.org/BWBRP91A50</a>
- "A guide to Learning about the Livelihood Impacts of REDD+," 2010, with Jagger, Lawlor, and Sunderlin. CIFOR Working Paper No. 56. Available from: <a href="http://www.cifor.cgiar.org/nc/online-library/browse/view-publication/publication/3283.html">http://www.cifor.cgiar.org/nc/online-library/browse/view-publication/publication/3283.html</a>
- "Technical guidelines for research on REDD+ project sites with survey instruments and code book," 2010, with Sunderlin, Larson, Duchelle, Luttrell, Jagger, Pattanayak, Cronkleton, Ekaputri. CIFOR. Available from: <a href="http://www.cifor.cgiar.org/publications/pdf">http://www.cifor.cgiar.org/publications/pdf</a> files/Books/BSunderlin1001.pdf
- "What is a REDD+ Pilot? A preliminary typology based on early actions in Indonesia," 2010, with Madeira, Brockhaus, Verchot, Kanninen. CIFOR InfoBrief No. 26. Available from: http://www.cifor.cgiar.org/publications/pdf files/infobrief/3266-infobrief.pdf
- "Policy Impacts on Deforestation: Lessons from Past Experiences to Inform New Initiatives," 2010, with Pfaff, Amacher, Coren, Lawlor, and Streck. Nicholas Institute Report 10-02. Available from: http://www.nicholas.duke.edu/institute/deforestation.06.10.pdf
- "NCSU's First Graduate Focuses on Agriculture" Masters International Coordinators Newsletter, Issue 3, Fall 2005: 4.
- "Survey Results from NC State University," 2004, with Estevez, *PineTips: Newsletter of the Eastern NC Christmas Tree Growers Association*, April.
- "Financing Conservation with Certified Timber: Lessons from Belize" Sylvanet V 15(1) Spring 2002, pp.7-9.
- "Survey Examines Organic Farmers' Views of Trees on Farms," 2002, with Mirrett, *The Temperate Agroforester* V 10 N 4: 8.
- "What explains legislative voting on the environment?" 2002, with Ingle, *The Carolina Conservationist* Summer 2002, p. 5.
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- "World View: Learning Firsthand about World Forestry," NC State Bulletin, Mar 24, 2000: 2.
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## **Extension materials**

- <u>Tree Tips</u> (non-technical factsheets published by NC Cooperative Extension Service and available from <a href="http://www.ncsu.edu/woodlands/forestry.html">http://www.ncsu.edu/woodlands/forestry.html</a>)
- Mance, K., S. Warren, E. Sills. 2003. "Goods from your Woods."
- Mance, K., E. Sills, S. Warren, R. Hamilton. 2003. "Getting Help from a Consulting Forester."
- Mance, K., S. Warren, E. Sills. 2003. "Making Money from Hunting Leases."
- Mance, K., S. Warren, E. Sills. 2003. "Making a Profit from Pinestraw."

Warren, S., A. Hiatt, E. Sills. 2003. "Keeping the Family in Family Forest."

<u>Woods Wise</u> (non-technical guides published by NC Cooperative Extension Service and available from <a href="http://www.ncsu.edu/woodlands/forestry.html">http://www.ncsu.edu/woodlands/forestry.html</a>)

Hamilton, R., K. Mance, E. Sills, S. Warren, R. Bardon, S. Moore. 2003. "Guide to Consulting Foresters." Mance, K., S. Warren, E. Sills, B. Williamson. 2003. "Guide to Selling Timber."

## PROFESSIONAL SERVICE

## **Working groups**

Conservation Strategy Fund Economics Advisory Committee, member, 2023 -

IUFRO GFEP Expert Panel on Forests and Poverty, contributing author, 2019-2020.

IUFRO Task Force on FIRE\$: Economic Drivers of Global Wildland Fire Activity, 2019-2020.

IUFRO WFSE Expert Panel on the impacts of the SDGs on forests, convening lead author, 2018-2019.

NCEAS SNAPP Working Group on Sharing vs. Sparing, 2014 – 2017

SESYNC Working Group on Forests, Agriculture and Rivers in the Brazilian Amazon, 2016 - 2018

Working Group on Evidence Chains, member of group coordinated by the Nature Conservancy and Duke University, 2016 – 2018

Strategic Environmental Research Initiative (SERI) workshop on social equity in resource management, Bren School of Environmental Science & Management at the University of California, Santa Barbara, 2016

Working Group on Impact Evaluation of Forest Certification in the Tropics, coordinated by the University of Florida and funded by World Bank and US AID, 2011 - 2014

NCEAS Working Group on Effects of Trade Policy on Non-native Forest Pests and Pathogens, 2008 – 2009

#### **Events**

AAAS EPI Center, Member of panel on "Transactions, Uncertainty, and Trust in the Voluntary Carbon Market." Virtual. October 2023. https://www.aaas.org/events/exploring-how-carbon-credits-are-evolving-oil-and-gas-sector

Cross-Campus Climate Conversations, Member of panel on "Land Use and Climate Change." NC State University, Raleigh, NC. October 2023.

New York Climate Week, Member of panel on "Delivering integrity in the VCM: Developments towards high quality forest carbon crediting." New York. September 2023.

## Consulting

Inter-American Development Bank, consultant for development of PES system in Acre, Brazil

Nicholas Institute (Duke University), consultant for white paper reviewing lessons for REDD+ from previous deforestation policy

Research Triangle Institute, consultant on economics of invasive species, impact of severe weather on forest management, and REDD+

Terra Carbon, consultant for impact evaluation of Green Municipalities Program to reduce deforestation in the Brazilian Amazon

World Bank, consultant for strategy paper on Energy, Development, and Gender

#### Reviews

Grant proposals for the National Science Foundation, USDA National Research Initiative, South Asian Network for Development and Environmental Economics, Sustainable Forest Management Network (Canada), the Council for Development Research (Denmark), the International Foundation for Science (Sweden), the World Bank Development Marketplace, Environment for Development, the NORFACE and Belmont Forum research programme Transformations to Sustainability (T2S); Internal Reviewer for NCSU Proposals to USDA ISE

Manuscripts for Agroecology and Sustainable Food Systems, Agricultural and Resource Economics Review, Agroforestry Systems, AGU Advances, Ambio, American Journal of Agricultural Economics, Biological Conservation, Canadian Journal of Agricultural Economics, Carbon Footprints, Climate and Development, Climatic Change, Conservation Biology, Conservation Letters, Conservation Science and Practice, Current Opinion in Environmental Sustainability, East African Agricultural and Forestry Journal, Environmental Research Communications, Environmental Research Letters, Environmental Science and Policy, Ecosystems, Ecological Economics, Environment and Development Economics, Environment and Development, Environment Development and Sustainability, Environmental Management, Environmental and Resource Economics, Environmental Research Communications, Forests, Forest Economics, Forest Science, Forest Ecology and Management, Forest Policy and Economics, Frontiers in Forests and Global Change, Global Change Biology, Global Ecology and Conservation, Injury Prevention, International Journal of Biodiversity and Conservation, International Journal of Disaster Risk Reduction, International Review of Forest Research, Journal of Agricultural and Resource Economics, Journal of the Association of Environmental and Resource Economists, Journal of Environment and Development, Journal of Environmental Economics and Management, Journal of Forest Economics, Journal of Forestry, Journal of Land Use Science, Journal of Leisure Research, Journal of Sustainable Forestry, Land Economics, Land Use Policy, Nature Communications, Nature Ecology & Evolution, Nature Food, Nature Sustainability, Natural Resources Forum, One Earth, Oryx, PlosOne, Policy Sciences, PNAS, Resource and Energy Economics, Resources, Revista Brasileira de Politica Internacional, Science, Science Advances, Small-scale Forestry, Sustainability and World Development.

Book chapters for Forest under Pressure: Local Responses to Global Issues (IUFRO), Forest Policy for Private Forestry: Global and Regional Challenges (CABI), The Economics of Forest Disturbances: Wildfires, Storms, and Invasive Species (Dordrecht). Reports for IADB and UNEP Emissions Gap Report. Proposed book (Routledge) on management of non-timber forest products.

Dissertations for University of British Columbia (Canada), University of Western Australia, Tezpur University (India).

Dossiers for promotion to tenure for Oregon State University, Sultan Qaboos University (Oman), University of South Florida.

Conference abstracts for AERE and AAEA.

# Other

Mentor in the AERE Scholars program, 2022 Program committee for AERE sessions at ASSA, Member, 2018 – 2020, Chair 2021 International Society of Tropical Foresters, Country Vice President 2005 - 2006 Southern Roundtable on Sustainable Forests, Steering Committee Member 2003 – 2005

**MEMBERSHIPS** American Agricultural Economics Association (1999 - )

Association of Environmental and Resource Economists (1998 - )

**LANGUAGES &** Fluent in Portuguese, good Spanish skills, rudimentary Indonesian **PROGRAMS** Familiar with STATA, Limdep, R, MS Access, and IMPLAN