

**GEORGE CALEB HURTT**

Curriculum Vitae

**EDUCATION**

- 1997 Ph.D., Princeton University, Ecology and Evolutionary Biology
- 1994 M.A., Princeton University, Ecology and Evolutionary Biology
- 1992 M.S., University of Connecticut, Ecology and Evolutionary Biology
- 1990 B.A., Middlebury College, Biology, Cum Laude

**SPECIAL COURSES TAKEN**

- 2004 Issues in College Teaching, University of New Hampshire
- 1994 Food Webs, Cornell University
- 1993 NASA Global Change Summer School, California Institute of Technology
- 1992 Tropical Ecology, Princeton/Smithsonian Tropical Research Institute, Panama
- 1989 Introduction to Ecosystem Science, Institute of Ecosystem Studies, NY
- 1988 Tropical Ecology, School for Field Studies, Australia

**FIELDS OF SPECIALIZATION**

Theory and Application of Community and Ecosystem Ecology  
Interactions of the Atmosphere, Hydrosphere, and Biosphere  
Mathematical Modeling

**FELLOWSHIPS, HONORS, AND DISTINCTIONS**

- 2004 University Outreach Scholar
- 2004 NASA "Top Story"
- 2001 Runner-up "Breakthrough of the Year", *Science*
- 1994-7 NASA Global Change Research Fellow
- 1992-4 Princeton University Graduate Student Fellowship
- 1992 Princeton University First Year Merit Prize
- 1990 Honors, Biology Department, Middlebury College
- 1990 Cum Laude, Middlebury College
- 1989 Martin Marietta Fellowship for Advanced Study

**PROFESSIONAL EXPERIENCE**

- 2001- Assistant Professor, Department of Natural Resources & Institute for the Study of Earth, Oceans and Space, University of New Hampshire
- 2000- Graduate Faculty, University of New Hampshire
- 1998-01 Research Assistant Professor, Institute for the Study of Earth, Oceans and Space, University of New Hampshire
- 1997-8 Postdoctoral Fellow, Princeton University
- 1992-4 Teaching Assistant, Princeton University
- 1990-1 Teaching Assistant, University of Connecticut
- 1989 Summer Intern, Environmental Management, Martin Marietta Corporation
- 1988 Research Assistant, Middlebury College
- 1988-0 Teaching Assistant, Middlebury College

**PROFESSIONAL MEMBERSHIPS**

American Geophysical Union; American Society for the Advancement of Science  
American Society of Naturalists; Ecological Society of America  
Sigma Xi

### UNIVERSITY SERVICE

- 2004 Coordinator, NASA Earth System Science Seminar Series
- 2004- Environmental Science Program Faculty
- 2004- Environmental Conservation Program Faculty
- 2003- Member, Academic Affairs Committee, College of Life Sciences and Agriculture
- 2003- Chair, Undergraduate Research Conference- Earth, Oceans, & Space Symposium
- 2003- Member, Undergraduate Research Conference Planning Committee
- 2003- Member, Climate Education Initiative Working Group, Office of Sustainability Programs
- 2002- Member, Executive Committee, Natural Resources and Earth System Science PhD Program
- 2002- Program Faculty, Natural Resources and Earth System Science PhD Program
- 2002-4 Member, Committee on Environmental Science
- 2002- Member, Biodiversity Education Initiative, Office of Sustainability Programs
- 2000-2 Program Faculty, The Natural Resources PhD program

### EXTRA UNIVERSITY SERVICE

- 2004- Science Team, NASA Earth System Science Pathfinder Mission
- 2004 EPA Review Panel
- 2004 NASA Review Panel
- 2003- Member, Maine Dept of Environmental Protection Science and Economic Policy Resource Panel
- 2003 Invited Speaker, Maine Department of Environmental Protection
- 2003 Invited Speaker, National Research Council
- 2003- Lead Author, Millennium Ecosystem Assessment
- 2002- Member, Editorial Board, *Ecology Letters*
- 2002- Director, NASA-UNH Joint Educational Initiative Research & Discover
- 2002 NASA Review Panel
- 2001 Co-Chair, Synthetic analyses of large-scale ecological processes, AGU Meeting, San Francisco
- 2001- USGS/NOAA/GFDL Land Model Development Team
- 2001 Participant, GCTE Focus 1, Terrestrial Ecosystem Responses to Atmospheric and Climate Change
- 2001 Invited Testimony, House Science Technology and Environment Committee, Concord
- 2001 Panelist, US Congressional Briefing, US Capitol, Washington DC
- 2001-2 Scientific Spokesperson, New England Regional Assessment of the Potential Impacts of Climate Variability and Change, US Global Change Research Program
- 2000-3 Member, Science Team, NASA Earth Science Information Partner EOS-WebSTER
- 2000-2 Coordinator, IKONOS Imagery Tasking for NASA LBA-ECO Project.
- 2000 Co-Chair, Regional Modeling Group, 1<sup>st</sup> LBA Science Conference, Belem
- 1999- Member, NOAA Carbon Modeling Consortium
- 1999 Co-Chair, LBA-Ecology Modeling Workshop, San Francisco
- 1998-2 Science Team, NASA LBA-Ecology
- 1994 Co-Chair, Princeton-Rutgers Ecology and Evolution Symposium, Princeton
- 1992-6 Co-Founder & Co-Chair, Rutgers-Princeton Ecology and Evolution Symposium, Rutgers

### REFEREED JOURNALS & PROGRAMS (PARTIAL LISTING 2002+)

*American Naturalist, Earth Interactions, Ecology, Ecology Letters, Ecological Modeling, EPA, Frontiers in Ecology and the Environment, Global Change Biology, NASA, Nature, NOAA, Science*

### TEACHING

- 2005 NR415 Global Biological Change, UNH
- 2004 NR797/897-ESCI795/895-EOS895 Earth System Science, with C. Wake, UNH
- 2004 Guest Lecture, NR903 Approaches to Research (Prof. B. Rock), UNH
- 2004 Guest Lecture, EOS895 Advanced Remote Sensing Methods (Profs. M. Fahnestock, M. Martin), UNH
- 2004 Guest Lecture, ESCI405 Global Environmental Change (Prof. C. Wake), UNH
- 2004 Guest Lecture, NR400 Professional Perspectives in Natural Resources (Prof. T. Lee), UNH

- 2004 NR415 Global Biological Change, UNH
- 2003 Guest Lecture, NR400 Professional Perspectives in Natural Resources (Prof. T. Lee), UNH
- 2003 Guest Lecture, ESCI405 Global Environmental Change (Prof. C. Wake), UNH
- 2003 NR415 Global Biological Change, UNH
- 2002 NR993 Hot Topics: The State of the World, UNH
- 2002 Guest Lecture, ESCI405 Global Environmental Change (Prof. C. Wake), UNH
- 2002 NR795/895-EOS795/895 Climate Change 2001, UNH
- 2002 Guest Lecture, ESCI596 Introduction to Climate as an Earth System (Prof. J. Pringle), UNH
- 2001 Fifteen Students from South America to Participate in Challenges of a Changing Earth, International Geosphere-Biosphere Program. Amsterdam (NASA).
- 2000 LBA-GAIM Modeling Workshop, National Center for Weather and Climate Forecasting (CPTEC), Brazil, with B. Moore, C. Nobre, D. Sahagian, and others.
- 2000 Guest Lecture, Ecosystem Ecology (Prof. J. Aber), UNH
- 1999 Guest Lecture, NR903 Approaches to Research (Prof. B. Rock), UNH
- 1994-7 Guest Lecture, Community Ecology (Prof. S. Pacala), Princeton University
- 1994 Assistant in Instruction, Greenhouse Gases (Prof. J. Sarmiento), Princeton University
- 1993 Assistant in Instruction, Theoretical Biology (Prof. S. Levin), Princeton University
- 1992 Assistant in Instruction, Biology of Organisms, Princeton University
- 1991 Teaching Assistant, Principles of Biology 2, University of Connecticut
- 1991 Teaching Assistant, Principles of Biology 2, University of Connecticut
- 1990 Teaching Assistant, Principles of Biology 2, University of Connecticut
- 1990 Teaching Assistant, Principles of Biology 1, University of Connecticut
- 1989 Teaching Assistant, Methods in Ecology, Middlebury College
- 1989 Teaching Assistant, Introduction to Ecology, Middlebury College
- 1989 Peer Tutor, Biology Department, Middlebury College
- 1988 Teaching Assistant, Methods in Ecology, Middlebury College

**GRADUATE STUDENT ADVISING (\*MAJOR ADVISOR)**

- 2004- Mariya Schilz\* (MS), TBD.
- 2003- Carolyn Girod\* (MS), "The tension between carbon storage and fire risk in ecosystems"
- 2002- Sang Young Chung (MS), "High-Resolution Remote Sensing of Land Cover Changes"
- 1999- Cassiano D'Almeida (PhD), "Water and Energy Balance of Amazonia"
- 1999- Michael Palace\* (PhD), "Carbon and Course Woody Debris Dynamics in Amazonia"
- 1999-04 Manoel Cardoso\* (PhD), "Fire Dynamics in Amazonia".
- 1998-01 Balazs Fekete (PHD, 2001, UNH) "Spatial Distribution of Global Runoff and its Storage in River Channels"

**UNDERGRADUATE STUDENT THESIS ADVISING**

- 2003-04 Ana Garcia (Princeton University)
- 2002-03 Heather Bain (BA, 2003, Holy Cross)

**EXTERNAL STUDENT FUNDING AWARDS**

- 2003- Cary Girod, Graduate Fellowship, Department of Homeland Security

**EXTERNAL EDUCATION FUNDING**

- 2003-05 Earth System Science Education for the 21<sup>st</sup> century, NASA-USRA, with Wake C, Seidel L, Salomonson V. \$67,000.
- 2002-05 Joint Center for Earth Sciences Educational Initiative, NASA Goddard Space Flight Center, with Moore B, Campbell J. \$454,000.

## EXTERNAL RESEARCH FUNDING

- 2004-05 Modeling land-use dynamics in the Earth System. NOAA/Princeton. \$100,000.
- 2004-07 Understanding the changing carbon, nitrogen, and water cycles in the Earth system. NASA Interdisciplinary Science Program NRA-02-OES-03, with Moore B, Pacala S, Sarmiento J, Vorosmarty C, Braswell B, Xiao X, Li C, Frolking S, Ollinger S, Melillo J, Stallard R, Seitzinger S, Maybeck M. \$2.35 million.
- 2004-07 Characterizing forest structure for assessment of carbon cycling and biodiversity: an integrated approach using lidar remote sensing and ecosystem modeling. NASA Interdisciplinary Science Program NRA-02-OES-03, with Dubayah R, Blaire B, et al. \$1.85 million.
- 2001-04 Beyond Potential Vegetation: Improving Model Projections Using Lidar Remote Sensing, NASA Terrestrial Ecology Program, with Dubayah R, Drake J. \$534,338.
- 1999-03 Predicting Changes in Regional and Global Biogeochemical Cycles, NASA Interdisciplinary Science Program, with Moore B, Pacala S, Melillo J, Sarmiento J, Braswell B, Frolking S, Xiao X, Li C. \$1.7 million.
- 1999-03 Development of a Global Carbon Model, NOAA/Princeton. \$180,000
- 1997-03 Modeling the Biogeochemical System of the Terrestrial Amazon: Issues for Sustainability, NASA, with Moore B, Braswell B, Xiao X, Melillo J, Pacala S. \$1.27 million.

## PUBLICATIONS

- Purves D, Caspersen J, Moorcroft P, Hurtt G, Pacala S. (2004) Human-induced changes in U.S. biogenic VOC emissions. *Global Change Biology* 10:1737-1755, doi:10.1111/j.1365-2486.2004.00844.x.
- Hurtt GC, Dubayah R, Drake J, Moorcroft P, Pacala S, Fearon M. (2004) Beyond Potential Vegetation: Combining Lidar Remote Sensing and a Height- Structured Ecosystem Model for Improved Estimates of Carbon Stocks and Fluxes. *Ecological Applications* 14(3): 873-883.
- Roy SB, Hurtt GC, Weaver CP, Pacala SW. (2003) Impact of historical land cover change on the July climate of the United States. *Journal of Geophysical Research* 108, D24, 4793, doi:10.1029/2003JD003565.
- Hurtt GC, Xiao X, Keller M, Palace M, Asner G, Braswell R, Brondizio E, Cardoso M, Carvalho C, Fearon M, Guild L, Hagen S, Moore B, Nobre C, Sá T, Schloss A, Vourlitis G, Wickel A. (2003) IKONOS Imagery for the Large Scale Biosphere-Atmosphere Experiment in Amazonia (LBA). *Remote Sensing of Environment* 88(1-2): 111-127.
- Cardoso M, Hurtt GC, Moore B, Nobre C, Prins E. (2003) Projecting future fire activity in Amazonia. *Global Change Biology* 9: 656-669.
- Hurtt GC, Pacala SW, Moorcroft PR, Caspersen J, Shevliakova E, Houghton R, Moore B. (2002) Projecting the future of the US carbon sink. *Proceedings of the National Academy of Sciences of the United States (PNAS)* 99(3): 1389-1394.
- Hurtt GC, Hale S, Rock B. (2002) Historic and Future climates of the New England Region. Ch 4 In: *Preparing for a Changing Climate: The Potential Consequences of Climate Variability and Change. New England Regional Foundation Report* (by New England Regional Assessment Group). U.S. Global Change Research Program, 108pp, University of New Hampshire.
- Moorcroft PR, Hurtt GC, Pacala SW. (2001) A method for scaling vegetation dynamics: the ecosystem demography model (ED). *Ecological Monographs* 71(4): 557-585.
- Keller M, Palace M, Hurtt GC. (2001) A biomass estimate for a 400 ha forest plot in Amazonia. *Forest Ecology and Management*. 154(3):371-382.
- Hurtt GC, Rosentrater L, Frolking S., Moore B. (2001) Linking remote-sensing estimates of land cover and census statistics on land use to produce maps of land use of the conterminous United States. *Global Biogeochemical Cycles* 15(3): 673-685.
- Norby R, Ogle K, Curtis P, Badek FW, Huth A, Hurtt GC, Kohyama T, Penuelas J. (2001) Above ground growth and competition in forest gap models: an analysis for studies of climatic change. *Climatic Change* 51(3-4): 415-447.
- Hurtt GC, Hale S. (2001) Future climates of the New England Region. Ch 4 In: *Preparing for a Changing Climate: The New England Regional Assessment Overview* (by New EnglandRegional Assessment Group). US Global Change Research Program. 96 pp. University of New Hampshire.

- Pacala SW, Hurtt GC, Moorcroft P, Caspersen J. (2001) Carbon storage in the US caused by land-use change, Pages 145-172 in: Present and Future of Modeling Global Environmental Change: Toward Integrated Modeling (T. Matsuno and H. Kida, eds) Terra Scientific Publishing, Japan.
- Pacala SW, Hurtt GC, Baker D, Peylin P, Houghton RA, Birdsey RA, Heath L, Sundquist ET, Stallard RF, Ciais P, Moorcroft P, Caspersen JP, Shevliakova E, Moore B, Kohlmaier G, Holland E, Gloor M, Harmon ME, Fan SM, Sarmiento JL, Goodale CL, Schimel D, Field CB. (2001) Consistent land- and atmosphere-based US carbon sink estimates. *Science* 292:2316-2320.
- Cardoso M, Hurtt GC (2000) Fires and land-cover dynamics in Amazonia. *BACH News* 8: 14-16.
- Caspersen J, Pacala SW, Jenkins JC, Hurtt GC, Moorcroft PR, Birdsey RA (2000). Contributions of land-use history to carbon accumulation in US forests. *Science* 290 (5494): 1148-1151.
- Hurtt GC, Armstrong RA (1999) A pelagic ecosystem model calibrated with BATS and OWSI data. *Deep-Sea Research I* 46:27-61.
- Hurtt GC, Moorcroft PR, Pacala SW, Levin SA (1998) Terrestrial models and global change: challenges for the future. *Global Change Biology* 4(5): 581-590.
- Clark J, Fastie C, Hurtt GC, Jackson S, Johnson C, King G, Lewis M, Lynch J, Pacala S, Prentice C, Schupp E, Webb T, Wycoff P. (1998) Dispersal theory offers solutions to Reid's Paradox of rapid plant migration. *Bioscience* 48(1): 13-24.
- Christian J, Ammerman J, Campbell L, Chai F, Chavez F, Doney S, Evans G, Hurtt G, et al. (1998) Nutrient limitation and phytoplankton community structure. *U.S. JGOFS Planning Report* 21:21-26.
- Hurtt GC (1997) Review: Modeling Biological Systems: Principles and Applications (J. W. Haefner, Chapman & Hall, 473 pp.). *Journal of Marine Biology and Ecology* 218(1):156-157.
- Hurtt GC (1997) Ocean ecosystem models for use in studies of the air-sea balance of carbon dioxide. PhD Thesis. Princeton University.
- Hurtt GC, Armstrong RA (1996) A pelagic ecosystem model calibrated with BATS data. *Deep-Sea Research II* 43(2-3):653-683.
- Hurtt GC, Pacala SW (1995) The consequences of recruitment limitation: reconciling chance, history and competitive differences between plants, *Journal of Theoretical Biology* 176:1-12.
- Colwell RK, Hurtt GC (1994). Nonbiological gradients in species richness and a spurious Rapoport's Rule, *The American Naturalist* 144(4):570-595.
- Pacala SW, Hurtt GC (1993) Terrestrial vegetation and climate change: integrating models and experiments, Pages 57-74 in Kingsolver J et al. eds. *Biotic Interactions and Global Change*, Sinauer.
- Hurtt GC (1992) *The consequences of recruitment limitation*. MS Thesis. Univ of Connecticut.

#### MANUSCRIPTS IN REVIEW

- de Guenni LB, Cardoso M, Goldammer J, Hurtt G, Mata LJ, Ebi K, House J, Valdes J. Regulation of Natural Hazards: Floods and Fires, Ch. 16 in *Millennium Ecosystem Assessment*. In review.
- Cardoso M, Hurtt GC, Nobre C, Moore B, Bain H. Field work and statistical analyses for the enhanced interpretation of satellite fire data. *Remote Sensing of Environment*. In review.
- D'Almeida C, Vorosmarty CJ, Hurtt GC, Marengo JA, Dingman SL, Keim BD. Hydrological effects of deforestation in Amazonia: lessons from the literature. *Hydrological Sciences Journal*. In review.
- Hurtt GC, Frolking S, Fearon MG, Moore III B, Shevliakova E, Malyshev S, Pacala SW, Houghton RA. The underpinnings of land-use history: three centuries of global gridded land-use transitions, wood harvest activity, and resulting secondary lands. *Global Change Biology*. In review.
- Shevliakova E, Pacala SW, Malyshev S, Hurtt GC, Milly PCD, Caspersen J, Thompson L, Wirth C, Dunne KA. The land carbon cycle and vegetation dynamics in the global dynamics land model LM3V. *Global Change Biology*. In review.
- Zarin D, Davidson EA, Brondizio E, Vieira ICG, Sá T, Feldpausch T, Schuur T, Mesquita R, Moran E, Delamonica P, Ducey MJ, Salimon C, Denich M, Hurtt G. Legacy of Fire Slows Carbon Accumulation in Amazonian Forest Regrowth. *Ecology Letters*. In review.

**PAPERS PRESENTATIONS AT PROFESSIONAL MEETINGS (1998+ PARTIAL LISTING)**

- Hurtt G, Dubayah R, Fearon M, Drake J, Schwarz P, Pacala S, Moorcroft P (2004) Beyond Potential Vegetation: Combining Lidar Remote Sensing and a Height- Structured Terrestrial Ecosystem Model for Improved Estimates of Carbon Stocks and Fluxes at a Set of Sites in North and Central America, AGU Fall Meeting, San Francisco.
- Girod G, King T, Hurtt G (2004) Global Fire Patterns and Trends from ENSO Events Estimated Using an Enhanced Ecosystem Model, AGU Fall Meeting, San Francisco. Poster.
- Wawrzeniak T, Wake C, Hurtt G, Seidel L (2004) Advancing Earth System Science Education for the 21<sup>st</sup> Century: An Interdisciplinary Education Initiative for University Students, AGU Fall Meeting, San Francisco. Poster.
- Hurtt GC, Frohling S, Fearon M, Moore B, Shevliakova E, Malyshev S, Pacala S, Houghton RA (2004) Three centuries of gridded, global land-use transition rates and wood harvest statistics for Earth System Model applications, Lucc: Integrated assessment of the land system: The future of land use Amsterdam.
- Hurtt G, Wake C, Seidel S, Sahagian D, Salomonson V, Frappier A, Girod C, Wawrzeniak T (2004) Advancing Earth System Science for the 21<sup>st</sup> Century: An interdisciplinary education initiative for university students. Universities Space Research Agency Earth System Science for the 21<sup>st</sup> Century Annual Meeting, Monterey, CA.
- Hurtt G, Wake C, Seidel S, Sahagian D, Salomonson V, Frappier A, Girod C, Wawrzeniak T (2004) Advancing Earth System Science for the 21<sup>st</sup> Century: An interdisciplinary education initiative for university students. Universities Space Research Agency Earth System Science for the 21<sup>st</sup> Century Annual Meeting, Monterey, CA. Poster.
- Hurtt G (2004) Regional Ecosystem Modeling, NASA Regional Amazon Forest Structure and Carbon Cycling Workshop, New Orleans
- Hurtt G (2004) Field, remote sensing, and modeling linkages. NASA Regional Amazon Forest Structure and Carbon Cycling Workshop, New Orleans
- Hurtt G, Frohling S, Fearon M, Moore B, Shevliakova E, Malyshev S, Pacala S (2003) Estimating the Uncertainty of Land-use History Reconstructions in the Global Carbon Balance. AGU Fall Meeting, San Francisco.
- Shevliakova E, Pacala S, Hurtt G, et al. (2003) Carbon Cycle and Vegetation Dynamics in the GFDL-Princeton University Coupled Atmosphere-Biosphere Model. AGU Fall Meeting, San Francisco, Poster.
- Dubayah R, Hurtt G, et al. (2003) Assessing Biogeochemical Cycling in Forested Ecosystems Through Integration of Remotely-Sensed Forest Structure with an Ecosystem Model. AGU Fall Meeting, San Francisco.
- Cardoso M, Salas B, Hurtt G, Hagen S, Keller M, Fearon M (2003) Land-Cover Transitions as Predictors of Fire Activity in Amazonia. AGU Fall Meeting, San Francisco, Poster.
- Hurtt G (2003) Direct and Indirect Human Contributions to Terrestrial Greenhouse Gas Fluxes: Consideration for Differing Spatial and Time Scales. National Academy of Sciences, Washington, DC.
- Hurtt, G (2003) Climate Change Science, Maine Department of Environmental Protection, Wiscasset, ME.
- Hurtt G, Dubayah R, Drake J, Fearon M (2003) Using Data on Vegetation Height Structure to Improve Model Estimates of Carbon Stocks and Fluxes, NASA Workshop on the Remote Sensing of Forest Structure, Baltimore, Poster.
- Wake C, Hurtt G, Seidel L (2003) Advancing Earth System Science Education for the 21st Century: An Interdisciplinary Education Initiative for University Students, ESSE21 Meeting, Morgan State University, Baltimore.
- Hurtt G (2003) Climate change: the outlook for New England and the U.S. Peterborough Conservation Commission and The Harris Center for Conservation Education, Peterborough, NH.
- Cardoso M, Hurtt G, Moore B, Nobre C, Prins E, Setzer A (2003) Use of satellite fire products in large-scale models. 9th Brazilian Remote Sensing Symposium, Brazil.
- Drake J, Hurtt G, Dubayah R, Moorcroft P, Fearon M (2003) Lidar Detected Vertical Canopy Structure for Improved Model Estimates of Carbon Stocks and Fluxes, ESA Annual Meeting, Savannah, GA.

- Dubayah R, Hurtt G, Drake J, Blair B, Fearon M (2003) Beyond Potential Vegetation: Combining Lidar Remote Sensing and a Height- Structured Ecosystem Model for Improved Estimates of Carbon Stocks and Fluxes. Association of American Geographers, Spring Meeting.
- Cardoso M, Hurtt G, Moore B, Nobre C, Setzer A (2002) Fieldwork and Statistical Analyses for Enhanced Interpretation of Satellite Fire Data. AGU Fall, San Francisco, Poster.
- Hurtt G (2002) The uses of climate projections in the New England Regional Assessment (NERA), NOAA Climate Prediction Assessment Workshop, Arlington, VA.
- Hurtt G (2002) The New England Regional Assessment, North American Maple Producers Meeting, North Conway, NH.
- Hurtt G (2002) Scaling-up ecosystem dynamics. Department of Mathematics, University of New Hampshire, Durham.
- Hurtt G (2002) The New England Regional Assessment. The Neponset River Watershed Association Annual Meeting, Mass.
- Dubayah R, Hurtt G, Drake J, Fearon M (2002) Beyond potential vegetation: improving model carbon projections of the land surface using lidar remote sensing. AGU Spring Meeting.
- Moorcroft P, Hurtt G, Caspersen J, Shevliakova E, Pacala S (2002) Biosphere-atmosphere fluxes of CO<sub>2</sub>: scaling from ecosystem to continent using the ED model. AGU Spring.
- Hurtt G (2002) The New England Regional Assessment. Forest Watch Teacher Training, Durham.
- Hurtt G (2002) IKONOS Imagery for Large-scale Biosphere Atmosphere Experiment in Amazonia. High Spatial Resolution Commercial Imagery Workshop, USGS National Center, Reston, VA.
- Hurtt G (2002) Climate and carbon changes in the US: Where could it all be headed? Edward Bronfman Family Foundation Lecture, University of Vermont, Burlington.
- Hurtt G, Dubayah R, Drake J, Fearon J (2002) Using Data on Vegetation Height Structure to Improve Model Estimates of Carbon Stocks and Fluxes. AGU Fall Meeting, San Francisco, Poster.
- Schloss A, Moore B, Braswell R, Hurtt G, Armstrong W, Blaha D, Carmell T, Freuder R, Routhier M, Spencer S (2002) EOS-WEBSTER - Providing Satellite Imagery for Everyone, AGU Fall, San Francisco, Poster.
- Hurtt G, Xiao X, Keller M, Palace M, Fearon M, Braswell R, Hagen S, Cardoso M, Schloss A, Moore B, Nobre C (2002). IKONOS imagery for the Large Scale Biosphere-Atmosphere in Amazonia. GIS Day, UNH, Durham. Poster.
- Hurtt G, Xiao X, Keller M, Palace M, Fearon M, Braswell R, Hagen S, Cardoso M, Schloss A, Moore B, Nobre C (2002). IKONOS imagery for the Large Scale Biosphere-Atmosphere in Amazonia. LBA 2<sup>nd</sup> Scientific Conference, Manaus. Poster.
- Cardoso M, Hurtt C, Moore B, Nobre C, Setzer A (2002) Fieldwork and statistical analyses for enhanced interpretation of satellite fire data. LBA 2<sup>nd</sup> Scientific Conference, Manaus. Poster.
- Cardoso M, Hurtt G, Moore B, Nobre C, Prins E. (2001) Potential Changes to Fire Dynamics in Amazonia. AGU, San Francisco.
- Hurtt G (2001) The Synthesis Challenge. AGU, San Francisco.
- Hurtt G (2001) The New England Regional Assessment Overview. New England Integrated Sciences and Assessment Meeting, Durham.
- Hurtt G (2001) Climate Change and The New England Regional Assessment, New England Science Center Consortium, University of New Hampshire, Durham.
- Hurtt G (2001) The New England Regional Assessment Overview, House Science, Technology, and Environment Committee, Concord.
- Hurtt G (2001) The New England Regional Assessment Overview, Congressional Briefing, United States Capitol, Washington, DC.
- Hurtt G (2001) Terrestrial Ecosystems and Global Change: New approaches for Synthesis and Prediction. Department of Natural Resources, University of New Hampshire, Durham.
- Shevliakova E, Hurtt G, Moorcroft P, Pacala S, Milly P, Fan S, Wang, G, Nobre C (2001) Sensitivity of biophysical feedbacks in the coupled atmosphere-biosphere model to land-cover/land use changes. IGBP Open Science Conference, Amsterdam.
- Hurtt G, Moorcroft P, Pacala S, Caspersen J, Shevliakova E, Moore B, (2001) Scaling carbon dynamics: models for synthesis and prediction. AGU, Boston.

- Hurtt G (2001) *Terrestrial Models and Global Change: New Approaches for synthesis and prediction*, Rutgers University, New Brunswick.
- Hurtt G (2001) *The New England Regional Assessment*, Yale University, New Haven.
- Hurtt G (2001) Incorporating the effects of land use and land-use history in the Ecosystem Demography Model of Amazonia. LBA Open Science Meeting, Atlanta.
- Moorcroft P, Hurtt G, Pacala S, et al. (2001) Scaling ecosystem dynamics. LBA Open Science Meeting, Atlanta.
- Hurtt G, Pacala SW, Moorcroft PR, Caspersen J, Shevliakova E, Houghton R, Moore B (2001) The future of the US carbon sink. AGU, San Francisco. Poster.
- Shevliakova E, Hurtt G, Pacala S, Milly P, Moorcroft P (2001) Interannual variability in Amazonian net ecosystem production: Implications for regional carbon cycle. AGU, San Francisco. Poster.
- Xiao X, Hurtt G, Keller M, Palace M, Hagen S, Moore B, Nobre C, Spencer S. (2001) Spatial heterogeneity of the eddy flux tower sites in Amazon Basin: Observations from high resolution space-borne remote sensing imagery (IKONOS sensor). LBA Eddy-Flux Tower Workshop, CPTEC, Cachoiera de Paulista, Brazil. Poster.
- Xiao X, Hurtt G, Hagen S, Frohling S, Braswell B, Moore B, Nobre C (2001) A multi sensor/resolution remote sensing database for Amazon eddy-flux tower sites. LBA Eddy-Flux Tower Workshop, CPTEC, Cachoiera de Paulista, Brazil. Poster.
- Xiao X, Hurtt G, Hagen S, Frohling S, Braswell B, Moore B, Nobre C (2001) A multi sensor/resolution remote sensing database for Amazon eddy-flux tower sites. GIS Day. University of New Hampshire. Durham. Poster.
- Cardoso M, Hurtt G, Moore B, Nobre C, Prins E (2001) Modeling large scale fire dynamics in Amazonia. GIS Day. University of New Hampshire, Durham 11/01. Poster.
- Hurtt G, Pacala SW, Moorcroft PR, Caspersen J, Shevliakova E, Houghton R, Moore B (2001) The future of the US carbon sink. IGBP Open Science Conference, Amsterdam. Poster.
- Hurtt G, Moorcroft P, Pacala S, Shevliakova E, Cardoso M, Moore B, Nobre C. (2001) Synthesis and projection of ecosystem changes in Amazonia. IGBP Open Science Conference, Amsterdam. Poster.
- Cardoso M, Hurtt G, Moore B, Nobre C, Prins E, (2001) Modeling Large-Scale Fire Dynamics in Amazonia. IGBP Open Science Conference, Amsterdam. Poster.
- Schloss A, Aber J, Braswell B, Frohling S, Hurtt G, Vorosmarty C, Moore B. (2001) A WEB-based system for terrestrial environmental Research. IGBP Open Science Conference, Amsterdam. Poster.
- Xiao X, Hurtt G, Hagen S, Frohling S, Braswell B, Moore B, Nobre C (2001), A multi sensor/resolution remote sensing database for Amazon eddy-flux tower sites LBA Open Science Meeting, Atlanta. Poster.
- Xiao X, Hurtt G, Hagen S, Frohling S, Braswell B, Moore B, Nobre C (2001), A multi sensor/resolution remote sensing database for Amazon eddy-flux tower sites LBA Open Science Meeting, Atlanta. Poster.
- Hurtt G, Pacala S, Moorcroft P, Caspersen J, Shevliakova E, Moore B (2000) Net carbon Fluxes in the conterminous U.S.: patterns, causes, and implications for the future. *AGU*, San Francisco.
- Shevliakova E, et al. (2000) Influence of Land Use and Land Cover on Biophysical Feedbacks to the Atmosphere. *AGU*, San Francisco.
- Pacala S, Hurtt G, et al (2000) Carbon Storage in the US Caused by Land use Change: Convergence of Estimates from Inventories of Ecosystems and Inversions of Atmospheric *AGU*, San Francisco.
- Hurtt G (2000) Introductory talk: Issues in LBA Ecology related to LBA Hydrology, LBA Hydronet Workshop, CPTEC, Brazil.
- Hurtt G (2000) Linking ecological and hydrological models of the Amazon. LBA Hydronet Workshop, CPTEC, Brazil.
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