



Pamela Matson

Richard and Rhoda Goldman Professor in Environmental Studies, Director, Change Leadership for Sustainability and Senior Fellow at the Woods Institute
Earth System Science

Bio

BIO

PAMELA MATSON is an interdisciplinary sustainability scientist, academic leader, and organizational strategist. She served as dean of Stanford University's School of Earth, Energy and Environmental Sciences from 2002-2017, building interdisciplinary departments and educational programs focused on resources, environment and sustainability, as well as co-leading university-wide interdisciplinary initiatives. In her current role as the Goldman Professor of Environmental Studies and Senior Fellow in the Woods Institute for the Environment, she leads the graduate program on Sustainability Science and Practice. Her research addresses a range of environment and sustainability issues, including sustainability of agricultural systems, vulnerability and resilience of particular people and places to climate change, and characteristics of science that can contribute to sustainability transitions at scale.

Dr. Matson serves as chair of the board of the World Wildlife Fund-US, and on the boards of the World Wildlife Fund – International and the ClimateWorks Foundation, and several university advisory boards. She served on the US National Academy of Science Board on Sustainable Development and co-wrote the National Research Council's volume *Our Common Journey: A transition toward sustainability* (1999); she also led the NRC committee on America's Climate Choices: *Advancing the Science of Climate Change*. She was the founding chair of the National Academies Roundtable on Science and Technology for Sustainability, and founding editor for the *Annual Review of Environment and Resources*. She is a past President of the Ecological Society of America. Her recent publications (among around 200) include *Seeds of Sustainability: Lessons from the Birthplace of the Green Revolution* (2012) and *Pursuing Sustainability* (2016).

Pam is an elected member of the National Academy of Science and the American Academy of Arts and Sciences, and is a AAAS Fellow. She received a MacArthur Foundation Award, contributed to the award of the Nobel Prize to the Intergovernmental Panel on Climate Change, among other awards and recognitions, and is an Einstein Fellow of the Chinese Academy of Sciences.

Dr. Matson holds a Bachelor of Science degree with double majors in Biology and Literature from the University of Wisconsin (Eau Claire), a Master degree in Environmental Science and Policy from Indiana University's School of Public and Environmental Affairs, and a Doctorate in Forest Ecology from Oregon State University. She spent ten years as a research scientist with NASA-Ames Research Center before moving to a professorship at the University of California Berkeley and, in 1997, to Stanford University.

ACADEMIC APPOINTMENTS

- Professor, Earth System Science
- Senior Fellow, Stanford Woods Institute for the Environment
- Affiliate, Precourt Institute for Energy

ADMINISTRATIVE APPOINTMENTS

- Post-doctoral Fellow Department of Entomology, North Carolina State University, (1983-1983)
- Research Scientist, NASA-Ames Research Center, (1983-1993)
- Professor, University of California, Berkeley, (1993-1998)
- Richard and Rhoda Goldman Professor in Environmental Sciences, Stanford University, (1997- present)
- Sant Director of the Earth Systems Program, Stanford University, (1999-2002)
- Co-director Center for Environmental Science and Policy, Stanford University, (2000-2002)
- Naramore Dean of the School of Earth, Energy and Environmental Sciences, Stanford University, (2002-2017)
- Senior Fellow, Woods Institute for the Environment, (2005- present)

HONORS AND AWARDS

- Tellus Mater Distinguished Fellow, Cambridge University (2019)
- Honorary Doctorate, McGill University (2017)
- Honorary Doctorate, Princeton University (2017)
- Fellow, California Academy of Sciences (2015)
- Doctor of Science Honorary Degree, Arizona State University (2014)
- Honorary Member, British Ecological Society (2013)
- Sustainability Science Award, Ecological Society of America (2013)
- Top 100 Women of Influence, Silicon Valley Business Journal (2013)
- Fellow, Ecological Society of America (2012)
- Einstein Visiting Professor, Chinese National Academy (2011)
- Eminent Ecologist Award, Colorado State University (2009)
- Major contributor to Nobel Peace prize awarded to Intergovernmental Panel on Climate Change, Norwegian Nobel Committee (2007)
- The 2005 Richard W. Lyman Award, Stanford University (2005)
- McMurtry University Fellow for Undergraduate Education, McMurtry University (2002)
- National Associate, National Academy of Sciences (2002)
- Leopold Leadership Fellow, Leopold Leadership Program (1999)
- Richard and Rhoda Goldman Professorship, Stanford University (1999)
- Distinguished Alumni Award, Oregon State University (1998)
- School of Public and Environmental Affairs Distinguished Alumni Award, Indiana University (1998)
- AAAS Fellow, American Academy of Arts and Sciences (1997)
- Distinguished Alumni Award, University of Wisconsin-Eau Claire (1996)
- MacArthur Fellow, MacArthur Fellowship (1995-2000)
- Elected Member, National Academy of Sciences (1994)
- Exceptional Service Medal, NASA (1993)
- Elected Member, American Academy of Arts and Sciences (1992)
- Fellow, Ames (NASA) Associate (1992)
- Research Paper Award, Oregon State University (1984)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Chair, World Wildlife Fund Board of Trustees (2018 - present)
- Chair, Guns Institute (University of Vermont) Advisory Board (2018 - present)
- Member, FutureEarth Advisory Council (2018 - present)
- Member, Board of Directors, FFAR (Foundation for Food and Agriculture Research) (2014 - 2015)
- Vice Chair, Board of Trustees, World Wildlife Fund (2012 - 2018)
- Chair, Provost's Committee on Sustainability, Stanford University (2012 - 2017)
- Member, ClimateWorks Board of Trustees (2011 - present)
- Keynote Address, Resilience 2011 Conference, Arizona State University, Tempe (2011 - 2011)
- Member, External Advisory Board for School of Global Environmental Sustainability, Colorado State University (2010 - 2016)
- Member, Editorial Board, Annual Review of Energy and the Environment (2010 - 2015)
- Member, Advisory Board, National Park System (2010 - 2012)
- Betty Klepper Lecture, Crop Science Society of America Meeting, Long Beach, Crop Science Society of America (2010 - 2010)
- Distinguished Lecturer, University of Hawaii, Honolulu (2010 - 2010)
- Keynote speaker, Wallace Stegner Center for Land, Resources and the Environment Annual Symposium, University of Utah (2010 - 2010)
- Member, Visiting Committee for MIT's Department of Civil and Environmental Engineering, MIT (2010 - 2010)
- Session speaker, Annual Meeting in San Francisco, American Geophysical Union (2010 - 2010)
- Member, Board, Climate Central, Inc. (2009 - 2012)
- Member, NAS Committee on America's Climate Choices, National Academy of Science (2009 - 2012)
- Member, NAS Committee on Climate, Energy and National Security, National Academy of Science (2009 - 2011)
- Member, NAS Science Ambassador Program Advisory Board, National Academy of Science (2009 - 2010)
- Invited speaker, "Climate Change: Global Risks, Challenges and Decisions" in Copenhagen, Denmark, University of Copenhagen and the International Alliance of Research Universities (2009 - 2009)
- Member, NAS Certification Committee, National Academy of Science (2009 - 2009)
- Participant, NSF Conference "Towards a Science of Sustainability", National Science Foundation (2009 - 2009)
- Presenter at Symposium during AAAS Annual Meeting. Invited lecture at the University of Texas, Austin., The American Academy of Arts and Sciences (2008 - 2008)
- Member, Board of Advisors, Global Institute of Sustainability, Arizona State University (2007 - present)
- Member, Advisory Board, Department of Ecology and Evolutionary Biology, Princeton University, (2007 - 2019)
- Speaker at Three Symposia at AAAS Annual Meeting in San Francisco. Invited lectures at Columbia University, Lamont-Doherty Earth Observatory, Duke University and Oregon State University., The American Academy of Arts and Sciences (2007 - 2007)
- Member, Advisory Council, Woods Institute for the Environment (2006 - 2017)
- Member, Editorial Board, Proceedings of the National Academy of Sciences (2006 - 2015)
- Plenary Lecture at AAAS Annual Meeting, St. Louis. Invited lectures at Arizona State University, the U.S. Geological Survey and the Long-Term Ecological Research (LTER) All-Scientists Meeting. Panelist at Society of Petroleum Engineering Annual Technical Conference and Exhibition., The American Academy of Arts and Sciences (2006 - 2006)
- Invited lecturer, The University of Wisconsin, Eau Claire, and the University of Virginia, Charlottesville (2005 - 2005)
- Science Director, Leopold Leadership Program, Stanford University (2004 - 2017)
- Stanford Environmental Initiative Leader, Stanford University (2004 - 2011)
- Invited lecturer, University of Georgia, Athens, Brown University and Woods Hole Marine Biological Laboratory. (2004 - 2004)
- Member, Board of Trustees, World Wildlife Fund (2003 - present)

- Invited lecturer, Yale University, Massachusetts Institute of Technology and Princeton University (2003 - 2003)
- Ex Officio member of Stanford University Academic Senate, Stanford University (2002 - 2017)
- Founding Editor-in-Chief, Annual Review of Environment and Resources (2002 - 2008)
- External Review Committee, Life Sciences Initiative, Cornell University (2002 - 2002)
- Invited Seminars: Stanford Think Again in Washington, Vancouver, Stanford Think Again (2002 - 2002)
- Founding Co-Chair, NAS Roundtable on Science and Technology for Sustainability, National Academy of Sciences (2001 - 2009)
- Founding Editor, Annual Review of Energy and the Environment (2001 - 2009)
- Advisory Committee for Environmental Program, Luce Foundation (2001 - 2007)
- Member, Executive Committee of the Emmett Interdisciplinary Program in Environment and Resources, Stanford University (2001 - 2006)
- Sophomore Advisor, Stanford University (2001 - 2006)
- Chair, Section on Ecology and Environmental Sciences, National Academy of Sciences (2001 - 2004)
- President, Ecological Society of America (2001 - 2003)
- Invited Seminars, University of Illinois, Harvard University, UC Davis, University of Wisconsin, Stanford University (2001 - 2001)
- Member, Board of Trustees, National Park Conservation Association (2000 - 2007)
- Member, National Academy of Sciences Temporary Nominating Group on Global and Human Environmental Science, National Academy of Sciences (2000 - 2004)
- Member, Coordinating Committee on the Sustainability Transition, National Academies of Science (2000 - 2002)
- Chair, Ad hoc Committee for an Interdisciplinary Environmental Studies Graduate Program, Stanford University (2000 - 2001)
- Member, Provost's Task Force on University Needs, Stanford University (2000 - 2001)
- President Elect, Ecological Society of America (2000 - 2001)
- External Review Committee, University of Utah (2000 - 2000)
- Invited Seminars, Carnegie Institution Global Ecology Lecturer, World Affairs Council of Northern California, Institute of Ecosystem Studies, Royal Swedish Academy of Sciences, National Academy of Sciences Presidents' Circle, Stanford Law School, Peninsula Geological Association (2000 - 2000)
- Provost's Committee on Environment, Stanford University (1999 - 2004)
- Provost's Committee to form Stanford Institute for the Environment, Stanford University (1999 - 2003)
- Director, Earth Systems Program, Stanford University (1999 - 2002)
- Dean of the School of Education Search Committee, Stanford University (1999 - 2000)
- Invited Seminars, Carnegie Institution Capital Science Lecture, International Botanical Congress, UC Davis, IGBP Congress keynote speaker, University of Connecticut Teale Lecturer, Penn State Life Sciences Consortium Colloquium, State University of New York (1999 - 1999)
- Invited testimony, California Senate Environmental Quality Committee (1999 - 1999)
- Co-Chair, Section 27, National Academy of Sciences (1998 - 2001)
- Institute for International Studies Search Committee, Stanford University (1998 - 2001)
- Lead Author, Working Group 1, Chapter 4, IPCC (Intergovernmental Panel on Climate Change) (1998 - 2001)
- Liaison, Section 27, National Academy of Sciences (1998 - 2001)
- Member, Science Advisory Committee, Organization of Tropical Studies (1998 - 2001)
- Editorial Board, Annual Review of Energy and Environment (1998 - 2000)
- Member, International SCOPE project on nitrogen transport and transformations, SCOPE (1998 - 2000)
- Acting Director, Earth Systems Program, Stanford University (1998 - 1999)
- Program Committee for the XVI International Botanical Congress, International Botanical Congress (1998 - 1999)
- Invited Seminars, National Academy of Sciences Symposium, USDA Anniversary Celebration, UCSC Resources in Environmental Education Program, SCOPE 10th General Assembly, University of Minnesota Lindeman Lecturer (1998 - 1998)

- Editorial Board, Ecosystems (1997 - 2002)
- Goldman Honors Program faculty member, Stanford University (1997 - 2002)
- Member and Executive Committee Member, Scientific Advisory Committee, International Geosphere-Biosphere Program (1997 - 2001)
- Sexual Harassment Advisor, School of Earth Sciences, Stanford University (1997 - 2001)
- Invited Seminars, Oregon State University; University of Texas, Austin; Colorado State University, Eminent Ecologists Series (3 seminars); UC Santa Cruz; Stanford University; Lawrence Berkeley National Laboratory; Greater Yellowstone Coalition, Boseman (1997 - 1997)
- Member, Advisory Committee, Natural Resource Ecology Laboratory (1996 - 2000)
- Member, U.S. National Committee, Scientific Committee on Problems of the Environment (SCOPE) (1996 - 1999)
- Member, Board of Trustees, Institute of Ecosystem Studies (1995 - 2004)
- Member, Board on Sustainable Development, National Academy of Sciences (1995 - 2000)
- Chair, Sustainable Biosphere Initiative Steering Committee, Ecological Society of America (1994 - 2000)
- Editorial Board, Ecological Applications (1994 - 2000)
- Member, Boreal Ecosystem-Atmosphere Exchange Study Advisory Committee, NASA (1994 - 1998)
- Editorial Board, Global Change Biology (1994 - 1997)
- Member, Mission to Planet Earth Advisory Committee, NASA (1994 - 1997)
- Member, Advisory Board, Aspen Global Change Institute (1992 - present)

PROGRAM AFFILIATIONS

- Center for Latin American Studies

PROFESSIONAL EDUCATION

- Ph.D., Oregon State University , Forest Ecology (1983)
- M.S., Indiana University , Environmental Science (1980)
- B.S., University of Wisconsin-Eau Claire , Biology (magna cum laude) (1975)

LINKS

- Matson Sustainability Science Research Laboratory: <http://pangea.stanford.edu/researchgroups/matsonlab/>
- Pursuing Sustainability: <http://pursuingsustainability.org>

Teaching

COURSES

2019-20

- Pursuing Sustainability: Managing Complex Social Environmental Systems: SUST 210 (Aut)
- Service Learning Practicum: EDUC 98 (Win)
- Sustainability Leadership Practicum: SUST 240 (Win, Spr)

2018-19

- Sustainability Science and Practice Practicum: SUST 240 (Win, Spr)

2017-18

- Pursuing Sustainability: Managing Complex Social Environmental Systems: SUST 210 (Aut)
- Social and Environmental Tradeoffs in Climate Decision-Making: EARTHSYS 188, EARTHSYS 288 (Win)
- Sustainability Challenges and Transitions: THINK 40 (Aut)

2016-17

- Pursuing Sustainability: Managing Complex Social Environmental Systems: EARTH 280 (Aut)
- Social and Environmental Tradeoffs in Climate Decision-Making: EARTHSYS 188, EARTHSYS 288 (Win)
- Sustainability Challenges and Transitions: THINK 40 (Aut)

STANFORD ADVISEES

Master's Program Advisor

Jack Barber, Whitney Francis, Kat Klass, Kat McNeill, Maggie Nowlan, Davianna Olert, Ricardo Sanchez Romero, Dalia Szafer, Eva Wallack

Doctoral (Program)

Sami Chen

Publications

PUBLICATIONS

- **Natural climate solutions are not enough.** *Science (New York, N.Y.)*
Anderson, C. M., DeFries, R. S., Litterman, R., Matson, P. A., Nepstad, D. C., Pacala, S., Schlesinger, W. H., Shaw, M. R., Smith, P., Weber, C., Field, C. B.
2019; 363 (6430): 933–34
- **Rainfall Intensification Enhances Deep Percolation and Soil Water Content in Tilled and No-Till Cropping Systems of the US Midwest** *VADOSE ZONE JOURNAL*
Hess, L. T., Hinckley, E. S., Robertson, G., Hamilton, S. K., Matson, P. A.
2018; 17 (1)
- **Evidence for a historic change occurring in China** *Environmental Science and Technology*
Liu, X., Vitousek, P., Chang, Y., Zhang, W., Matson, P., Zhang, F.
2016; 50: 505-506
- **Knowledge Systems for Sustainable Development** *Proceeding of the National Academy of Sciences of the United States of America. Articles from the Arthur M. Sackler Colloquium Linking Knowledge with Action for Sustainable Development*
Clark, W. C., Dickson, N. M., Matson, P. A.
2016; 113 (17): 4570-4622
- **Pursuing Sustainability: A Guide to the Science and Practice**
Matson, P. A., Clark, W. C., Andersson, K.
Princeton University Press.2016
- **Towards seaport resilience for climate change adaptation: Stakeholder perceptions of hurricane impacts in Gulfport (MS) and Providence (RI)** *Progress in Planning*
Becker, A., Matson, P., Fischer, M., Mastrandrea, M.
2014
- **Agricultural Nutrient Use and Its Environmental Consequences** *The Evolving Sphere of Food Security*
Vitousek, P. M., Matson, P. A.
edited by Naylor, R. L.
Oxford University Press.2014: 269–285
- **Energy in the Context of Sustainability** *DAEDALUS*
Bierbaum, R. M., Matson, P. A.
2013; 142 (1): 146-161
- **From Global Environmental Change to Sustainability Science: Ecosystem Studies in the Yaqui Valley, Mexico** *Fundamentals of Ecosystem Science*
Matson, P. A.
edited by Weathers, K. C., Strayer, D. L., Likens, G. E.
Academic Press, Elsevier.2013: 233–241

- **Planetary Opportunities: A Social Contract for Global Change Science to Contribute to a Sustainable Future** *BIOSCIENCE*
DeFries, R. S., Ellis, E. C., Chapin, F. S., Matson, P. A., Turner, B. L., Agrawal, A., Crutzen, P. J., Field, C., Gleick, P., Kareiva, P. M., Lambin, E., Liverman, D., Ostrom, et al
2012; 62 (6): 603-606
- **Seeds of Sustainability: Lessons from the Birthplace of the Green Revolution in Agriculture**
edited by Matson, P. A.
Island Press, Washington DC.2012
- **Transformations, transport, and potential unintended consequences of high sulfur inputs to Napa Valley vineyards** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Hinckley, E. S., Matson, P. A.
2011; 108 (34): 14005-14010
- **Integrated soil-crop system management for food security** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Chen, X., Cui, Z., Vitousek, P. M., Cassman, K. G., Matson, P. A., Bai, J., Meng, Q., Hou, P., Yue, S., Roemheld, V., Zhang, F.
2011; 108 (16): 6399-6404
- **Short-term fates of high sulfur inputs in Northern California vineyard soils** *NUTRIENT CYCLING IN AGROECOSYSTEMS*
Hinckley, E. S., Fendorf, S., Matson, P.
2011; 89 (1): 135-142
- **Principles of Terrestrial Ecosystem Ecology**
Chapin III, F. S., Matson, P. A., Vitousek, P.
Springer: New York.2011
- **Narrowing the agronomic yield gap with improved nitrogen use efficiency: a modeling approach** *ECOLOGICAL APPLICATIONS*
Ahrens, T. D., Lobell, D. B., Ortiz-Monasterio, J. I., Li, Y., Matson, P. A.
2010; 20 (1): 91-100
- **Linking knowledge with action in the pursuit of sustainable water-resource management** *Proceedings of the National Academy of Sciences*
Jacobs, K., Lebel, L., Buizer, J., Addams, L., Matson, P., McCullough, E., Garden, P., Saliba, G., Finan, T.
2010
- **America's Climate Choices: Advancing the Science of Climate Change** *National Research Council of the National Academies Committee (Matson, co-chair)*
Matson, P. A.
National Academy Press, Washington, DC.2010
- **The Sustainability Transition** *ISSUES IN SCIENCE AND TECHNOLOGY*
Matson, P.
2009; 25 (4): 39-42
- **Nutrient Cycling and Biogeochemistry** *Princeton Guide to Ecology*
Vitousek, P. M., Matson, P. A.
edited by Levin, S. A.
Princeton University Press.2009
- **Nutrient Balances in Agricultural Development** *Science*
Vitousek, P. M., Naylor, R., Crews, T., David, M. B., Drinkwater, L. E., Holland, E., Jones, P. J., Katzenberger, J., Martinelli, L. A., Matson, P. A., Nziguheba, G., Ojima, D., Palm, et al
2009; 324 (5934): 1519-1520
- **A synthesis of nitrogen transformations and transfers from land to the sea in the Yaqui Valley agricultural region of Northwest Mexico** *WATER RESOURCES RESEARCH*
Ahrens, T. D., Beman, J. M., Harrison, J. A., Jewett, P. K., Matson, P. A.
2008; 44
- **Ecosystem services: From theory to implementation** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*

- Daily, G. C., Matson, P. A.
2008; 105 (28): 9455-9456
- **Reconciling carbon-cycle concepts, terminology, and methods** *ECOSYSTEMS*
Chapin, F. S., Woodwell, G. M., Randerson, J. T., Rastetter, E. B., Lovett, G. M., Baldocchi, D. D., Clark, D. A., Harmon, M. E., Schimel, D. S., Valentini, R., Wirth, C., Aber, J. D., Cole, et al
2006; 9 (7): 1041-1050
 - **A case study of land reform and coastal land transformation in southern Sonora, Mexico** *LAND USE POLICY*
Luers, A. L., Naylor, R. L., Matson, P. A.
2006; 23 (4): 436-447
 - **The influence of tropical plant diversity and composition on soil microbial communities** *MICROBIAL ECOLOGY*
Carney, K. M., Matson, P. A.
2006; 52 (2): 226-238
 - **Business strategies for conservation on private lands: Koa forestry as a case study** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Goldstein, J. H., Daily, G. C., Friday, J. B., Matson, P. A., Naylor, R. A.
2006; 103 (26): 10140-10145
 - **Agricultural intensification: Will land spared from farming be land spared for nature?** *CONSERVATION BIOLOGY*
Matson, P. A., Vitousek, P. M.
2006; 20 (3): 709-710
 - **Variations in soil N cycling and trace gas emissions in wet tropical forests** *OECOLOGIA*
Holtgrieve, G. W., Jewett, P. K., Matson, P. A.
2006; 146 (4): 584-594
 - **Plant communities, soil microorganisms, and soil carbon cycling: Does altering the world belowground matter to ecosystem functioning?** *ECOSYSTEMS*
Carney, K. M., Matson, P. A.
2005; 8 (8): 928-940
 - **Analysis of wheat yield and climatic trends in Mexico** *FIELD CROPS RESEARCH*
Lobell, D. B., Ortiz-Monasterio, J. I., Asner, G. P., Matson, P. A., Naylor, R. L., Falcon, W. P.
2005; 94 (2-3): 250-256
 - **Consequences of nitrogen additions for soil losses from wet tropical forests** *ECOLOGICAL APPLICATIONS*
Lohse, K. A., Matson, P.
2005; 15 (5): 1629-1648
 - **Effects of a diel oxygen cycle on nitrogen transformations and greenhouse gas emissions in a eutrophied subtropical stream** *AQUATIC SCIENCES*
Harrison, J. A., Matson, P. A., Fendorf, S. E.
2005; 67 (3): 308-315
 - **Agricultural runoff fuels large phytoplankton blooms in vulnerable areas of the ocean** *NATURE*
Beman, J. M., Arrigo, K. R., Matson, P. A.
2005; 434 (7030): 211-214
 - **People, land use and environment in the Yaqui Valley, Sonora, Mexico** *Population, Land Use, and Environment*
Matson, P., Luers, A., Seto, K., Naylor, R., Ortiz-Monasterio, I.
edited by Entwisle, B., Stern, P.
National Research Council, Washington, DC.2005: 238-264
 - **Diversity and composition of tropical soil nitrifiers across a plant diversity gradient and among land-use types** *ECOLOGY LETTERS*
Carney, K. M., Matson, P. A., Bohannan, B. J.
2004; 7 (8): 684-694
 - **Global change and the earth system: A planet under pressure (Book Review)** *NATURE*
Book Review Authored by: von Storch, H.

2004; 429 (6989): 244-245

- **A method for quantifying vulnerability, applied to the agricultural system of the Yaqui Valley, Mexico** *GLOBAL ENVIRONMENTAL CHANGE-HUMAN AND POLICY DIMENSIONS*
Luers, A. L., Lobell, D. B., Sklar, L. S., Addams, C. L., Matson, P. A.
2003; 13 (4): 255-267
- **Erosion and the rejuvenation of weathering-derived nutrient supply in an old tropical landscape** *ECOSYSTEMS*
Vitousek, P., Chadwick, O., Matson, P., Allison, S., Derry, L., Kettley, L., Luers, A., Mecking, E., Monastra, V., Porder, S.
2003; 6 (8): 762-772
- **Nutrient losses over four million years of tropical forest development** *ECOLOGY*
Hedin, L. O., Vitousek, P. M., Matson, P. A.
2003; 84 (9): 2231-2255
- **Effect of land use change on soil carbon in Hawaii** *BIOGEOCHEMISTRY*
Osher, L. J., Matson, P. A., Amundson, R.
2003; 65 (2): 213-232
- **Patterns and controls of nitrous oxide emissions from waters draining a subtropical agricultural valley** *GLOBAL BIOGEOCHEMICAL CYCLES*
Harrison, J., Matson, P.
2003; 17 (3)
- **A framework for vulnerability analysis in sustainability science** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Turner, B. L., Kasperson, R. E., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., Eckley, N., Kasperson, J. X., Luers, A., Martello, M. L., Polsky, C., Pulsipher, A., Schiller, et al
2003; 100 (14): 8074-8079
- **Illustrating the coupled human-environment system for vulnerability analysis: Three case studies** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Turner, B. L., Matson, P. A., McCarthy, J. J., Corell, R. W., Christensen, L., Eckley, N., Hovelsrud-Broda, G. K., Kasperson, J. X., Kasperson, R. E., Luers, A., Martello, M. L., Mathiesen, S., Naylor, et al
2003; 100 (14): 8080-8085
- **Nutrient status of tropical rain forests influences soil N dynamics after N additions** *ECOLOGICAL MONOGRAPHS*
Hall, S. J., Matson, P. A.
2003; 73 (1): 107-129
- **Agricultural sustainability and intensive production practices** *NATURE*
Tilman, D., Cassman, K. G., Matson, P. A., Naylor, R., Polasky, S.
2002; 418 (6898): 671-677
- **Policy implications of human-accelerated nitrogen cycling (Reprinted from Biogeochemistry, vol 52, pg 281-320, 2001)** *BIOGEOCHEMISTRY*
Mosier, A. R., Bleken, M. A., Chaiwanakupt, P., Ellis, E. C., Frenay, J. R., Howarth, R. B., Matson, P. A., Minami, K., Naylor, R., Weeks, K. N., Zhu, Z. L.
2002; 57 (1): 477-516
- **The globalization of nitrogen deposition: Consequences for terrestrial ecosystems** *2nd International Nitrogen Conference*
Matson, P., Lohse, K. A., Hall, S. J.
ROYAL SWEDISH ACAD SCIENCES.2002: 113-19
- **Principles of Terrestrial Ecosystem Ecology**
Chapin, F. S., Matson, P. A., Mooney, H. A.
Springer-Verlag, New York.2002
- **Environmental variables controlling trace gas emissions from forests: Acid Precipitation and Nitrogen Deposition** *Trace Gas Exchange in Forest Ecosystems*
Hall, S. J., Matson, P. A.
edited by Papen, H., Gasche, R., Rennenberg, H.
Kluwer Academic Publishers, The Netherlands.2002: 279-306
- **Carbon cycling and soil carbon storage in mesic to wet Hawaiian montane forests** *ECOLOGY*

- Schuur, E. A., Chadwick, O. A., Matson, P. A.
2001; 82 (11): 3182-3196
- **Net primary productivity and nutrient cycling across a mesic to wet precipitation gradient in Hawaiian montane forest** *OECOLOGIA*
Schuur, E. A., Matson, P. A.
2001; 128 (3): 431-442
 - **Identifying the agricultural imprint on the global N₂O budget using stable isotopes** *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*
Perez, T., Trumbore, S. E., Tyler, S. C., Matson, P. A., Ortiz-Monasterio, I., Rahn, T., Griffith, D. W.
2001; 106 (D9): 9869-9878
 - **Physical and biogeochemical controls over terrestrial ecosystem responses to nitrogen deposition** *BIOGEOCHEMISTRY*
Asner, G. P., Townsend, A. R., Riley, W. J., Matson, P. A., Neff, J. C., Cleveland, C. C.
2001; 54 (1): 1-39
 - **Environment and development - Sustainability science** *SCIENCE*
Kates, R. W., Clark, W. C., Corell, R., Hall, J. M., Jaeger, C. C., Lowe, I., McCarthy, J. J., Schellnhuber, H. J., Bolin, B., Dickson, N. M., Faucheux, S., Gallopin, G. C., Grubler, et al
2001; 292 (5517): 641-642
 - **Policy implications of human-accelerated nitrogen cycling** *BIOGEOCHEMISTRY*
Mosier, A. R., Bleken, M. A., Chaiwanakupt, P., Ellis, E. C., Frenay, J. R., Howarth, R. B., Matson, P. A., Minami, K., Naylor, R., Weeks, K. N., Zhu, Z. L.
2001; 52 (3): 281-320
 - **Environmental challenges for the twenty-first century: Interacting challenges and integrative solutions** *ECOLOGY LAW QUARTERLY*
Matson, P.
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