

DIANA HARRISON WALL**University Distinguished Professor and Director, School of Global Environmental Sustainability**

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<http://www.biology.colostate.edu/faculty/dwall>email: diana@nrel.colostate.edu**EDUCATION**

- Ph.D. Plant Pathology. University of Kentucky, Lexington.
 B. A. Biology. University of Kentucky, Lexington.

PROFESSIONAL EMPLOYMENT

- 2008- present Director, School of Global Environmental Sustainability, Colorado State University (CSU), Fort Collins, CO
 2006- present Professor, Department of Biology, CSU
 1993-present Senior Research Scientist, Natural Resource Ecology Laboratory, CSU
 1993-2006 Professor, Forest, Rangeland, and Watershed Stewardship Department, CSU
 1993-2005 Director, Natural Resource Ecology Laboratory, CSU
 2001 Interim Dean, College of Natural Resources, CSU
 1993-2000 Associate Dean for Research, College of Natural Resources, CSU
 1993 Professor, Dept. Nematology, University of California (UC), Riverside
 1990-1993 Associate Professor and Associate Nematologist, Dept. Nematology, UC Riverside
 1982-1990 Associate Research Nematologist, Dept. Nematology, UC Riverside
 1988-1989 Associate Program Director, Ecology Program, National Science Foundation (NSF), Washington, DC
 1986-1988 Associate Director, Drylands Research Institute, UC Riverside
 1976-1982 Assistant Research Nematologist, Dept. Nematology, UC Riverside
 1975-1976 Lecturer, Dept. Plant Science, California State University, Fresno, CA
 1972-1975 Postgraduate Research Nematologist, Dept. Nematology, UC Riverside
 1971-1972 Biology Teacher, Julius T. Wright School for Girls, Mobile, AL
 1970-1971 Director, Biology Laboratories, Mobile College, Mobile, AL

HONORS

- 2012 **Fellow**, Ecological Society of America
Mines Medal, South Dakota School of Mines & Technology
President's Medal for Excellence in Antarctic Research, Scientific Committee on Antarctic Research (SCAR)
 2011-2012 **Member**, U. S. Antarctic Program Blue Ribbon Panel
2012 Tansley Lecturer, British Ecological Society
 2010 **Resident Distinguished Ecologist lecture**, CSU Graduate Degree Program in Ecology
 2009 **University Distinguished Professor**, Colorado State University
Unduloribates diana (Behan-Pelletier et Walter, 2009) (Acari: Oribatida) described
 2008 **Golden Beaker Award** for Outstanding Performance, MCMLTER Soil Ecology team, McMurdo Station Helicopter Operations (07-08 season), Antarctica
 2007 **Distinguished Ecologist lecture**, Program in Ecology, University of Wyoming
 2006 **Honorary Doctorate**, Utrecht University, The Netherlands
 2005-2011 **At Large Individual Member**, United States National Commission, United Nations Educational, Scientific, and Cultural Organization (UNESCO)
 2005-2007 **Member**, International Ecology Institute
 2005 **Wall Valley, Antarctica**, 77°29'S, 160°51' E
 (Designated by the USGS and ICSU Scientific Committee on Antarctic Research)
 2003-2006 **Co-chair**, Aldo Leopold Leadership Program
 2003 **Edwin Way Teale Lecturer**, University of Connecticut
 2003 **Soil Ecology Society Professional Achievement Award**
 2002 **Ton Damman Distinguished Lecturer in Ecology**, Department of Biology, Kansas State University

- 1999 **National Associate**, of the National Academy of Sciences
Awardee, CSU Academic Faculty & Administrative Professional Women's Caucus Award
Fellow, Aldo Leopold Leadership Program
- 1998 **Fellow**, American Association for the Advancement of Science
- 1998 **Distinguished Research Professor**, Univ. California, Davis, Bodega Marine Laboratory
- 1995 **Fellow**, Society of Nematology
- 1990 **United States Antarctic Service Medal**

BOARDS AND FOUNDATIONS

- 2011- present **Chair**, Scientific Advisory Committee, Global Soil Biodiversity Initiative
Member, South Dakota School of Mines, University Advisory Board
- 2006-present **Member**, World Resources Institute, Board of Directors
- 2009-present **Member**, Scientific Advisory Board, EU Research Project, EcoFINDERS
- 2001-present **Member**, Island Press Board of Directors
- 2007- present **Member**, Advisory Board, Aldo Leopold Leadership Program, Stanford University
- 2006-2011 **Member**, UNESCO International Hydrological Program US National Committee
- 2006-2008 **Member**, Scientific Advisory Committee, Institute of Arctic & Alpine Research, Univ. Colorado
- 2005- 2008 **Member**, Polar Research Board, National Research Council
- 2005-2006 **Member**, AAAS Advisory Committee on International Science
- 2005-2008 **Member**, Scientific Advisory Board, United Kingdom Population Biology Network (PopNet)
Member, Programme Advisory Committee, Conservation & Sustainable Management of Belowground Biodiversity Project, Tropical Soil Biology and Fertility Inst. of CIAT, Nairobi

OFFICES HELD

- 2004 **President**, Association of Ecosystem Research Centers
- 2003 **Chair**, Council of Scientific Society Presidents
- 1999-2000 **President**, Ecological Society of America
- 1993 **President**, American Institute of Biological Sciences
- 1984-1985 **President**, Intersociety Consortium for Plant Protection
- 1983-1984 **President**, Society of Nematologists
- 1983-1985 **President**, Sigma XI, University of California, Riverside
- 1975-1976 **Faculty Fellow**, California State University, Fresno

RESEARCH GRANT EXPERIENCE (2002-Present)

- 2011 Principal Investigator, Winslow Foundation. *Surveying unexplored soil biodiversity in Sub-Saharan Africa to enhance agricultural productivity* . Co-PI, Noah Fierer (Univ. Colorado). CSU. \$150,000.
- 2011-2017 Co- Investigator, NSF DEB Long Term Ecological Research (LTER). Increased connectivity in a Polar desert resulting from climate warming: McMurdo Dry Valley LTER Program. PI, Diane McKnight, (University of Colorado.), 5,640,000. CSU for Wall (Biology) and Howkins (History). 427,026.
- 2009-2011 Principal Investigator, Winslow Foundation. *Surveying unexplored soil biodiversity in Sub-Saharan Africa to enhance agricultural productivity* . Co-PI, Noah Fierer (Univ. Colorado). CSU. \$100,000.
- 2009 -2011 Co- Investigator, USDA CSREES. *Summer Soil Institute: Addressing environmental challenges with current and emerging techniques*. PI: J. C. Moore, Co-PIs, Many - (Colorado State University). CSU. \$142,611.
- 2009 -2013 Co- Investigator, NSF Ecosystems. *A Novel Experimental and Modeling Study of C and N Dynamics between Litter, Soil and the Atmosphere as Affected by Soil Fauna and Litter Quality*. PI: M. F. Cotrufo, Co-PI, W. J. Parton (Colorado State University). CSU. \$798,675.

- 2009 Co- Investigator, NSF Office of Polar Programs. ANT 0840979. *Collaborative Research: Limits and Drivers of Metazoan Distributions in the TransAntarctic Mountains*. PI: B. J. Adams, (Brigham Young University), Co-PI, B. Lyons (Ohio State University), Ian Hogg (Waikato University) CSU. \$50,000.
- 2008 Principal Investigator, CSU International Programs. *Conservation and Sustainable Use of Soil Biodiversity: an International Conference on Predicting Biodiversity Patterns under Climate Change*. Co-PI: E. Ayres, B. Simmons, CSU. \$20,000.
- 2006-2007 Principal Investigator, Winslow Foundation. *Discovering Global Patterns of Soil Biodiversity and Ecosystem Processes*. Co-PI: E. Ayres. \$75,000.
- 2005-2011 Co-Investigator, NSF Ecosystems Long Term Ecological Research (LTER). *The Role of Resource Legacy on Contemporary Linkages between Biodiversity and Ecosystem Processes in a Cold Desert Ecosystem: The McMurdo Dry Valley LTER Program*. PI: W. Berry Lyons (Ohio State University). Wall/CSU \$573,552.
- 2005-2006 Principal Investigator, Winslow Foundation. *Integrating Soil Biodiversity and an Ecosystem Process: Analysis of a Global Experiment*. \$63,000.
- 2004-2009 Principal Investigator, NSF DEB Ecosystems. *Collaborative Research: Global Patterns of Soil Biodiversity: Implications for Ecosystem Function*. \$1.22M. Collaborators: J. Garey, (University of South Florida), R. Bardgett (Lancaster University), Wall/CSU, \$579,994.
- 2004-2006 Principal Investigator, NSF Office of Polar Programs. *Synthesis of Soil Biodiversity and Ecosystem Functioning in Victoria Land, Antarctica: A Workshop*. \$51,677. Co-PIs: B. Adams (Brigham Young University), R. Virginia (Dartmouth College), J. Barrett (Va. Tech).
- 2004-2005 Principal Investigator, Winslow Foundation. *International Workshop on Soil and Sediment Biodiversity and Ecosystem Functioning*. \$60,000.

LEADERSHIP/SERVICE

International

- 2012 **Member**, New Zealand Antarctic Research International Science Panel
- Member**, Development Council, Scientific Committee on Antarctic Research (SCAR)
- 2011 **Member**, Scientific Committee, First Wageningen Conference on Applied Soil Science, The Netherlands.
- Member**, Scientific Committee on Antarctic Research (SCAR) Antarctic Ecosystem Thresholds and Resilience (AntETR), Life Sciences Programme.
- 2010 - **Member**, Scientific Committee on Antarctic Research (SCAR), USA Standing Committee on Life Sciences
- 2009 **Member**, Wageningen University Review Committee of the Graduate School for Production Ecology and Resource Conservation, Wageningen, The Netherlands, June.
- 2008 **Selection Jury Member**, ECI prize in Terrestrial Ecology.
- 2007 **Expert Panel Member on Soil**, Working Group on the Environment, Roundtable on Sustainable Biofuels, Switzerland.
- External Reviewer**, Ecological Reviews Series, Cambridge University Press and British Ecological Society.
- Lecturer**, International Ph.D. course on Soil Ecology: crossing the frontier between below and above ground. Wageningen, The Netherlands, February.
- 2006 **Member**, Appointments and Promotions Board, Swedish University of Agricultural Sciences, Department of Forest Vegetation Ecology, Umeå, Sweden
- 2004-2005 **Overseas Co-Organizer**, Integrative Approaches for the Investigation of Root Herbivory in Agricultural and Natural Systems; International Workshop. Prof. P. Gregory, Univ. Reading, UK, Organizer. October. UK Biotechnology and Biological Sciences Research Council
- 2003-present **Member**, International Board, Frontiers in Ecology and the Environment, journal of the Ecological Society of America
- 2003-2005 **Co-Lead Author and Co-chair**, Implications for Achieving the Millennium Development Goals, Chapter Committee of the Millennium Ecosystem Assessment

- 2000-2006 **Chair**, DIVERSITAS International Biodiversity Observation Year (IBOY) - Global Litter Invertebrate Decomposition Experiment (GLIDE)
- 1999-2002 **Chair**, DIVERSITAS International Biodiversity Observation Year
- 1999-2001 **Member**, International Advisory Panel for 2001 Meeting on Detecting Climate Change, London
- 1998 **Member**, Steering Committee, Biological Investigations of Terrestrial Antarctic Systems of the Scientific Committee on Antarctic Research (SCAR)
- 1996-2001 **Member and SCOPE Representative** to DIVERSITAS Scientific Steering Committee
- 1996-1997 **Chair**, International Planning Committee for the “Functional Role of Soils Biota under Global Change: An Ecosystem-level Perspective.”
- 1995-2004 **Chair**, SCOPE Committee on Biodiversity and Ecosystem Functioning in Soils and Sediments

United States

- 2011- **Member**, Soil Science Society of America, S733 Conferences Committee
- Member**, Soil Science Society of America, Bouyoucos Conferences Committee
- 2010-2011 **Member**, NRC Committee on *Future Science Opportunities in Antarctica and the Southern Ocean*. (release date Sept 9, 2011).
- Member**, PCAST Working Group on Biodiversity Preservation and Ecosystem Sustainability: Report to President’s Council of Advisors on Science and Technology (PCAST), Washington, DC. *Sustaining Environmental Capital: Protecting Society and the Economy* (release date August 2011)
- Investigator**, Kellogg Biological Station LTER (1996 -)
- 2009-2011 **Member**, McMurdo Area Users Committee, Raytheon Polar and NSF
- Member**, Soil Ecology Society Professional Achievement Award Selection Committee
- Member**, NEON Domain 10 Science and Education Coordination Committee
- Member**, Committee for Proposal Review, Institute of Environment, Univ Minn.
- 2008-2010 **Member**, McMurdo LTER Executive Committee
- 2008 **Participating Scientist**, NEON Domain 10 Central Grasslands
- Member**, Ecological Society of America Nominating Committee

Editorial Boards

- Member:** Encyclopedia of Biodiversity (2005- present); Environmental Development (2011-)
- Past Member:** Editorial Boards: *Oecologia* (1997-1999), *Ecosystems* (1997-1998), *The International Journal of Meiofaunal Zoology* (1995-1998); Editorial Advisory Board, *Applied Soil Ecology* (1993-1998)

INVITED TALKS AND SEMINARS (2008-Present)

- 2012 *Soil invertebrates and climate change in hot and cold deserts*. Society of Experimental Biology Symposium on Physiology of Environmental Gradients, Salzburg, Austria, June.
- Life in an Extreme Desert Ecosystem: the McMurdo Dry Valleys*. Department of Geology, Portland State University, Portland, May.
- Soil biodiversity: is it critical for ecosystem functioning and sustainability*. Earth Day 2012 Symposium. Purdue University, April.
- Soil biodiversity, natural capital, and ecosystem services*. Planet under Pressure Meeting, London, March.
- Linking soil biodiversity and terrestrial ecosystem science*. University of California, Riverside, February.
- 2011 *Biodiversity is key to sustaining soils*. International Forum on Soil Science in a Changing World. Wageningen, Holland, September.
- Integrating soil biodiversity into terrestrial ecosystem science*. Tansley Lecture, British Ecological Society, Sheffield, UK, September.
- Can climate change in extreme ecosystems inform future scenarios of biodiversity?* Ecological Society of America, Austin, TX, August (Wall, DW, BJ Adams, UN Nielsen, and RA Virginia).

- Soils, biodiversity and sustainability*. USDA Summer Soils Institute, CSU, July.
- Supporting services of soils and sediments: the foundation of human well-being*. Ecosystem services in soil and water research symposium, Swedish University of Agricultural Research, Sweden, May.
- Soils, biodiversity and global sustainability*. Dennis Parkinson Memorial Symposium, Soil Ecology Society, University of British Columbia, Okanagan, BC, Canada, June.
- Lessons from a cold desert ecosystem: the Antarctic Dry Valleys*. Senior Scholars/ Osher lecture. Fort Collins, March.
- 2010 *Biodiversity: What did we know and what do we know now?* CSU Graduate Degree Program in Ecology, Fort Collins, October. (GDPE Resident Distinguished Ecologist Lecture).
- Long term ecosystem research: an environmental observation system in the Dry Valleys, Antarctica*. Scientific Committee on Antarctic Research, Buenos Aires, Argentina.
- Soil ecology and links to human health*. Soil Ecology Course, Taking Global Issues Underground, Wageningen, The Netherlands, June.
- Continental-scale analysis of total soil biodiversity using molecular techniques*. Conservation and Sustainable Management of Below-ground Biodiversity Conference, World Agroforestry Center (ICRAF). D. Wall, E. Ayres, U. Nielsen, R. Bardgett, J. Garey, T. Wu, S.T. Bates, and N. Fierer Nairobi, Kenya, May.
- Biodiversity in the Dry Valleys and beyond*. Polar Society, Boulder, CO, May.
- Biodiversity and the role of invertebrates in ecosystems*. Section of Integrative Biology, University of Texas, Austin, TX, April.
- 2009 *Biodiversity questions in critical zone research*. Jena, Germany, February.
- The Dry Valleys of Antarctica: soils and climate change*. Beet Street, Fort Collins, November.
- The Antarctic, the Climate and Implications for the Ecosystem*. CSU Alumni, Fort Collins, November.
- Research in the coldest desert on earth, the Antarctic Dry Valleys*. TILT, CSU, November
- Sustaining soil biodiversity and ecosystem services in agriculture*. Ecological Society of America, Albuquerque, NM, August.
- The Dry Valleys, Antarctica: where invertebrates rule*. Society for Advancing Chicanos and Native Americans in Science. Dallas, October.
- Trophic phylogeography: a research program for identifying drivers of soil community composition and concerted patterns of change and over time and space*. July. Soil Ecology Society Meetings, New Hampshire. (Adams, B.J. and D. H. Wall).
- Opening Talk, Aldo Leopold Leadership Program Training Week*. West Cornwall, Connecticut, June.
- Climate Pulses alter Soil Communities in a Polar Desert*. Stanford University Hopkins Marine Lab, Pacific Grove, CA, April.
- Soil Biodiversity, Ecosystem Services and Climate Change*. Harvard Sustainability Science Program, Center for International Development, Kennedy School of Government, Harvard University, Cambridge, MA, April.
- Antarctic Ecosystems and Climate Change*. A Celebration of International Polar Year 2007-2008 sponsored by the National Academy of Sciences and the National Science Foundation. Soil Biodiversity. Washington, DC, April.
- Soil Biodiversity*. Panel on the Many Uses of GlobalSoilMap.net. Soil Knowledge for a Sustainable Planet: Inaugurating GlobalSoil Map.net. Earth Institute, Columbia University, New York, February.
- Soil Biodiversity and Ecosystem Services*. EcoSystem Carbon Scoping Workshop, H. John Heinz III Center for Science, Economics and the Environment, Washington, DC, January.
- 2008 *Soil Biodiversity and Ecosystem Services*. Department of Plant and Soil Sciences, University of Kentucky, Lexington, October.
- Connecting Earth Sciences and Human Health in a Changing World*. NRC Symposium on Global Connections between Earth Sciences, Health and Policy, Washington, DC, September.

The World beneath our Feet: What it Does for Us. NRC Symposium on Soil: Sustaining Life on Planet Earth, Washington, DC, July.

Biodiversity, Carbon Storage and Trace Gas Loss. In Biodiversity Research – Safeguarding the Future. Convention on Biological Diversity Pre Conference meeting, Bonn, May. (with V. Wolters).

The State of Changing Antarctic Ecosystems, Antarctic LTER Social Sciences Workshop, Baltimore, May.

Threats to Biodiversity and Habitat Loss: How Do We Manage Biodiversity Sustainably? CSU Accelerates Panel, NY, March.

Soil Biodiversity and Ecosystem Services, Plenary Address, 45th Annual Alberta Soil Science Workshop, Lethbridge, Canada, February.

Terrestrial Ecosystems of the Antarctic Dry Valleys, Department of Earth and Planetary Sciences Department, Johns Hopkins University, Baltimore, MD, February

INVITED PARTICIPANT (2008-Present)

- 2012 Panelist, World Day to Combat Desertification Global Observance Event. Securing healthy soil and stopping land degradation: the Global Soil Partnership -Outcomes for Rio+20. Rio de Janeiro, Brazil, June.
- 2011 Participant, Soil Security Meeting, sponsored by the Univ. Sydney United State Studies Centre. Washington, DC, September.
- Participant, Antarctic Thresholds – Ecosystem Resilience and Adaptation Scientific Writing Group, Scientific Committee on Antarctic Research, Germany, October.
- Participant, NRC Workshop on Legacy and Lessons of the International Polar Year 2007-2008, Washington, DC, June.
- Participant, Antarctic Conservation for the 21st Century workshop, Scientific Committee on Antarctic Research, Kruger National Park, South Africa, May.
- 2010 Participant, NRC Polar Research Board workshop on “Frontiers in Understanding Climate Change and Polar Ecosystems”, Washington, DC, August
- 2009 Participant, Workshop on the Future of SCAR (Scientific Committee on Antarctic Research) Biology Programmes, Castiglioncello, Italy, May.
- Moderator, AAAS Symposium on Life Beneath Our Feet: Research Challenges in Soil Biodiversity, Chicago. February.
- 2008 NSF Workshop on Rapid Directional Change, sponsored by NSF Division of Integrative Organismal Systems, Arlington, VA, December.
- NSF Discussion Forum on the Future of Synthesis, sponsored by NSF Program Officers for NCEAS and NEScen, Arlington, VA, December.
- Panelist, CSU, President Penley’s ‘American Research Universities: Paving the Way for an Energy Future through Collaboration, Commercial Innovation and Workforce Education’, Washington, DC, September.
- Panelist, University of Colorado Research Symposium, Meeting the Global Energy and Climate Challenge, Boulder, August.
- Panelist, CSU, President Penley’s ‘CSU Accelerates’ Program of Scientists to Manhattan, NY, March.

MEETING CHAIR/CONVENOR (2008-Present)

- 2012 **Organizer**, with Richard Bardgett, Wim Van der Putten, Johan Six and Luca Monaterelli, Open Meeting Global Soil Biodiversity Initiative, London, March
- Co-organizer**, with S Kanatous (Biology), J Collinson (Ohio State Univ, Retired) and M Vandegehuchte and Z Sylvain (Biology), Antarctic Lecture Series, Fort Collins Library, January – June and September-December.
- 2011 **Co-organizer**, with U Nielsen, Symposium: *Connecting the dots from polar and hot desert ecosystems: what climate changes in extreme environments tell us*. Ecological Society of America, Austin, Texas, August.
- Co-organizer**, with Shane Kanatous (Biology), Jim Collinson (Ohio State Univ, Retired) and Uffe Nielsen (Biology), Antarctic Lecture Series, Fort Collins Library, January –

- June and September-December.
 2010 **Organizer**, McMurdo Science meeting, Fort Collins, CO, August.
 2008 **Co-organizer**, with Breana Simmons, Ed Ayres and Tracy Smith, Conservation and Sustainable Use of Soil Biodiversity: an International Conference on Predicting Biodiversity Patterns under Climate Change. *CSU, June*.

OTHER MEETINGS ATTENDED (2008 -- present)

- 2011 All Scientists Meeting, All LTER, Estes Park, September.
 Ecological Society of America, August.
 Society of Nematologists, August.
 Island Press Board Meeting April.
- 2011 American Geophysical Union, San Francisco, CA, December.
 South Dakota School of Mines, University Advisory Board meeting, October.
 Society of Nematology Meetings, Corvallis, OR, July.
 World Resources Board meeting, Washington, DC, March.
 Island Press Board Meeting, Washington, DC, April.
 McMurdo LTER PI meeting, New Orleans, February.
- 2009 MCM LTER Science Meeting, Hanover, NH, July.
 Soil Organic Matter Dynamics: Landuse, Management and Global Change, Colorado Springs, CO, July.
 NSF LTER Science Council Meeting, San Diego, CA, June.
 Jornada LTER Science Symposium, Las Cruces, NM, July.
 Council of Scientific Society Presidents, Washington, DC, May.
 Island Press Board Meeting, Washington, DC, April.
 Moderator, 3 panels, CORE Business Summit, Denver, March.
 The IARU International Scientific Congress on Climate Change, Copenhagen, Denmark, March.
- 2008 McMurdo LTER PI meeting, Clearwater, FL, February.
 British Ecological Society Meetings, London, August.
 Ecological Society of America Meetings, Milwaukee, August.
 Scientific Committee on Antarctic Research (SCAR), St. Petersburg, Russia, July.
 Sevilleta LTER Open Science Meeting, Albuquerque, NM, July.
 McMurdo LTER PI meeting, Chicago, June.
 Island Press Board Meeting, Washington, DC, May, November
 NSF LTER Antarctic Social Science Meeting, Baltimore, MD, May
 NRC Polar Research Board, Washington, DC, April
 McMurdo LTER PI meeting, Tampa, FL, March.
 World Resources Board meeting, Washington, DC, March, September

Reviewer

- Journals: *American Naturalist, American Midland Naturalist, Applied Soil Ecology, Arctic, Antarctic and Alpine Biology, Biology and Fertility of Soils, BioScience, Ecology, Ecology Letters, Ecological Monographs, Ecosystems, Geoderma, Global Change Biology, Great Basin Naturalist, Holarctic Ecology, Journal of Environmental Quality, Journal of Nematology, Oecologia, OIKOS, Nematologica, Nematropica, Pedobiologia, Polar Biology, Soil Biology and Biochemistry, Science, Nature, European Science Foundation*
- Proposals: NSF Divisions of: Ecology, Systematic Biology, Ecosystems, Population Biology, Physiological Ecology, Polar Programs, International Programs, Visiting Professorships for Women, Research Facilities. EU, NZ, & other countries. US Environmental Protection Agency, USDA Competitive Grants, US Department of Energy, Sigma Delta Epsilon. National Research Council Board on Science and Technology for International Development. NERC- UK, Women's International Science Collaborative Program. American Association for the Advancement of Science

MEMBERSHIPS

American Association for the Advancement of Science, American Geophysical Union, American Institute of Biological Sciences, American Phytopathological Society, American Women in Science, British Ecological Society, Ecological Society of America, European Society of Nematologists, Gamma Sigma Delta, International Society of Soil Zoology, International Association for Ecology, Organization of Tropical American Nematologists, Sigma Xi, Society of Nematologists, Soil Ecology Society, Soil Science Society of America.

EDUCATION/TEACHING ACTIVITIES **COLORADO STATE UNIVERSITY**

CSU Honors Program

2010-2011 Kyrie Ivanovich (with UN Nielsen, Ashley Shaw and Cecilia Tomasel)
2007-2008 Sarah Atherton

NSF Research Experience for Undergraduates Award MCM LTER

2006-2007 Sarah Atherton, NSF MCM LTER REU
2004 John Tipton, NSF MCM LTER REU

Undergraduate Student Mentoring

Kyrie Ivanovich, CSU, (with Ashley Shaw and Cecilia Tomasel), 2009-2011.
John Chaston, Brigham Young University, MOU internship, Antarctic Field Season, 2004-2005
Claire Ojima, Middlebury College, Undergraduate internship, Antarctic Field Season, 2004-2005
Kate Norvell, Soil Science Department, Colorado State University
Adler Dilman, Brigham Young University, MOU internship, Antarctic Field Season, 2005-2006

Courses Taught

Spring 2010

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2009

-BZ 692C (2 students) and BUS 690-003 (25 students): Global Change, Ecosystems and Sustainable Decisions. BUS taught in Global Social and Sustainable Enterprise Program, College of Business: BZ for Biology Graduate Students

Fall 2008

-BZ 692C (4 students) and BUS 690-003 (24 students): Global Change, Ecosystems and Sustainable Decisions. BUS taught in Global Social and Sustainable Enterprise Program, College of Business: BZ for Biology Graduate Students

Spring 2008

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2007

-BZ 690C and BUS 690-002 – Global Environmental Change: Challenges for Ecology and Economies (23 students: 2 BZ, 21 BUS) BUS taught for Global Social and Sustainable Enterprise Program, Business College: BZ for Biology Graduate Student

Spring 2007

-EY 592/BZ 692 – Ecology of Extreme Environments (co-taught with Dr. Shane Kanatous, Dept. Biology)

Fall 2002

-Seminar Series, Future Directions of Global Ecosystem Science (co-taught with Dr. Dave Theobald)
-Communicating Science. (co-taught with Dr. Dennis Ojima and Dr. Kathy Galvin)

Spring 1999

-EY 592 (Graduate Degree Program in Ecology) Methods in Ecosystem Science, 1 lecture, 1 lab

Fall 1996

-EY 592 (Graduate Degree Program in Ecology), Current Topics in Soil Ecology

Mentoring Young Scientists

Postdoctoral Scientists

Kelly S Ramirez, Ph.D. Univ. Colorado (2012-)

Pablo Garcia-Palacios, Ph.D. (Fulbright Fellow) Spain (2012)
 Martijn Vandegeuchte, Ph.D. Belgium (2011- present)
 Uffe Nielsen, Ph.D., Maculay Institute and Univ. Aberdeen (2008-2011)
 Breana Simmons, Ph.D., University of Georgia, (2005- 2009)
 Edward Ayres, Ph.D., Lancaster University, UK (2005- 2008)
 Johnson Nkem, Ph.D., Univ. New England, NSW, Australia (2003-2005)
 Emma Broos, Ph.D., Univ. Western Sydney, Australia (2003-2005)
 Dorota Porazinska, Univ. Florida, 1999-2002 (promoted to Scientist, 2001)
 Gina Adams, Ph.D., Sheffield University, 1999-2002
 Andrew Parsons, Ph.D., Manchester University, 1997-2003 (promoted to Scientist, 2000)
 Debbie Krumm, Ph.D., Univ. Colorado, 1999-2001
 Robert K. Niles, Ph.D., Purdue University, 1993-2001
 Laura E. Powers, Ph.D. Univ. Florida, 1993-1998
 Andreas O. Overhoff, Ph.D. Germany, 1991-1992

Graduate Students

Current

Elizabeth A. Shaw. M.Sc. 2010 –present, Graduate Degree in Ecology.
 Zachary Sylvain, Ph.D, 2008-present, Biology.
 Karen Seaver, M.Sc., 2007-terminated no degree. Biology.
 Rosemary Townsend, Ph.D., 2009. Hiatus - Biology.

Degrees Completed

Tracy Smith, M.Sc., 2011. Biology.
 Mark St. John, Ph.D. 2005, Graduate Degree Program in Ecology. Thesis - Soil mite biodiversity: Its relationship to grass species and influence on decomposition in the Konza Tallgrass Prairie
 Ana Child, M.Sc. 2002. Graduate Degree Program in Ecology. Thesis - Soil nematodes of the Short Grass Step region: From trophic to molecular diversity
 Nicole DeCrappeo, M.Sc. 2002. Graduate Degree Program in Ecology. Thesis - Influence of biotic and abiotic factors on the distribution of entomopathogenic nematodes in tallgrass prairie
 Best Poster Award, Soil Ecology Section, Ecological Society of America, DeCrappeo, N.M. and D.H.
Wall. 2000. Abiotic and biotic controls on the abundance and distribution of entomopathogenic nematodes in tallgrass prairie.
 Amy Treonis, Ph.D. 1999. Graduate Degree Program in Ecology. Thesis - Environmental controls of the diversity, activity and function of soil nematodes in the McMurdo Dry Valleys of Antarctica
 Ericha Courtright, M.Sc. 1996. Graduate Degree Program in Ecology. Thesis- Soil nematode distribution and genetic diversity in the Dry Valleys of Antarctica
 Sarah Spaulding, Ph.D. 1996. Graduate Degree Program in Ecology. Thesis - Algal investigations at varying temporal scales in an extreme environment: McMurdo Dry Valley Lakes, Antarctica

Graduate Committees

Elly Morrien, Wageningen University, Wageningen, The Netherlands, 2011, Ph.D. (outside Ph.D. member)
 Carolina Romano Rosa, 2009. M. B. A. Business College.
 Megan Steinweg, 2005-2007. M.Sc. Graduate Degree Program in Ecology
 Heather Blackburn, 2000-present. Ph.D. Graduate Degree Program in Ecology
 Cecilia de Tomasel, 1999. M.Sc. Plant Pathology
 Serita Frey, 1999. Ph.D. Graduate Degree Program in Ecology

Visiting Students

Maria Blauuw, M.Sc. student from Wageningen University, The Netherlands (May 1999-August 1999)
 Pella Brinkman, M.Sc. student from Wageningen University, The Netherlands (March-July 1996)
 Christien E. Ettema. M.Sc. student from Wageningen University, The Netherlands (March-September).

Sponsored Visiting Scientists

Marie Dam, Univ. Copenhagen (2012)
 Jihai Zhou, China (2009- 2011)
 Youngkee Lee. South Korean Ministry of the Environment, (2006-2008)

Teaching (only since tenure in 1990)**NSF Research Experience for Undergraduates Award**

- 1994 Svetlana Fortner, NSF REU, Univ. Calif, Riverside, CA
Elizabeth Lynn, NSF REU, Dartmouth College.
- 1991 Michelle Rose. NSF REU, Univ. Calif, Riverside, CA.
- 1989 Busan Ahn. NSF REU, Univ. Calif, Riverside, CA.

Informal Teaching:

- Winter 1994- Took a high school student and teacher to Antarctica to participate in my NSF Antarctic
1995 Research
- 1992 Nematology 250 (informal discussion). "NSF Proposals, Writing, Submission and Panel
Reviews", with Dr. D. Cooksey. 5 students. February. Informal Nematology Lunch
Discussion Group: (Winter 1992).

Courses Taught (formal courses were taught after tenure track appointment Fall 1990)

- Soil Ecology* (Nematology/Soil & Environmental Sciences 120); Upper Division/graduate, 13 students, 4 hr
credit; Spring Quarter, 1992; Co-Teacher: Dr. D. Crowley, S&ES; Plant/Soil Interactions From an
Ecological Perspective, Biotic Interactions Controlling Soil Fertility and Plant Growth.
- Seminar* (Nematology 250) Graduate seminar, 3 students, 1-2 hours credit; Spring Quarter, 1991. Every
quarter, 1976-78, co-taught, 5-9 students.
- Directed Studies* (Nematology 290); Ecology of Nematodes, Graduate seminar, 7 students, Winter Quarter,
1977.

Graduate Students**Graduate Committees**

- D. N. Janes, Jr., 1991. Ph.D., Biology.
- J. Nobbs, 1985. Ph.D.-Waite Agricultural Institute, Australia (External Advisor).

High School Participation

- 1992 J.W. North/UCR Mentorship Program. "Predator-Prey Interactions Under Steady State
Nutrient Conditions." A science project by Jennifer J. Park, Senior, North High School,
Riverside, CA, April-December.
Expanding Horizons Secondary Enrichment Program, UCR. Participant, July.
- 1991 Total Immersion Science Program, Faculty Mentor. 1 Student, A. Scales, Maryland, July.
Invited Lecturer, Honors Program, North High School, Riverside, CA, April.

CALIFORNIA STATE UNIVERSITY, FRESNO (1975-1976)

- Plant Nematology* (Lab). Upper Division/Graduate, 18 students, 4 hr credit; *Plant Pathology* (Lab). Upper
Division, 56 students, 4 hr credit. *Plant Quarantine*. Upper Division, 23 students, 3 hr credit. *Pest
Management* (w Lab). Upper Division/Graduate, 19 students, 4 hr credit.

PUBLICATIONS ARE DIVIDED INTO:

Publications in Press, Submitted, Refereed Published Papers, Edited Books, Book Chapters, Reports,
Articles not refereed and Abstracts

REFEREED PUBLICATIONS IN PRESS

- Standish, L. F., T. J. Kohler, R. M. M. Esposito, B. L. Simmons, U. N. Nielsen, D. H. **Wall**, D. R. Nemergut and D. M. Mcknight. Extreme streams: flow intermittency as a control on diatom communities in meltwater streams in the McMurdo Dry Valleys, Antarctica. *Canadian Journal of Fisheries and Aquatic Sciences*.
- Hodkinson, I.D. (Lead Author), Babenko, A., Behan-Pelletier, V., Böcher, J., Boxshall, G., Brodo, F., Coulson, S.J., De Smet, W., Dózsa-Farkas, K., Elias, S., Fjellberg, A., Fochetti, R., Footitt, R., Hessen, D., Hobaek, A., Koponen, S., Liston, A., Makarova, O., Marusik, Y.M., Michelsen, V., Mikkola, K., Pont, A., Renaud, A., Rueda, L.M., Savage, J., Smith, H., Samchyshyna, L., Velle, G., Viehberg, F., Vikberg, V., **Wall**, D.H., Weider, L.J., Wetterich, S., Yu, Q., & Zinovjev, A. 2012. Terrestrial and freshwater invertebrates. In Meltofte, H. (Ed.) *The Arctic Biodiversity Assessment*, Reykjavik, The Arctic Council.
- Verchot, L. V., N. L. Ward, J. Belnap, D. Bossio, M. Coughenour, J. Gibson, O. Hanotte, A. N. Muchiru, S. L. Phillips, B. Steven, D. H. **Wall** and R. S. Reid. Bacteria to elephants. Effects of land-use legacies on biodiversity and ecosystem processes in the Serengeti-Mara ecosystem. Book chapter.

SUBMITTED REFEREED PUBLICATIONS

- Nielsen, U. N., E. Ayres, D. H. **Wall**, G. Li, R. D. Bardgett, T. Wu and J. R. Garey. Global scale patterns of soil nematode community structure in relation to biotic and abiotic ecosystem properties. *Global Ecology and Biogeography*.
- Virginia, R.A., and D. H. **Wall**. Ecosystem function, principles of. in S. Levin, ed. *Encyclopedia of Biodiversity*. Academic Press, New York. (revision).
- Porazinska, D., and D. H. **Wall**. Soil Conservation. in S. Levin, ed. *Encyclopedia of Biodiversity*. Academic Press, New York. (revision).
- Levy, J. S., A. G. Fountain, M. N. Gooseff, J. E. Barrett, R. VanTreese, K. A. Welch, W. B. Lyons, U. N. Nielsen and D. H. **Wall**. Water track modification of soil ecosystems in the Lake Hoare Basin, Taylor Valley, Antarctica.

REFEREED JOURNAL PUBLICATIONS

- Nielsen, U. N. and D. H. Wall. 2013. The future of soil invertebrate communities in Polar Regions: different climate change responses in the Arctic and Antarctic? *Ecology Letters* www.doi: 10.1111/ele.12058
- Wall, D. H. & Nielsen, U. N. 2012. Biodiversity and Ecosystem Services: Is It the Same Below Ground? *Nature Education Knowledge* 3(12):8
- Fierer, N., J. W. Leff, B.J. Adams, U.N. Nielsen, S. T. Bates, C.L. Lauber, S. Owens, J. A. Gilbert, D. H. Wall, and G. Caporaso. 2012. Cross-biome metagenomic analyses of soil microbial communities and their functional attributes. *PNAS*. www.pnas.org/cgi/doi/10.1073/pnas.1215210110
- Mulder, C., A. Boit, S. Mori, J.A. Vonk, S. D. Dyer, L. Faggiano, S. Geisen, A. L. Gonzalez, M. Kaspari, S. Lavorel, P.A. Marquet, A. G. Rossberg, R. W. Sterner, W. Voigt and D. H. Wall. 2012. Distributional (In) Congruence of Biodiversity-Ecosystem Functioning. *Advances in Ecological Research* 46:1-88.
- C. Magalhaes, M. I. Stevens, S. C. Cary, B. A. Ball, B. C. Storey, D. H. Wall, R. Turk and U. Ruprecht. 2012. At limits of life: multidisciplinary insights reveal environmental constraints on biotic diversity in continental Antarctica. *PLOS ONE* <http://mines-medal.sdsmt.edu/183377/>
- S. L. Chown, J. E. Lee, K. A. Hughes, J. Barnes, P. J. Barrett, D. M. Bergstrom, P. Convey,³ D. A. Cowan, K. Crosbie, G. Dyer, Y. Frenot, S. M. Grant, D. Herr, M. C. Kennicutt, M. Lamers, A. Murray, H. P. Possingham, K. Reid, M. J. Riddle, P. G. Ryan, Lou Sanson, J. D. Shaw, M. D. Sparrow, C. Summerhayes, A. Terauds, D. H. Wall. 2012. Challenges to the future conservation of the Antarctic. *Science*. 337: 158-.159
- Sabacká, M., J. C. Priscu, H. J. Basagic, A. G. Fountain, D. H. Wall, R. A. Virginia, and M. C. Greenwood. 2012. Aeolian flux of biotic and abiotic material in the Taylor Valley, Antarctica. *Geomorphology* DOI 10.1016/j.geomorph.2011.12.009
- Nielsen, U. N., D. H. Wall, B. J. Adams, R. A. Virginia, B. A. Ball, M. N. Gooseff and D. M. McKnight. 2012. The ecology of pulse events: insights from an extreme climatic event in a polar desert ecosystem. *Ecosphere*. 3(2) 17.
- Smith, T.E., D. H. Wall, I. D. Hogg, B. J. Adams, U. N. Nielsen and R. A. Virginia. 2012. Thawing permafrost alters nematode populations and soil habitat characteristics in an Antarctic polar desert ecosystem. *Pedobiologia* 55: 75-81.
- Hogg, I.D. and D. H. Wall. 2011. Global change and Antarctic terrestrial biodiversity. *Polar Biology* 34: 1625-1627.
- Wu, T., E. Ayres, R. D. Bardgett, D. H. Wall and J. R. Garey. 2011. A molecular study of the worldwide distribution and diversity of soil animals. *Proceedings of the National Academy of Sciences*. 108:17720-17725.
- Ball, B. A., J. E. Barrett, M. N. Gooseff, R. A. Virginia and D. H. Wall. 2011. Implications for melt water pulse events for soil biology and biogeochemical cycling in a polar desert. *Polar Research* 30: 14555 DOI: 10.3402/polar.v30i0.14555
- Wall, D. H., W. Berry Lyons, S. L. Chown, P. Convey, C. Howard-Williams, A. Quesada, and W. F. Vincent. 2011. Long term ecosystem networks to record change: an international imperative. *Antarctic Science*. 23:209-209.
- Nielsen, U. N., D. H. Wall, B. J. Adams and R. A. Virginia. 2011. Antarctic nematode communities: observed and predicted responses to climate change. *Polar Biology*. DOI 10.1007/s00300-011-1021-2
- Nielsen, U. N., D. H. Wall, G. Li, M. Toro, B. J. Adams and R. A. Virginia. 2011. Nematode communities of Byers Peninsula, Livingston Island, maritime Antarctica. *Antarctic Science* 23:349-357.
- Sylvain, Z. A. and D. H. Wall. 2011. Linking soil biodiversity and vegetation: implications for a changing planet. *American Journal of Botany* 98:1-11.
- Bokhorst, S., A. Huiskes, P. Convey, B. J. Sinclair, M. Lebouvier, B. van de Vijver and D. H. Wall. 2011. Microclimate impacts of passive warming methods in Antarctica: implications for climate change studies. *Polar Biology*. DOI 10.1007/s00300-011-0997-y
- Nielsen, U. N., E. Ayres, D. H. Wall and R. D. Bardgett. 2011. Soil biodiversity and carbon cycling: a review and synthesis of studies examining diversity-function relationships. *European Journal of Soil Science* 62:105-116. doi: 10.1111/j.1365-2389.2010.01314.x
- Adhikari, B. N., C. M. Tomasel, G. Li, D. H. Wall, and B. J. Adams. 2010. Culturing the nematode

- Plectus murrayi*. *Cold Spring Harbor Protocols*. doi:10.1101/pdb.prot5522
- Adhikari, B. N., C. M. Tomasel, D. H. **Wall**, and B. J. Adams. 2010. The Antarctic nematode *Plectus murrayi*: An emerging model to study multiple stress survival. *Cold Spring Harbor Protocols: Emerging Model Organism Series*. doi:10.1101/pdb.emo142
- Adhikari, B. N., D. H. **Wall**, and B. J. Adams. 2010. Effect of slow desiccation and freezing on gene transcription and stress survival of an Antarctic nematode. *J. Experimental Biology* 213: 1803-1812.
- Wall, D. H., R. D. Bardgett and E. F. Kelly. 2010. Biodiversity in the dark. *Nature Geoscience* 3:297-298.
- Ayres, E., J. N. Nkem, D. H. **Wall**, B. J. Adams, J. E. Barrett, B. L. Simmons, R. A. Virginia and A. G. Fountain. 2010. Experimentally increased snow accumulation alters soil moisture and animal community structure in a polar desert. *Polar Biology* 33:897-907.
- Gessner, M. O., C. M. Swan, C. K. Dang, B. G. McKie, R. D. Bardgett, D. H. **Wall** and S. Hattenschwiler. 2010. Diversity meets decomposition. *Trends in Ecology and Evolution*. doi:10.1016/j.tree.2010.01.010
- Simmons, B. L., D. H. **Wall**, B. J. Adams, J. E. Barrett, and R. A. Virginia. 2009. Mesofauna communities in above- and belowground habitats in mosses and algal mats in Taylor Valley, Antarctica. *Polar Biology*. 32:1549-1558.
- Simmons, B. L. D. H. **Wall**, B. J. Adams, E. Ayres, J. E. Barrett and R. A. Virginia. 2009. Long- term experimental warming reduces soil nematode populations in the McMurdo Dry Valleys, Antarctica. *Soil Biology and Biochemistry* 41: 2052-2060. <http://dx.doi.org/10.1016/j.soilbio.2009.07.009>
- Carpenter, S. R., V. Armbrust, P. Arzberger, F. S. Chapin III, J. Elser, E. Hackett, A. R. Ives, P. Kareiva, M. Leibold, P. Lundberg, M. Magel, N. Merchant, W. Murdoch, M. Palmer, D. Peters, S. Pickett, K. Smith, D. H. **Wall**, A. Zimmerman. 2009. Synthesis must be accelerated in Ecology and Environmental Sciences. *BioScience* 59:699-701.
- Reed, H. E., J. M. Blair, D. Wall and T. R. Seastedt. 2009. Impacts of management legacies on litter decomposition in response to reduced precipitation in a tallgrass prairie. *Applied Soil Ecology* 79-85.
- Ayres, E., H. Steltzer, S. Berg, M. D. Wallenstein, B. L. Simmons and D. H. **Wall**. 2009. Tree species traits influence soil physical, chemical and biological properties in high elevation forests. *PLoS ONE* 4, e5964.
- Ayres, E., H. Steltzer, S. Berg and D. H. Wall. 2009. Soil biota accelerate decomposition in high elevation forests by specializing in the breakdown of litter produced by the plant species above them. *Journal of Ecology* 97:901-912, doi: 10.1111/j.1365-2745.2009.01539
- Ball, B. A., R. A. Virginia, J. E. Barrett, A. N. Parsons and D. H. **Wall**. 2009. Interactions between physical and biotic factors influence CO₂ flux in Antarctic Dry Valley soils. *Soil Biology and Biochemistry* 41(7): 1510-1517. doi:10.1016/j.soilbio.2009.04.011
- Ayres, E., H. Steltzer, B.L. Simmons, R. T. Simpson, J. M. Steinweg, M. D. Wallenstein, N. Mellor, W. J. Parton, J. C. Moore, and D. H. **Wall**. 2009. Home advantage accelerates leaf litter decomposition in forests. *Soil Biology and Biochemistry* 41:606-610. (*highly accessed*)
- Adhikari, B. N., D. H. **Wall**, B. J. Adams. 2009. Desiccation survival in an Antarctic nematode: Molecular analysis using expressed sequenced tags. *BMC Genomics* 10:69. doi:10.1186/1471-2164-10-69
- Wu, T., E. Ayres, G. Li, R. D. Bardgett, D. H. **Wall** and J. R. Garey. 2009. Molecular profiling of soil animal diversity in natural ecosystems: incongruence of molecular and morphological results. *Soil Biology and Biochemistry* 41:849-857.
- Palumbi, S. R., P. A. Sandifer, J. D. Allan, M. W. Beck, D. G. Fautin, M. J. Fogarty, B. S. Halpern, L. S. Incze, J. Leong, E. Norse, J. J. Stachowicz and D. H. **Wall**. 2009. Managing for ocean biodiversity: creating a national biodiversity conservation agenda to sustain marine ecosystem services. *Frontiers in Ecology and the Environment* 7, doi:10.1890/070135.
- Ayres, E., D. H. **Wall**, B. L. Simmons, C. B. Field, D. G. Milchunas, J. A. Morgan and J. Roy. 2008. Belowground nematode herbivores are resistant to elevated atmospheric CO₂ concentrations in grassland ecosystems. *Soil Biology and Biochemistry* 40: 978-985.
- Ayres, E., J. N. Nkem, D. H. **Wall**, B. J. Adams, J. E. Barrett, E. J. Broos, A. N. Parsons, L. E. Powers, B. L. Simmons, R. A. Virginia. 2008. Effects of human trampling on populations of soil fauna

- in the McMurdo Dry Valleys, Antarctica. *Conservation Biology* 22:1544-1551. (Cover photo on December issue).
- Barrett, J. E., R. A. Virginia, **D. H. Wall**, and B. J. Adams. 2008. Decline of a dominant invertebrate species contributes to altered carbon cycling in low diversity soil ecosystem. *Global Change Biology* 14:1734-1744.
- Barrett, J. E., R. A. Virginia, **D. H. Wall**, P. T. Doran, A. G. Fountain, K. A. Welch and W. B. Lyons. 2008. Persistent effects of a discrete warming event on a polar desert ecosystem. *Global Change Biology* 14:2249-2261. doi:10.1111/j.1365-2486.2008.01641.x
- Poage, M. A., J. E. Barrett, R. A. Virginia, **D. H. Wall**. 2008. The influence of soil geochemistry on nematode distribution, McMurdo Dry Valleys, Antarctica. *Arctic, Antarctic and Alpine Research* 40:119-128.
- Robertson, G. P., V. G. Allen, G. Boody, E. R. Boose, N. G. Creamer, L. E. Drinkwater, J. R. Gosz, L. Lynch, J. L. Havlin, L. E. Jackson, S. T. A. Pickett, L. Pitelka, A. Randall, A. S. Reed, T. R. Seastedt, R. B. Waide and **D. H. Wall**. 2008. Long-term agricultural research (LTAR): A research, education and extension imperative. *BioScience* 58:640-645
- Simmons, B. L., R. K. Niles and **D. H. Wall**. 2008. Distribution and abundance of alfalfa-field nematodes at various spatial scales. *Applied Soil Ecology* 38:211-222. Doi:10.1016/j.apsoil.2007.10.011.
- Niederberger, T. D., I. R. McDonald, A. L. Hacker, R. M. Soo, J. E., Barrett and **D. H. Wall** and S. C. Cary. 2008. Microbial community composition in soils of Northern Victoria Land, Antarctica. *Environmental Microbiology* doi:10.1111/j.1462-2920.2008.01593x.
- Wall**, D. H., M. A. Bradford, M. G. St. John, J. A. Trofymow, V. Behan-Pelletier, D. E. Bignell, J. Mark Dangerfield, W. J. Parton, J. Rusek, W. Voigt, V. Wolters, H. Zadeh Gardel, F. O. Ayuke, R. Bashford, O. I. Beljakova, P. J. Bohlen, A. Brauman, S. Flemming, J. R. Henschel, D. L. Johnson, T. H. Jones, M. Kovarova, J. M. Kranabetter, L. Kutny, Kuo-Chuan Lin, M. Maryati, D. Masse, A. Pokarzhevskii, H. Rahman, M. G. Sabara, J-A. Salamon, M. J. Swift, A. Varela, H. L. Vasconcelos, D. White, and X. Zou. 2008. Global decomposition experiment shows soil animal impacts on decomposition are climate dependent. *Global Change Biology* 14:1-17.
- Hunt, H. W., A. M. Treonis, **D. H. Wall**, and R. A. Virginia. 2007. A mathematical model for variation in water-retention curves among sandy soils. *Antarctic Science* 19:427-436, doi: 10.1017/S0954102007000703.
- Wall**, D.H. 2007. Global Change tipping points: Above- and below-ground biotic interactions in a low diversity ecosystem. *Philosophical Transactions of the Royal Society B, Biological Sciences*, 362:2291-2306, doi: 10.1098/rstb.2006.1950.
- Ayres, E., **D. H. Wall**, B. J. Adams, J. E. Barrett and R. A. Virginia. 2007. Unique similarity of faunal communities across aquatic terrestrial interfaces in a polar desert ecosystem. *Ecosystems* 10:523-535, doi:10.1007/s10021-007-9035-x.
- Barrett, J. E., R. A. Virginia, W. B. Lyons, D. M. McKnight, J. C. Priscu, P. T. Doran, A. G. Fountain, **D. H. Wall**, and D. L. Moorhead. 2007. Biogeochemical stoichiometry of Antarctic Dry Valley ecosystems. *Journal of Geophysical Research*, 112, G01010, doi:10.1029/2005JG000141.
- Wall**, D. H., B. J. Adams, J. E. Barrett, and D. W. Hopkins. 2006. A synthesis of soil biodiversity and ecosystem functioning in Victoria Land, Antarctica. *Soil Biology and Biochemistry*. 38: 3001-3002.
- St. John, M. G., **D. H. Wall** and H. W. Hunt. 2006. Are soil mite assemblages structured by the identity of native and invasive alien grasses? *Ecology*, 87: 1314-1324.
- St. John, M. G., **D. H. Wall** and V. M. Behan-Pelletier. 2006. Does plant species co-occurrence influence soil mite diversity? *Ecology*, 87: 625-633.
- Nkem, J. N., R. A. Virginia, J. E. Barrett, **D. H. Wall** and G. Li. 2006. Salt tolerance and survival thresholds for two species of Antarctic soil nematodes. *Polar Biology* 29: 643-651.
- Nkem, J. N., **D. H. Wall**, R. A. Virginia, J. E. Barrett, E. Broos, D. L. Porazinska, and B. J. Adams. 2006. Wind dispersal of soil invertebrates in the McMurdo Dry Valleys, Antarctica. *Polar Biology* 29: 346-352.
- Johnson, S. N., J. W. Crawford, P. J. Gregory, D. V. Grinev, R. W. Mankin, G. J. Mankin, P. J. Murray, **D. H. Wall**, X. Zhang. 2006. Non-invasive techniques for investigating and modelling root-feeding insects in managed and natural systems. *Agricultural and Forest Entomology*. DOI:10.1111/j.1461-9563.2006.00315.x
- Hogg, I. D., S. C. Cary, P. Convey, K. Newsham, T. O'Donnell, B. J. Adams, J. Aislabie, F. Frati, M. I.

- Stevens, and D. H. **Wall**. 2006. Biotic interactions in Antarctic terrestrial ecosystems: are they a factor? *Soil Biology and Biochemistry*. 38: 3035-3040.
- Dobson, A., D. Lodge, J. Alder, G. S. Cumming, J. Keymer, J. McGlade, H. Mooney, J. A. Rusak, O. Sala, V. Wolters D. **Wall**, R. Winfree and M. A. Xenopoulos. 2006. Habitat loss, trophic collapse and the decline of ecosystem services. *Ecology*, 87: 1915-1924.
- Blecker, S. W., J. A. Ippolito, J. E. Barrett, D. H. **Wall**, R. A. Virginia, and K. L. Norvell. 2006 Phosphorus fractions in soils of Taylor Valley, Antarctica. *Soil Science Society of America Journal* 70: 806-815.
- Barrett, J. E., R. A. Virginia, D. H. **Wall**, S. C. Cary, B. J. Adams, A. L. Hacker, and J. M. Aislabie. 2006. Co-variation in soil biodiversity and biogeochemistry in Northern and Southern Victoria Land, Antarctica. *Antarctic Science*. 18: 535-548.
- Barrett, J. E., R. A. Virginia, A. N. Parsons and D. H. **Wall**. 2006. Soil carbon turnover model for the McMurdo Dry Valleys, Antarctica. *Soil Biology and Biochemistry*. 38: 3065-3082.
- Barrett, J. E., R. A. Virginia, D. W. Hopkins, J. Aislabie, R. Bargagli, J. G. Bockheim, I. B. Campbell, W. B. Lyons, D. Moorhead, J. Nkem, R. S. Sletten, H. Steltzer, D. H. **Wall**, and M. Wallenstein. 2006. Terrestrial ecosystem processes of Victoria Land, Antarctica. *Soil Biology and Biochemistry*. 38: 3019-3034.
- Adams, B. J., D. H. **Wall**, U. Gozel and I. D. Hogg. 2006. The southernmost worm, *Scottinema lindsayae* (Nematoda): diversity, dispersal and ecological stability. *Polar Biology*. doi: 10.1007/s00300-006-0241-3.
- Adams, B. J. R. D. Bardgett, E. Ayres, D. H. **Wall**, J. Aislabie, S. Bamforth, R. Bargagli, C. Cary, P. Cavacini, L. Connell, P. Convey, J. W. Fell, F. Frati, I. Hogg, K. Newsham, A. O'Donnell, N. Russell, R. Seppelt, and M. I. Stevens. 2006. Diversity and distribution of Victoria Land biota. *Soil Biology and Biochemistry*. 38: 3003-3018.
- Wall**, D. H. 2005. Biodiversity and ecosystem functioning in terrestrial habitats of Antarctica. *Antarctic Science* 17:523-531.
- Wall**, D. H., E. Ayres, V. Behan-Pelletier, A. P. Covich, and P. V. R. Snelgrove. Soils, freshwater and marine sediments: the need for integrative landscape science. 2005. In H. Browman and K. I. Stergiou, eds. Theme Section: Bridging the Gap between Aquatic and Terrestrial Ecology. *Marine Ecology Progress Series* 304:302-307.
- Treonis, A. M., and D. H. **Wall**. 2005. Soil nematodes and desiccation survival in the extreme arid environment of the Antarctic Dry Valleys. *Integrative and Comparative Biology* 45:741-750.
- Lyons, W. B., K. A. Welch, A. E. Carey, D. H. **Wall**, R. A. Virginia, A. G. Fountain, P. T. Doran, B. Csatho, and C. Tremper. 2005. Groundwater seeps in Taylor Valley Antarctica: An example of a subsurface melt event. *Annals of Glaciology* 40:200-206.
- Doran, P. T., J. C. Priscu, W. B. Lyons, J. E. Walsh, A. G. Fountain, D. M. McKnight, D. L. Moorhead, R. A. Virginia, D. H. **Wall**, G. D. Clow, C. H. Fristen, C. P. McKay, A. N. Parsons. 2005. Comment on "El Nino suppresses Antarctic warming" by N. Bertler et al. *Geophysical Research Letters* 32: Art. No. L07706.
- Bamforth, S. S., D. H. **Wall**, and R. A. Virginia. 2005. Distribution and diversity of soil protozoa in the McMurdo Dry Valleys of Antarctica. *Polar Biology* 28:756-762.
- Barrett, J. E., R. A. Virginia, A. N. Parsons, and D. H. **Wall**. 2005. Potential soil organic matter turnover in Taylor Valley, Antarctica. *Arctic, Antarctic, and Alpine Research* 37:108-117.
- Wardle, D. A., R. D. Bardgett, J. N. Klironomos, H. Setälä, W. H. van der Putten, and D. H. **Wall**. 2004. Ecological linkages between aboveground and belowground biota. *Science* 304: 1629-1633.
- Schröter, D., L. Brussaard, G. De Deyn, K. Poveda, V. K. Brown, M. P. Berg, D. A. Wardle, J. Moore, and D. H. **Wall**. 2004. Trophic interactions in a changing world: modelling aboveground-belowground interactions. *Basic and Applied Ecology* 5: 515-528.
- Porazinska, D.L., A. G. Fountain, T. H. Nysten, M. Tranter, R. A. Virginia, and D. H. **Wall**. 2004. The biodiversity and biogeochemistry of cryoconite holes from McMurdo Dry Valley glaciers, Antarctica. *Arctic, Antarctic, and Alpine Research* 36: 84-91.
- Parsons, A. N., J. E. Barrett, D. H. **Wall**, and R. A. Virginia. 2004. Soil carbon dioxide flux in Antarctic Dry Valley ecosystems. *Ecosystems* 7: 286-295.
- Moore, J. C., E. L. Berlow, D. C. Coleman, P. C. de Ruiter, Q. Dong, A. Hastings, N. C. Johnson, K. S. McCann, K. Melville, P. J. Morin, K. Nadelhoffer, A. D. Rosemond, D. M. Post, J. L. Sabo, K. M. Scow, M. J. Vanni, and D. H. **Wall**. 2004. Detritus, trophic dynamics and biodiversity.

- Ecology Letters* 7: 584-600.
- Barrett, J. E., R. A. Virginia, D. H. **Wall**, A. N. Parsons, L. E. Powers, and M. B. Burkins. 2004. Variation in biogeochemistry and soil biodiversity across spatial scales in a polar desert ecosystem. *Ecology* 85: 3105-3118.
- Symstad, A. J., F. S. Chapin III, D. H. **Wall**, K. L. Gross, L. F. Huenneke, G. G. Mittelbach, D. P. C. Peters, and D. Tilman. 2003. Long-term and large-scale perspectives on the relationship between biodiversity and ecosystem functioning. *BioScience* 53: 89-98.
- Porazinska, D. L., R. D. Bardgett, M. B. Blaauw, H. W. Hunt, A. N. Parsons, T. R. Seastedt, and D. H. **Wall**. 2003. Relationships at the aboveground - belowground interface: Plants, soil biota, and soil processes. *Ecological Monographs* 73: 377-395.
- Moorhead, D. L., J. E. Barrett, R. A. Virginia, D. H. **Wall**, and D. Porazinska. 2003. Organic matter and soil biota of upland wetlands in Taylor Valley, Antarctica. *Polar Biology* 26: 567-576.
- Gooseff, M. N., J. E. Barrett, P. T. Doran, A. G. Fountain, W. B. Lyons, A. N. Parsons, D. L. Porazinska, R. A. Virginia, and D. H. **Wall**. 2003. Snow-patch influence on soil biogeochemical processes and invertebrate distribution in the McMurdo Dry Valleys, Antarctica. *Arctic, Antarctic, and Alpine Research* 35: 91-99.
- Adams, G. A., and D. H. **Wall**. 2003. A sampling of the science from the international biodiversity observation year 2001-2002. *Organisms, Diversity, Evolution* 3: 75-76.
- Walsh, J. E., P. T. Doran, J. C. Priscu, W. B. Lyons, A. G. Fountain, D. M. McKnight, D. L. Moorhead, R. A. Virginia, D. H. **Wall**, G. D. Clow, C. H. Fritsen, C. P. McKay, and A. N. Parsons. 2002. Brief Communications - reply. *Nature* 418: 292-292.
- Treonis, A. M., D. H. **Wall**, and R. A. Virginia. 2002. Field and microcosm studies of decomposition and soil biota in a cold desert soil. *Ecosystems* 5: 159-170.
- Porazinska, D. L., D. H. **Wall**, and R. A. Virginia. 2002. Invertebrates in ornithogenic soils on Ross Island, Antarctica. *Polar Biology* 25: 569-574.
- Porazinska, D. L., D. H. **Wall**, and R. A. Virginia. 2002. Population age structure of nematodes in the Antarctic Dry Valleys: Perspectives on time, space, and habitat suitability. *Arctic, Antarctic, and Alpine Research* 34: 159-168.
- Moorhead, D. L., D. H. **Wall**, R. A. Virginia, and A. N. Parsons. 2002. Distribution and life cycle of *Scottinema lindsayae* (Nematoda) in Antarctic soils: A modeling analysis of temperature responses. *Polar Biology* 25: 118-125.
- Jackson, R. B., J. L. Banner, E. G. Jobbagy, W. T. Pockman, and D. H. **Wall**. 2002. Ecosystem carbon loss with woody plant invasion of grasslands. *Nature* 418: 623-626.
- Hunt, H. W., and D. H. **Wall**. 2002. Modelling the effects of loss of soil biodiversity on ecosystem function. *Global Change Biology* 8: 33-50.
- Doran, P. T., J. C. Priscu, W. B. Lyons, J. E. Walsh, A. G. Fountain, D. M. McKnight, D. L. Moorhead, R. A. Virginia, D. H. **Wall**, G. D. Clow, C. H. Fritsen, C. P. McKay, and A. N. Parsons. 2002. Antarctic climate cooling and terrestrial ecosystem response. *Nature* 415: 517-520.
- Barrett, J. E., R. A. Virginia, and D. H. **Wall**. 2002. Trends in resin and KCl-extractable soil nitrogen across landscape gradients in Taylor Valley, Antarctica. *Ecosystems* 5: 289-299.
- Wall**, D., H. Mooney, G. Adams, G. Boxshall, A. Dobson, T. Nakashizuka, J. Seyani, C. Samper, and J. Sarukhan. 2001. An international biodiversity observation year. *Trends in Ecology & Evolution* 16: 52-54.
- Wall**, D. H., M. A. Palmer, and P. V. R. Snelgrove. 2001. Biodiversity in critical transition zones between terrestrial, freshwater, and marine soils and sediments: Processes, linkages, and management implications. *Ecosystems* 4: 418-420.
- Pimm, S. L., M. Ayres, A. Balmford, G. Branch, K. Brandon, T. Brooks, R. Bustamante, R. Costanza, R. Cowling, L. M. Curran, A. Dobson, S. Farber, G. A. B. da Fonseca, C. Gascon, R. Kitching, J. McNeely, T. Lovejoy, R. A. Mittermeier, N. Myers, J. A. Patz, B. Raffle, D. Rapport, P. Raven, C. Roberts, J. P. Rodriguez, A. B. Rylands, C. Tucker, C. Safina, C. Samper, M. L. J. Stiassny, J. Supriatna, D. H. **Wall**, and D. Wilcove. 2001. Environment - Can we defy nature's end? *Science* 293: 2207-2208.
- Hunt, H. W., D. H. **Wall**, N. M. DeCraeppeo, and J. S. Brenner. 2001. A model for nematode locomotion in soil. *Nematology* 3: 705-716.
- Ewel, K. C., C. Cressa, R. T. Kneib, P. S. Lake, L. A. Levin, M. A. Palmer, P. Snelgrove, and D. H. **Wall**. 2001. Managing critical transition zones. *Ecosystems* 4: 452-460.

- Courtright, E. M., D. H. **Wall**, and R. A. Virginia. 2001. Determining habitat suitability for soil invertebrates in an extreme environment: The McMurdo Dry Valleys, Antarctica. *Antarctic Science* 13: 9-17.
- Clark, J. S., S. R. Carpenter, M. Barber, S. Collins, A. Dobson, J. A. Foley, D. M. Lodge, M. Pascual, R. Pielke, Jr., W. Pizer, C. Pringle, W. V. Reid, R. K. A. Rose, O. Sala, W. H. Schlesinger, D. H. **Wall**, and D. Wear. 2001. Ecological forecasts: An emerging imperative. *Science* 293: 657-660.
- Burkins, M. B., R. A. Virginia, and D. H. **Wall**. 2001. Organic carbon cycling in Taylor Valley, Antarctica: Quantifying soil reservoirs and soil respiration. *Global Change Biology* 7: 113-125.
- Bardgett, R. D., J. M. Anderson, V. Behan-Pelletier, L. Brussaard, D. C. Coleman, C. Ettema, A. Moldenke, J. P. Schimel, and D. H. **Wall**. 2001. The influence of soil biodiversity on hydrological pathways and the transfer of materials between terrestrial and aquatic ecosystems. *Ecosystems* 4: 421-429.
- Wolters, V., W. L. Silver, D. E. Bignell, D. C. Coleman, P. Lavelle, W. H. van der Putten, P. de Ruiter, J. Rusek, D. H. **Wall**, D. A. Wardle, L. Brussaard, J. M. Dangerfield, V. K. Brown, K. Giller, D. U. Hooper, O. Sala, J. Tiedje, and J. A. van Veen. 2000. Effects of global changes on above- and belowground biodiversity in terrestrial ecosystems: Implications for ecosystem functioning. *BioScience* 50: 1089-1098.
- Treonis, A. M., D. H. **Wall**, and R. A. Virginia. 2000. The use of anhydrobiosis by soil nematodes in the Antarctic Dry Valleys. *Functional Ecology* 14: 460-467.
- Sala, O. E., F. S. Chapin III, J. J. Armesto, E. Berlow, J. Bloomfield, R. Dirzo, E. Huber-Sanwald, L. F. Huenneke, R. B. Jackson, A. Kinzig, R. Leemans, D. M. Lodge, H. A. Mooney, M. Oesterheld, N. L. Poff, M. T. Sykes, B. H. Walker, M. Walker, and D. H. **Wall**. 2000. Global biodiversity scenarios for the year 2100. *Science* 287: 1770-1774.
- Hooper, D. U., D. E. Bignell, V. K. Brown, L. Brussaard, J. M. Dangerfield, D. H. **Wall**, D. A. Wardle, D. C. Coleman, K. E. Giller, P. Lavelle, W. H. van der Putten, P. C. de Ruiter, J. Rusek, W. L. Silver, J. M. Tiedje, and V. Wolters. 2000. Interactions between aboveground and belowground biodiversity in terrestrial ecosystems: Patterns, mechanisms, and feedback. *BioScience* 50: 1049-1061.
- Courtright, E. M., D. H. **Wall**, R. A. Virginia, L. M. Frisse, J. T. Vida, and W. K. Thomas. 2000. Nuclear and mitochondrial DNA sequence diversity in the Antarctic nematode *Scottinema lindsayae*. *Journal of Nematology* 32: 143-153.
- Burkins, M. B., R. A. Virginia, C. P. Chamberlain, and D. H. **Wall**. 2000. Origin and distribution of soil organic matter in Taylor Valley, Antarctica. *Ecology* 81: 2377-2391.
- Adams, G. A., and D. H. **Wall**. 2000. Biodiversity above and below the surface of soils and sediments: Linkages and implications for global change. *BioScience* 50: 1043-1048.
- Wall**, D. H., and R. A. Virginia. 1999. Controls on soil biodiversity: Insights from extreme environments. *Applied Soil Ecology* 13: 137-150.
- Wall**, D. H. 1999. Biodiversity and ecosystem functioning. *BioScience* 49: 107-108.
- Wall**, D. H., and J. C. Moore. 1999. Interactions underground: Soil biodiversity, mutualism, and ecosystem processes. *BioScience* 49: 109-117.
- Virginia, R. A., and D. H. **Wall**. 1999. How soils structure communities in the Antarctic Dry Valleys. *BioScience* 49: 973-983.
- Treonis, A. M., D. H. **Wall**, and R. A. Virginia. 1999. Invertebrate biodiversity in Antarctic Dry Valley soils and sediments. *Ecosystems* 2: 482-492.
- Moorhead, D. L., P. T. Doran, A. G. Fountain, W. B. Lyons, D. M. McKnight, J. C. Priscu, R. A. Virginia, and D. H. **Wall**. 1999. Ecological legacies: Impacts on ecosystems of the McMurdo Dry Valleys. *BioScience* 49: 1009-1019.
- Fountain, A. G., W. B. Lyons, M. B. Burkins, G. L. Dana, P. T. Doran, K. J. Lewis, D. M. McKnight, D. L. Moorhead, A. N. Parsons, J. C. Priscu, D. H. **Wall**, R. A. Wharton, Jr., and R. A. Virginia. 1999. Physical controls on the Taylor Valley ecosystem, Antarctica. *BioScience* 49: 961-971.
- Wall-Freckman**, D., and S. P. Huang. 1998. Response of the soil nematode community in a shortgrass steppe to long-term and short-term grazing. *Applied Soil Ecology* 9: 39-44.
- Powers, L. E., M. C. Ho, D. W. **Freckman**, and R. A. Virginia. 1998. Distribution, community structure, and microhabitats of soil invertebrates along an elevational gradient in Taylor Valley, Antarctica. *Arctic and Alpine Research* 30: 133-141.
- Ingram, J., and D. W. **Freckman**. 1998. Soil biota and global change--preface. *Global Change Biology* 4:

- 699-701.
- Bazzaz, F., G. Ceballos, M. Davis, R. Dirzo, P. R. Ehrlich, T. Eisner, S. Levin, J. H. Lawton, J. Lubchenco, P. A. Matson, H. A. Mooney, P. H. Raven, J. E. Roughgarden, J. Sarukhan, G. D. Tilman, P. Vitousek, D. H. **Wall**, E. O. Wilson, and G. M. Woodwell. 1998. Ecological science and the human predicament. *Science* 282: 879.
- Wall Freckman**, D., T. H. Blackburn, L. Brussaard, P. Hutchings, M. A. Palmer, and P. V. R. Snelgrove. 1997. Linking biodiversity and ecosystem functioning of soils and sediments. *Ambio* 26: 556-562.
- Marion, G. M., G. H. R. Henry, D. W. **Freckman**, J. Johnstone, G. Jones, M. H. Jones, E. Lévesque, U. Molau, P. Milgaard, A. N. Parsons, J. Svodoba, and R. A. Virginia. 1997. Open-top designs for manipulating field temperature in high-latitude ecosystems. *Global Change Biology* 3(suppl. 1): 20-32.
- Freckman**, D. W., and R. A. Virginia. 1997. Low diversity Antarctic soil nematode communities: Distribution and response to disturbance. *Ecology* 78: 363-369.
- Brussaard, L., V.M. Behan-Pelletier, D.E. Bignell, V.K. Brown, W. Didden, P. Folgarait, C. Fragoso, D. **Wall Freckman**, V. V. S. R. Gupta, T. Hattori, D.L. Hawksworth, C. Klopatek, P. Lavelle, D.W. Malloch, J. Rusek, B. Soderstrom, J.M. Tiedje, and R.A. Virginia 1997. Biodiversity and Ecosystem Functioning in Soil. *Ambio* 26: 563-570.
- Moore, J. C., D. C. Coleman, P. C. de Ruiter, D. W. **Freckman**, and H. W. Hunt. 1996. Microcosms and soil ecology: Critical linkages between field studies and modelling food webs. *Ecology* 77: 694-705.
- Robertson, G. P., and D. W. **Freckman**. 1995. The spatial distribution of nematode trophic groups across a cultivated ecosystem. *Ecology* 76: 1425-1432.
- Powers, L. E., D. W. **Freckman**, and R. A. Virginia. 1995. Spatial distribution of nematodes in polar desert soils of Antarctica. *Polar Biology* 15: 325-333.
- Niles, R. K., D. W. **Freckman**, and M. L. Roose. 1995. Use of trifoliate orange as a comparative standard for assessing the resistance of citrus rootstocks to citrus nematode. *Plant Disease* 79: 813-818.
- Barker, K. R., R. S. Hussey, L. R. Krusberg, G. W. Bird, R. A. Dunn, V. R. Ferris, D. W. **Freckman**, C. J. Gabriel, P. S. Grewal, A. E. MacGuidwin, D. L. Riddle, P. A. Roberts, and D. P. Schmitt. 1994b. Plant and Soil Nematodes - Societal Impact and Focus for the Future. Executive Summary. *BioScience* 44: 568-569.
- Barker, K. R., R. S. Hussey, L. R. Krusberg, G. W. Bird, R. A. Dunn, V. R. Ferris, D. W. **Freckman**, C. J. Gabriel, P. S. Grewal, A. E. MacGuidwin, D. L. Riddle, P. A. Roberts, and D. P. Schmitt. 1994a. Plant and soil nematodes-societal impact and focus for the future. *Journal of Nematology* 26: 127-137.
- Yeates, G. W., T. Bongers, R. G. M. De Goede, D. W. **Freckman**, and S. S. Georgieva. 1993. Feeding habits in soil nematode families and genera-An outline for soil ecologists. *Journal of Nematology* 25: 315-331.
- Van der Knaap, E., R. J. Rodriguez, and D. W. **Freckman**. 1993. Differentiation of bacterial-feeding nematodes in soil ecological studies by means of arbitrarily-primed PCR. *Soil Biology and Biochemistry* 25: 1141-1151.
- Overhoff, A., D. W. **Freckman**, and R. A. Virginia. 1993. Life cycle of the microbivorous Antarctic Dry Valley nematode *Scottinema lindsayae* (Timm 1971). *Polar Biology* 13: 151-156.
- Freckman**, D. W., and R. A. Virginia. 1993. Extraction of nematodes from Dry Valley Antarctic soils. *Polar Biology* 13: 483-487.
- Freckman**, D. W., and C. H. Ettema. 1993. Assessing nematode communities in agroecosystems of varying human intervention. *Agriculture, Ecosystems, and Environment* 45: 239-261.
- Dyer, M. I., D. C. Coleman, D. W. **Freckman**, and S. J. McNaughton. 1993. Measuring heterotroph-induced source-sink relationships in *Panicum coloratum* with ¹¹C technology. *Ecological Applications* 3: 654-665.
- Virginia, R. A., W. M. Jarrell, W. G. Whitford, and D. W. **Freckman**. 1992. Soil biota and soil properties in the surface-rooting zone of mesquite (*Prosopis glandulosa*) in historical and recently desertified Chihuahuan Desert habitats. *Biology and Fertility of Soils* 14: 90-98.
- Freckman**, D. W., K. R. Barker, D. C. Coleman, M. Acra, M. I. Dyer, B. R. Strain, and S. J. McNaughton. 1991. The use of the ¹¹C technique to measure plant responses to herbivorous soil

- nematodes. *Functional Ecology* 5: 810-818.
- Dyer, M. I., M. A. Acra, G. M. Wang, D. C. Coleman, D. W. **Freckman**, S. J. McNaughton and B. R. Strain. 1991. Source-sink carbon relations in two *Panicum coloratum* ecotypes in response to herbivory. *Ecology* 72: 1472-1483.
- Fisher, F. M., D. W. **Freckman**, and W. G. Whitford. 1990. Decomposition and soil nitrogen availability in Chihuahuan Desert field microcosms. *Soil Biology & Biochemistry* 22: 241-249.
- Whitford, W. G., E. A. Aldon, D. W. **Freckman**, Y. Steinberger, and L. W. Parker. 1989. Effects of organic amendments on soil biota on a degraded rangeland. *Journal of Range Management* 42: 56-60.
- Wang, G. M., D. C. Coleman, D. W. **Freckman**, M. I. Dyer, S. J. McNaughton, M. A. Acra, and J. D. Goeschl. 1989. Carbon partitioning patterns of mycorrhizal versus non-mycorrhizal plants: Real-time dynamic measurements using $^{11}\text{CO}_2$. *New Phytologist* 112: 489-493.
- Freckman**, D. W., and R. A. Virginia. 1989. Plant-feeding nematodes in deep-rooting desert ecosystems. *Ecology* 70: 1665-1678.
- Freckman**, D. W. 1988. Bacterivorous nematodes and organic-matter decomposition. *Agriculture, Ecosystems and Environment* 24:195-217.
- Moorhead, D. L., D. W. **Freckman**, J. F. Reynolds, and W. G. Whitford. 1987. A simulation model of soil nematode population dynamics: Effects of moisture and temperature. *Pedobiologia* 30: 361-372.
- Freckman**, D. W., W. G. Whitford, and Y. Steinberger. 1987. Effect of irrigation on nematode population dynamics and activity in desert soils. *Biology and Fertility of Soils* 3: 3-10.
- Whitford, W. G., Y. Steinberger, W. MacKay, L. W. Parker, D. W. **Freckman**, J. A. Wallwork, and D. Weems. 1986. Rainfall and decomposition in the Chihuahuan Desert. *Oecologia* 68: 512-515.
- Walter, D. E., R. A. Hudgens, and D. W. **Freckman**. 1986. Consumption of nematodes by fungivorous mites, *Tyrophagus* spp. (Acarina: Astigmata: Acaridae). *Oecologia* 70: 357-361.
- Freckman**, D. W., and R. Mankau. 1986. Abundance, distribution, biomass, and energetic of soil nematodes in a Northern Mojave Desert Ecosystem. *Pedobiologia* 29: 129-142.
- Freckman**, D. W., and E. P. Caswell. 1985. Ecology of nematodes in agroecosystems. *Annual Review of Phytopathology* 23: 275-296.
- Steinberger, Y., D. W. **Freckman**, L. W. Parker, and W. G. Whitford. 1984. Effects of simulated rainfall and litter quantities on desert soil biota: nematodes and microarthropods. *Pedobiologia* 26: 267-274.
- Parker, L. W., D. W. **Freckman**, Y. Steinberger, L. Driggers, and W. G. Whitford. 1984. Effects of simulated rainfall and litter quantities on desert soil biota: Soil respiration, microflora and protozoa. *Pedobiologia* 27: 185-195.
- Thomason, I. J., D. W. **Freckman**, and M. Luc. 1983. Perspectives in nematode control. *Revue de Nématologie* 6: 315-320.
- Whitford, W. G., D. W. **Freckman**, N. Z. Elkins, L. W. Parker, R. Parmalee, J. Phillips, and S. Tucker. 1981. Diurnal migration and responses to simulated rainfall in desert soil microarthropods and nematodes. *Soil Biology & Biochemistry* 13: 417-425.
- Freckman**, D. W., Y. Demeure, D. Munnecke, and S. D. Van Gundy. 1980. Resistance of anhydrobiotic *Aphelenchus avenae* to methyl bromide fumigation. *Journal of Nematology* 12: 19-22.
- Freckman**, D. W., D. A. Duncan, and J. R. Larson. 1979. Nematode density and biomass in an annual grassland ecosystem. *Journal of Range Management* 32: 418-421.
- Demeure, Y., D. W. **Freckman**, and S. D. Van Gundy. 1979a. Anhydrobiotic coiling of nematodes in soil. *Journal of Nematology* 11: 189-195.
- Demeure, Y., D. W. **Freckman**, and S. D. V. Gundy. 1979b. *In vitro* response of four species of nematodes to desiccation and discussion of this and related phenomena. *Revue de Nématologie* 2: 203-210.
- Van Gundy, S. D., and D. W. **Freckman**. 1977. Phytoparasitic nematodes in belowground agroecosystems. *Ecological Bulletin* 25: 320-329.
- Freckman**, D. W., and R. Mankau. 1977. Distribution and trophic structure of nematodes in desert soils. *Ecological Bulletin* 25: 511-514.
- Freckman**, D. W., D. T. Kaplan, and S. D. Van Gundy. 1977. A comparison of techniques for extraction and study of anhydrobiotic nematodes from dry soils. *Journal of Nematology* 9: 176-181.
- Freckman**, D. W., R. Mankau, and H. Ferris. 1975. Nematode community structure in desert soils:

Nematode recovery. *Journal of Nematology* 7: 343-346.

Freckman, D. W., and R. A. Chapman. 1972. Infection of red clover seedlings by *Heterodera trifolii* Goffart and *Pratylenchus penetrans* (Cobb). *Journal of Nematology* 4: 23-28.

Freckman, D.W. 1971. Penetration of and Early Development in Red Clover Seedlings by *Heterodera trifolii* and *Pratylenchus penetrans*. Ph.D. Thesis.

EDITED BOOKS

Cheeke, T., D.C. Coleman and D. H. **Wall**, eds. 2012. *Microbial Ecology in Sustainable Agroecosystems*. CRC Press, Publishers.

Wall, D.H., R. D. Bardgett, V. Behan-Pelletier, J.E. Herrick, H. Jones, K. Ritz, J. Six, D.R. Strong and W.H. van der Putten, eds. 2012. *Soil Ecology and Ecosystem Services*. Oxford University Press, UK.

Wall, D. H. ed. 2004. *Sustaining Biodiversity and Ecosystem Services in Soil and Sediments*. Island Press, Washington, D. C.

Freckman, D. W. ed. 1982. *Nematodes in Soil Ecosystems*. University of Texas Press, Austin, TX.

CHAPTERS

Hogg, I. D. and D. H. **Wall**. 2012. Polar Deserts. In Pages 176-195, E A. Bell, ed. *Life at Extremes: Environments, Organisms and Strategies for Survival*. CABI, UK.

Wall, D.H. 2012. Global Change in a Low Diversity Terrestrial Ecosystem: the McMurdo Dry Valleys. In Pages 44-63, A. D.Rogers, N.M. Johnston, E. J.Murphy and A. Clarke, eds. *Antarctic Ecosystems. An Extreme Environment in a Changing World*. Wiley-Blackwell, West Sussex, UK.

Wall, D. H., G. Gonzalez and B. Simmons. 2011. Dry Tropical Forest Soil Biodiversity and Functioning. In R. Dirzo and H. A. Mooney, eds. *Tropical Dry Forests*, Island Press, Washington, D. C.

Nielsen, U. N. and D. H. **Wall**. 2010. Soil biodiversity in extreme soil environments. Section 3:7, Pages 32-35. In: S. Jeffery, C. Giardi, A. Jones, L. Montanarella, L. Marmo, L. Miko, K. Ritz, G. Peres, J. Rombke and W. H. van der Putten (eds). *European Atlas of Soil Biodiversity*. European Commission, Publications Office of the European Union, Luxembourg.

Ayres, E., D. H. **Wall** and R. D. Bardgett. 2009. Trophic interactions and their implications for soil carbon dynamics. Pages 187-206. In W. L. Kutsch, M. Bahn and A. Heinemeyer, eds. *Soil Carbon Dynamics: An Integrated Methodology*. Cambridge University Press, Cambridge, UK.

Wall, D. H. and U. Nielsen. 2009. The Substrate of Life in Soils. In J.A. McNeely, R. S. Mittermeier, T. M. Brooks, F. Boltz and N. Ash, eds. *The Wealth of Nature – Ecosystem Services, Biodiversity and Human Well-being*. Conservation International. Washington, DC.

Moore, J. C., J. Sipes, A. A. Whittemore-Olson, H. W. Hunt, D. H. **Wall**, P. C. de Ruiter, and D. C. Coleman. 2008. Trophic structure and nutrient dynamics of the belowground food web within the rhizosphere of the shortgrass steppe. The Shortgrass Steppe LTER. In W. K. Lauenroth and I. C. Burke, eds. *Ecology of the Shortgrass Steppe: Perspectives from Long-term Research*. Oxford University Press, Cambridge, UK.

Wall, D. H. 2007. Biodiversity: Extracting lessons from extreme soils. Pages 71-86. in P. Dion and C. S. Nautiyal, eds. *Microbiology of Extreme Soils*. Springer Publishers, The Netherlands.

Coleman, D. C., and D. H. **Wall**. 2007. Fauna: the engine for microbial activity and transport. Pages 163-191 in E. A. Paul, ed. *Soil Microbiology, Ecology and Biochemistry*. Elsevier Press, New York.

Wall, D. H., R. Rabbinge, G. Gallopin, K. Khoday, N. Lewis, J. Lubchenco, J. Melillo, G. Schmidt-Traub, M. Sombilla, and L. Cimarrusti. 2005. Implications for achieving the Millennium Development Goals. Pages 549-584 in K. Chopra, R. Leemans, P. Kumar, and H. Simons, eds., *Millennium Ecosystem Assessment. Policy Responses: Findings of the Responses Working Group*. Island Press, Washington, DC.

Kareiva, P., J. B. R. Agard, J. Alder, E. Bennet, C. Butler, S. Carpenter, W. W. L. Cheung, G. S. Cumming, R. Defries, B. de Vries, R. E. Dickinson, A. Dobson, J. A. Foley, J. Geoghegan, B. Holland, P. Kabat, J. Keymer, A. Kleidon, D. Lodge, S. M. Manson, J. McGlade, H. Mooney, A. M. Parma, M. A. Pascual, H. M. Pereira, M. Rosegrant, C. Ringler, O. E. Sala, B. L. Turner II, D. van Vuuren, D. H. **Wall**, P. Wilkinson, V. Wolters. 2006. State of the art in simulating future changes in ecosystem services. Pages 73-115 in S.R. Carpenter, P.L. Pingali, E.M.

- Bennett, M.B. Zurek, eds. *Ecosystems and Human Well-being: Scenarios, Volume 4, Millennium Ecosystem Assessment*. Island Press, Washington, DC.
- Chapin, F. S. III., M. Berman, T. V. Callaghan, P. Convey, A. S. Crépin, K. Danell, H. Ducklow, B. Forbes, G. Kofinas, A. D. McGuire, M. Nuttall, R. Virginia, O. Young, S. A. Zimov, T. Christensen, A. Godduhn, E. J. Murphy, D. **Wall**, and C. Zockler. 2005. Polar Systems. Pages 717-743 in R. Hassan, R. Scholes and N. Ash, eds., *Millennium Ecosystem Assessment. Current State and Trends: Findings of the Condition and Trends Working Group*. Island Press, Washington, DC.
- Wall**, D. H., A. Fitter, and E. Paul. 2005. Developing new perspectives from advances in soil biodiversity research. Pages 3-30 in R. D. Bardgett, M. B. Usher, and D. W. Hopkins, eds. *Biological Diversity and Function in Soils*, British Ecological Society, Cambridge University Press, Cambridge, UK.
- Wall**, D. H. 2005. Global change impacts on soil biodiversity in grassland ecosystem. Pages 291-295 in T. E. Lovejoy and L. Hannah, eds. *Climate Change and Biodiversity*. Yale Press. London.
- Wardle, D. A., V. K. Brown, V. Behan-Pelletier, M. St. John, T. Wojtowicz, L. Brussaard, H. W. Hunt, E. A. Paul, and D. H. **Wall**. 2004. Vulnerability to global change of ecosystem goods and services driven by soil biota. Pages 101-136 in D. H. **Wall**, ed. *Sustaining Biodiversity and Ecosystem Services in Soil and Sediments*. Island Press, Washington, D. C.
- Wall**, D. H. 2005. Biodiversity. Pages 136-141 in D. Hillel, ed. *Encyclopedia of Soils in the Environment*. Elsevier Ltd, Oxford, UK.
- Wall**, D. H., R. D. Bardgett, A. P. Covich, and P. V. R. Snelgrove. 2004. Understanding the functions of biodiversity in soils and sediments will enhance global ecosystem sustainability and societal well-being. Pages 249-254 in D. H. **Wall**, ed. *Sustaining Biodiversity and Ecosystem Services in Soils and Sediments*. Island Press, Washington, D. C.
- Wall**, D. H., R. D. Bardgett, A. P. Covich, and P. V. R. Snelgrove. 2004. The need for understanding how biodiversity and ecosystem functioning affect ecosystem services in soil and sediments. Pages 1-12 in D. H. **Wall**, ed. *Sustaining Biodiversity and Ecosystem Services in Soils Sediments*. Island Press, Washington, D. C.
- van der Putten, W. H., J. M. Anderson, R. D. Bardgett, V. Behan-Pelletier, D. Bignell, G. S. Brown, V. K. Brown, L. Brussaard, H. W. Hunt, P. Ineson, T. H. Jones, P. Lavelle, E. A. Paul, M. St. John, D. A. Wardle, T. Wojtowicz, and D. H. **Wall**. 2004. The sustainable delivery of goods and services provided by soil biota. Pages 15-44 in D. H. **Wall**, ed. *Sustaining Biodiversity and Ecosystem Services in Soil and Sediments*. Island Press, Washington, D. C.
- Ineson, P., L. A. Levin, R. Kneib, R. O. Hall, J. M. Weslawski, R. D. Bardgett, D. A. Wardle, D. H. **Wall**, W. H. van der Putten, and H. Zadeh. 2004. Cascading effects of deforestation on ecosystem services across soils and freshwater sediments. Pages 225-248 in D. H. **Wall**, ed. *Sustaining Biodiversity and Ecosystem Services in Soils and Sediments*. Island Press, Washington, D. C.
- Adams, G. A., and D. H. **Wall**. 2002. Biodiversity in soils and sediments: Potential effects of global change. Pages 152-159 in H. A. Mooney and J. G. Canadell, eds. *The Earth System: Biological and Ecological Dimensions of Global Environmental Change*. John Wiley and Sons, Ltd., Chichester.
- Wall**, D. H., P. V. R. Snelgrove, and A. P. Covich. 2001. Conservation priorities for soil and sediment invertebrates. Pages 99-123 in M. E. Soule and G. H. Orians, eds. *Conservation Biology: Research Priorities for the Next Decade*. Island Press, Washington, D.C.
- Wall**, D. H., G. Adams, and A. N. Parsons. 2001. Soil Biodiversity. Pages 47-82 in F. S. Chapin III, O. E. Sala, and E. Huber-Sannwald, eds. *Global Biodiversity in a Changing Environment: Scenario for the 21st Century*. Springer-Verlag, New York.
- Virginia, R. A., and D. H. **Wall**. 2001. Ecosystem Functioning. Pages 345-352 in S. Levin, ed. *Encyclopedia of Biodiversity*. Academic Press, New York.
- Porazinska, D., and D. H. **Wall**. 2001. Soil Conservation. Pages 315-326 in S. Levin, ed. *Encyclopedia of Biodiversity*. Academic Press, New York.
- Wall**, D. H., and O. J. Reichman. 2000. Biotic manipulations involving below ground animals. Pages 318-329 in O. Sala, R. Jackson, H. Mooney, and R. Howarth, eds. *Methods in Ecosystem Science*. Springer Verlag, New York.
- Wall**, D. H., and J. M. Lynch. 2000. Soil biodiversity and ecosystem functioning. Pages 283-290 in E.

- Balazs, E. Galante, J. M. Lynch, J. S. Schepers, J.-P. Toutant, D. Werner, and P. A. T. J. Werry, eds. *Biological Resource Management. Connecting Science and Policy*. Springer, Heidelberg.
- Wall**, D. H., and R. A. Virginia. 2000. The world beneath our feet: Soil biodiversity and ecosystem functioning. Pages 225-241 in P. R. Raven and T. Williams, eds. *Nature and Human Society: The Quest for a Sustainable World*. National Academy of Sciences and National Research Council, Washington, DC.
- Baldwin, J. G., S. A. Nadler, and D. H. **Wall**. 2000. Nematodes-pervading the earth and linking all life. Pages 176-191 in P. R. Raven and T. Williams, eds. *Nature and Human Society: The Quest for a Sustainable World*. National Academy Press, Washington, DC.
- Wall**, D. H. 1999. Soil biodiversity: Life in soil. Pages 124-128 in J. Cracraft and F. Griffo, eds. *The Living Plant Crisis*. Columbia University Press, New York.
- Coleman, D. C., E. T. Elliott, J. M. Blair, and D. W. **Freckman**. 1999. Soil Invertebrates. Pages 349-377 in G. P. Robertson, D. C. Coleman, C. S. Bledsoe, and S. Phillips, eds. *Standard Soil Methods for Long - Term Ecological Research*. Oxford University Press, New York.
- Niles, R. K., and D. W. **Freckman**. 1998. From the ground up: Nematode ecology in bioassessment and ecosystem health. Pages 65-85 in K. R. Barker, G. A. Pederson, and G. L. Widham, eds. *Plant-Nematode Interactions. Agronomy Monograph*. American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, Madison, WI.
- Freckman**, D. W., and R. A. Virginia. 1998. Soil biodiversity and community structure in the McMurdo Dry Valleys, Antarctica. Pages 323-336 in J. C. Priscu, ed. *Ecosystem Dynamics in a Polar Desert. The McMurdo Dry Valleys, Antarctica*. American Geophysical Union, Washington, DC.
- Crowder, L. B., D. P. Reagan, and D. W. **Freckman**. 1996. Food web dynamics and applied problems. Pages 327-336 in G. A. Polis and K. O. Winemiller, eds. *Food Webs: Integration of Patterns and Dynamics*. Chapman and Hall, Inc., New York.
- Blair, J. M., P. J. Bohlen, and D. W. **Freckman**. 1996. Soil invertebrates as indicators of soil quality. Pages 273-291 in J. W. Doran and A.J. Jones, eds. *Methods for Assessing Soil Quality*. Soil Science Society of America, Madison, WI.
- Zak, J. C., and D. W. **Freckman**. 1991. Soil Communities in Deserts: Microarthropods and Nematodes. Pages 55-88 in G. A. Polis, ed. *The Ecology of Desert Communities*. The University of Arizona Press, Tucson, AZ.
- Freckman**, D. W., D. A. Duncan, and J. R. Larson. 1990. Effect of soil nematodes on annual grassland productivity. Pages 13-18 in P. F. Folliott and W. T. Swank, eds. *People and Temperate Region*. United States Department of State, Washington, DC.
- Freckman**, D. W., and J. G. Baldwin. 1990. Nematoda. Pages 155-200 in D. L. Dindal, ed. *Soil Biology Guide*. John Wiley & Sons. New York.
- Coleman, D. C., D. W. **Freckman**, G. M. Wang, and J. D. Goeschl. 1989. A reassessment of shoot/root and root/organic matter interactions. Pages 21-29 in M. Clarholm and L. Bergström, eds. *Ecology of Arable Land: Perspectives and Challenges. Development in Plant and Soil Sciences*. Kluwer Academic Publishers, Stockholm.
- Anderson, J. M., P. W. Flanagan, E. Caswell, D. C. Coleman, E. Cuevas, D. W. **Freckman**, J. A. Jones, P. Lavelle, and P. Vitousek. 1989. Biological processes regulating organic matter dynamics in tropical soils. Pages 97-123 in D. C. Coleman, J. M. Oades, and G. Uehara, eds. *Dynamics of Soil Organic Matter in Tropical Ecosystem*. Niftal, University of Hawaii, Honolulu.
- Whitford, W. G., and D. W. **Freckman**. 1988. The role of soil biota in soil processes in the Chihuahuan Desert. Pages 1063-1073 in E. E. Whitehead, C. F. Hutchinson, B. N. Timmerman, and R. G. Varady, eds. *Arid Lands: Today and Tomorrow*. University of Arizona, Tucson, AZ.
- Freckman**, D. W. 1988. Bacterivorous nematodes and organic matter decomposition. Pages 195-218 in: C. A. Edwards, B. R. Stinner, D. Stinner and S. Rabatin, eds. *Biological Interactions in Soil*. Elsevier, Amsterdam.
- Sasser, J. N., and D. W. **Freckman**. 1987. A world perspective on nematology: The role of society. Pages 7-14 in J. A. Veech and D. W. Dickson, ed. *Vistas on Nematology: A Commemoration of the Twenty-Fifth Anniversary of the Society of Nematologists*. Society of Nematologists, Hyattsville, MD.
- Freckman**, D. W. 1986. The ecology of dehydration in soil organisms. Pages 157-168 in A. C. Leopold, ed. *Membranes, Metabolism and Dry Organisms*. Cornell University Press, Ithaca, NY. 374 p.
- Freckman**, D. W., K. Cromack, and J. A. Wallwork. 1986. Recent advances in quantitative soil biology.

- Pages 399-442 in M. J. Mitchell and J. P. Nakas, eds. *Microfloral and Faunal Interactions in Natural and Agro-Ecosystems*. Dr. W. Junk Publishers, Dordrecht, The Netherlands.
- Whitford, W. G., D. W. **Freckman**, L. W. Parker, D. Schaefer, P. F. Santos, and Y. Steinberger. 1983. The contributions of soil fauna to nutrient cycles in desert systems. Pages 449-460 in Ph. Lebrun et al., eds. *New Trends in Soil Biology*. Dieu-Brichard Publishers, Louvain-LaNeuve.
- Freckman**, D. W., and C. Womersley. 1983. Physiological adaptations of nematodes in Chihuahuan desert soil. Pages 395-403 in Ph. Lebrun et al., eds. *New Trends in Soil Biology*. Dieu-Brichard Publishers, Louvain-LaNeuve.
- Whitford, W. G., D. W. **Freckman**, P. F. Santos, N. Z. Elkins, and L. W. Parker. 1982. The role of nematodes in decomposition in desert ecosystems. Pages 98-116 in D. W. **Freckman**, ed. *Nematodes in Soil Ecosystems*. University of Texas, Austin, TX.
- Freckman**, D. W. 1982. Parameters of the nematode contribution to ecosystems. Pages 81-97 in D. W. **Freckman**, ed. *Nematodes in Soil Ecosystems*. University of Texas Press, Austin, TX.
- Freckman**, D. W., L. B. Slobokin, and C. E. Taylor. 1980. Relation between species lists and tolerance to nematicides. Pages 34-42 in D. L. Dindal, ed. *Soil Biology as Related to Land Use Practices*. EPA, Washington, D.C.
- Demeure, Y., and D. W. **Freckman**. 1980. Recent advances in the study of anhydrobiosis in nematodes. Pages 205-226 in B. M. Zuckerman and R. A. Rohde, eds. *Plant Parasitic Nematodes*. Academic Press, New York.
- Freckman**, D. W. 1978. Ecology of anhydrobiotic soil nematodes. Pages 345-357 in J. H. Crowe and J. S. Clegg, eds. *Dry Biological Systems*. Academic Press, Inc., New York.

REPORTS

- US Blue Ribbon Panel Report on Antarctica and the Southern Ocean at the Request of the White House Office of Science and Technology Policy and the National Science Foundation. 2012. Washington, DC.
- UNESCO & SCOPE (authors, **Wall**, D. H., V. Behan-Pelletier, A. P. Covich and P. Snelgrove). 2007. Hidden assets: Biodiversity below-surface. *UNESCO-SCOPE Policy Briefs No. 5*. September, Paris.
- National Research Council. 2003. Frontiers in polar biology in the genomic era. Pages 1-166. National Academies Press, Washington, D. C.
- National Research Council. 1999. Perspectives on biodiversity: valuing its role in an ever changing world. Pages 1-74. National Academies Press, Washington D.C. D. H. Wall, Chair
- Bargagli, R., D. Wynn-Williams, F. Bersan, P. Cavacini, S. Ertz, F. Frati, D. **Freckman**, R. L. Smith, N. Russell, and A. Smith. 1997. Field report, Biotex 1: First BIOTAS expedition (Edmonson Point - Baia Terra Nova, Dec 10 1995-Feb 6 1996). Pages 42-58. Newsletter of the Italian Biological Research in Antarctica. Universita degli Studi di Camerino, Gennaio, Italy.
- National Research Council. 1995. A review of the biomonitoring of environmental status and trends program: The draft detailed plan. National Academies Press, Washington, D.C. D. W. **Freckman**, Chair.
- Freckman**, D. W. 1994. Life in the soil. Soil biodiversity: Its importance to ecosystem processes. Report of a workshop held at the Natural Resource History Museum, London, England.
- Solomon, S. 1992. Implementing science in the polar regions: A report of the advisory committee of the Division of Polar Programs. National Science Foundation, Washington, D.C.
- Klein, H. P. 1992. Planetary Protection Issues for the MESUR Mission: Probability of Growth. NASA conference publication. NASA Ames Research Center, Moffett Field, CA.
- National Research Council. 1991. Assessment of Satellite Earth Observation Programs. National Academies Press, Washington, D.C.
- National Research Council. 1990. The Search for Life's Origins: Progress and Future Directions in Planetary Biology and Chemical Evolution. National Academies Press, Washington, D.C.
- Freckman**, D. W. 1977. Cryptobiosis and its Effect on Metabolism and Production Estimates of Desert Nematodes. Utah Sate University, Logan, UT.
- Freckman**, D. W., R. Mankau, and S. A. Sher. 1975. Biology of Nematodes in Desert Ecosystems. Utah State University, Logan, UT.

ARTICLES (Not refereed)

- Wall, D. H.** 2008. The Lions of the Dry Valleys. In Lonely Planet Antarctica Travel Guide.
- Wall, D. H.** 2008. Foreword. In *A Handbook of Tropical Soil Biology: Sampling & Characterization of Below-ground Biodiversity*. F.M.S. Moreira, E. J. Huising and D. E. Bignell, eds. Earthscan Publishers.
- Gregory, P. M. and D. H. **Wall**. 2008. Foreword. In S. Johnson and P. Murray, eds. *Root Feeders, an Ecosystem Perspective*. CABI press, Oxford, UK.
- Ojima, D. S., D. H. **Wall**, J. Moore, K. Galvin, N. T. Hobbs, W. H. Hunt, K. Paustian, D. Swift, R. B. Boone, R. T. Conant, J. Klein, L. Christensen, M. Sankaran, J. Ratnam, E. Ayres, H. Steltzer, B. Simmons, G. Williams. 2006. Don't sell social science short. *Science* 312: 1470.
- Wall, D. H.** highlighted in "Environment-Think Tank: Celebrating 25 years". 2005. *Discover Magazine*. April: 73.
- Treonis, A. M., **Wall, D. H.**, and R. A. Virginia. 2005. Invertebrate diversity in Taylor Valley soils and sediments. *Antarctic Journal of the United States*. 33:13-16.
- Adams, G. A., and D. H. **Wall**. 2001. Building Bridges for Biodiversity: Progress of the International Biodiversity Observation Year (IBOY) 2001-2002. *Biology International* 42: 28-31.
- Wall, D. H.**, L. Brussaard, P. A. Hutchings, M. A. Palmer, and P. V. R. Snelgrove. 1998. Soil and Sediment Biodiversity and Ecosystem Functioning. *Nature and Resources* 34: 41-51.
- Courtright, E. M., D. W. **Freckman**, L. E. Powers, and R. A. Virginia. 1998. McMurdo Dry Valleys LTER: Genetic diversity of soil nematodes in the McMurdo Dry Valleys of Antarctica. *Antarctic Journal of the United States* 31: 203-204.
- Burkins, M. B., C. P. Chamberlain, R. A. Virginia, and D. W. **Freckman**. 1998. Natural abundance of carbon and nitrogen isotopes in potential sources of organic matter to soils of Taylor Valley, Antarctica. *Antarctic Journal of the United States* 31: 209-210.
- Virginia, R. A., and D. **Wall Freckman**. 1997. Soil and sediments: Linkages to new research. *Bulletin of the Ecological Society of America* 78: 284-285.
- Freckman, D. W.** 1997. AIBS Presidents Revisit the Past. 1993: Multidisciplinary in organismal biology. *BioScience* 47: 655-655.
- Wall-Freckman, D.** 1996. Soil and sediment biodiversity and ecosystem function: A DIVERSITAS new program element. *Biology International* 33: 35-36.
- Powers, L., D. **Wall-Freckman**, M. Ho, and R. A. Virginia. 1995. McMurdo LTER: Soil properties associated with nematode distribution along an elevational transect in Taylor Valley, Antarctica. *Antarctic Journal Review*: 282-287.
- Ho, M., R. A. Virginia, L. E. Powers, and D. W. **Freckman**. 1995. Soil chemistry along a glacial chronosequence on Andrews Ridge, Taylor Valley. *Antarctic Journal of the U.S.* 30: 310-311.
- Freckman, D. W.** 1995. Soil biodiversity: A new sense of hitting pay dirt. *American Society of Microbiology News* 61: 280-281.
- Powers, L. E., D. W. **Freckman**, and R. A. Virginia. 1994. Depth distribution of soil nematodes in Taylor Valley, Antarctica. *Antarctic Journal of the USA* 29: 175-176.
- Powers, L. E., D. W. **Freckman**, M. Ho, and R. A. Virginia. 1994. McMurdo LTER: Soil and nematode distribution along elevational gradient in Taylor valley, Antarctica. *Antarctic Journal of the USA review*: 228-229.
- Freckman, D. W.** 1993. The ecology of nematodes in Antarctic Dry Valley soils. *Antarctic Journal of the United States* 28: 10-11.
- Klopatek, C. C., E. G. O'Neill, D. W. **Freckman**, C. S. Bledsoe, D. C. Coleman, D. A. J. Crossley, E. R. Ingham, D. Parkinson, and J. M. Klopatek. 1992. The sustainable biosphere initiative: A commentary from the U.S. Soil Ecology Society. *Bulletin of the Ecological Society of America* 73: 223-227.
- Freckman, D. W.**, and R. A. Virginia. 1991. Nematodes in the McMurdo Dry Valleys of southern Victoria Land. *Antarctic Journal of the United States* 26: 233-234.
- Gaugler, R., and D. W. **Freckman**. 1990. A program officer's guide to effective grantsmanship. *American Entomologist* 36: 206-212.
- Freckman, D. W.**, and R. A. Virginia. 1990. Nematode ecology of the McMurdo Dry Valley ecosystems. *Antarctic Journal of the United States*: 229-230.
- Freckman, D. W.** 1989. Women and minorities in sciences. *Council of Scientific Society Presidents News* 4: 5-6.
- Freckman, D. W.** 1989. The scientist shortage and the gender gap. *BioScience* 39: 523.

- Freckman**, D. W. 1987. Soil nematodes. Pages 27-30 in M. J. Hayes and J. H. Cooley, ed. *Tropical Soil Biology: Current Status of Concepts. INTERCOL Bulletin 14.*
- Crossley, D. A. J., and D. W. **Freckman**. 1987. Tropical soil biology: Current status of concepts-introduction. Pages 1-4. In M. J. Hayes and J. H. Cooley, ed. *Tropical soil biology: Current status of concepts. INTERCL Bulletin 14.*
- Freckman**, D. W. 1985. Life cycles, survival, environmental effects ecology. Pages 46-49. In A. W. Johnson, ed. USDA, Washington, D.C.
- Freckman**, D. W., and D. A. Crossley Jr. 1984. Ecological consequences of tillage. Pages 31-32 in H. D. Hiemstra and W. Bauder, ed. *Conservation Tillage Strategies for the Future.* Conservation tillage information center, Fort Wayne, IN.

ABSTRACTS (PAST 5 YEARS)

- Tomasel, C. M., B. J. Adams, B. N. Adhikari and D. H. **Wall**. 2011. Life cycle of *Plectus murrayi* under laboratory conditions. Society of Nematology Annual Meeting, Corvallis, OR, July. (poster).
- Shaw, E.A., D.H. **Wall**, M.F. Cotrufo, J.L. Soong, and U.N. Nielsen. 2011. Do long-term burning practices affect carbon and nitrogen flow dynamics from grassland root litter through the soil food web? Ecological Society of America Annual Meeting, Austin, TX, July. (poster).
- Shaw, E.A., D.H. **Wall**, M.F. Cotrufo, J.L. Soong, and U.N. Nielsen. 2011. Do long-term burning practices affect carbon and nitrogen flow dynamics from grassland root litter through the soil food web? Grasslands in a Global Context Symposium, Konza Prairie Biological Station, Manhattan, KS. (poster).
- Soong, J. L., K. Deneff, U. N. Nielsen, M. L. Vandegehuchte, W. Parton, D. H. **Wall** and M. F. Cotrufo. 2011. AGU, San Francisco, CA. (oral).
- Cotrufo, M. F., J. L. Soong, A. J. Horton, U. N. Nielsen, K. Deneff, D. H. **Wall** and W. Parton. 2011. An integrated experimental and modeling study to advance process understanding and forecasting of C and N fluxes from the litter layer to the soil and the atmosphere. AGU, San Francisco, CA. (poster).
- Soong, J., U. Nielsen, K. Deneff, D. **Wall**, W. Parton, and M. F. Cotrufo. 2011. Understanding C and N dynamics during litter decomposition: a ¹³C and ¹⁵N enriched litter decomposition study. Konza Prairie LTER annual meeting. Manhattan, KS.
- Ivanovich, K., E. A. Shaw, C. M. de Tomasel, and D. H. **Wall**. 2011. Measuring stable isotopes of carbon and nitrogen in *P. murrayi* from laboratory cultures: an effort to improve lab techniques to decrease variability. Celebrating Undergraduate Research and Creativity, Colorado State University, (Poster).
- Sylvain, Z.A.[#] and **Wall**, D.H. 2011. Scale-dependent responses of soil invertebrate communities to altered soil moisture regimes across a regional precipitation gradient. Ecological Society of America, Austin, Texas.
- Sylvain, Z.A.[#] and **Wall**, D.H. 2011. Effects of soil moisture on nematode assemblages. Front Range Student Ecology Symposium, Fort Collins, Colorado.
- Sylvain, Z.A.[#] and **Wall**, D.H. 2010. Effects of soil moisture on soil invertebrate assemblages Annual Meeting of the Ecological Society of America, Pittsburgh, Pennsylvania.
- Martin, M. T.* , D. H. **Wall**, S. M. Peat[#], B. N. Adhikari[#] and B. J. Adams. 2010. Response of *Scottinema lindsayae* to Antarctic glacial cycles. Annual Meeting of the Society of Nematologists, Boise ID, July.
- Clayton, A. L.* , Andr assy, I., **Wall**, D. H., Holovachov, O., Peat, S.[#], and B. J. Adams. 2010. Molecular and morphological analysis of *Plectus* biodiversity. Annual Meeting of the Society of Nematologists. Boise, Idaho, July.
- Whiting, J.* , Nielsen, U.N., **Wall**, D.H., and Adams, B.J. 2010. Population genetics and phylogenetics of the MCM tardigrades. Annual Science Meeting of the McMurdo LTER, Fort Collins, CO August.
- Martin, M. T.* , D. H. Wall, S. M. Peat[#], B. N. Adhikari[#] and B. J. Adams. 2010. Phylogeography and population structure of *Scottinema lindsayae*. Annual Science Meeting of the McMurdo LTER, Fort Collins, CO August.
- Wu, T., J.R. Garey, S. Depovic, E. Ayres, D.H. **Wall**, and R. Bardgett. 2009. Soil faunal distribution under different ecosystems using large-scale DNA sequencing. Ecological Society of America Annual Meeting. Albuquerque, NM, August.

- Adam L. C., I. Andrassy, **D.H. Wall** and B. J. Adams. 2009. Molecular and morphological analysis of *Plectus* biodiversity in the McMurdo Dry Valleys. All Scientists Meeting, Estes Park, CO, September. (poster)
- Douglass, S. P., C. A. Peña, A. R. Dillman, T. S. Davie, S. M. Peat, B. N. Adhikari, J. M. Chasten, E. Ayres, E., B. L. Simmons, **D. H., Wall**, and B. J. Adams. 2009. Molecular and morphological analysis of *Eudorylaimus* biodiversity in the McMurdo Dry Valleys. All Scientists Meeting, Estes Park, CO, September. (poster)
- Adhikari, B. N., **D. H. Wall** and B. J. Adams. 2009. Molecular genetic analysis of stress survival in an Antarctic nematode: A synthesis of nematode biology, ecology and genomics. All Scientists Meeting, Estes Park, CO, September. (poster)
- Nielsen, U. N., **D. H. Wall** and B. J. Adams. 2009. A new record of the tardigrade genus *Milnesium* in the McMurdo Dry Valleys, Antarctica and the potential implication for biotic interactions. LTER All Scientists Meeting, Estes Park, CO, September. (poster)
- Nielsen, U. N., **D. H. Wall** and B. J. Adams. 2009. The diversity of tardigrades and their role in the soil food webs in the McMurdo Dry Valleys, Antarctica. Soil Ecology Society Meetings, Burlington, VT, August. (poster).
- Smith, T. E., **D. H. Wall**, I. D. Hogg and B. J. Adams. 2009. Increased soil moisture availability resulting from subsurface ice melt has an impact on nematode abundances and community structure in a polar desert ecosystem. Soil Ecology Society Meetings, Burlington, VT, August (poster).
- Tomasel, C. M. de, G. Li, B. J. Adams, B. Adhikari and **D. H. Wall**. 2009. Isolation and culture of the Antarctic nematode, *Plectus murrayi* under laboratory conditions. Soil Ecology Society Meetings, Burlington, VT, August. (poster).
- Wall**, D.H., E. Ayres, T. Wu, R.D. Bardgett and J.R. Garey 2009. Assessing global contributions of lesser-known soil invertebrates to ecosystem services under climate change scenarios. Climate Change, Global Risks, Challenges and Decisions. Copenhagen, Denmark, March. (poster).
- Wall**, D.H., W.B. Lyons, H. Ducklow, and B.J. Adams. 2008. Antarctic biodiversity and ecosystem services: how will they be altered with global change to Antarctic ecosystems? Scientific Committee on Antarctic Research Open Science Meeting. St. Petersburg, Russia, July.
- Wu, T., J.R. Garey, S. Depovic, E. Ayres, D.H. **Wall**, and R. Bardgett. 2007. Comparing soil mesofaunal communities using large-scale DNA sequencing. Ecological Society of America Annual Meeting. San Jose, California, August.
- Simmons, B.L., D.H. **Wall**, B.J. Adams, E. Ayres, J.E. Barrett, and R.A. Virginia. 2007. Linking aboveground and belowground diversity and soil properties in the McMurdo Dry Valleys, Antarctica. Ecological Society of America Annual Meeting. San Jose, California, August.
- Ayres, E., J.N. Nkem, D.H. **Wall**, B.L. Simmons, B.J. Adams, J.E. Barrett, and R.A. Virginia. 2007. Human trampling reduces soil faunal populations and soil respiration in the McMurdo Dry Valleys, Antarctica. Ecological Society of America Annual Meeting. San Jose, California, August.
- Dillman, A. R., T. S. Davie, J. M. Chaston, S. M. Peat, E. Ayres, B. Simmons, J. E. Barrett, D. H. **Wall** and B. J. Adams. 2007 Biodiversity and ecosystem functioning in Victoria Land nematodes: a molecular approach. Joint Meeting of the American Phytopathological Society and the Society of Nematologists, San Diego, California, July.
- Adhikari, B. N., E. Ayres, B. Simmons, D. H. **Wall**, and B. J. Adams. 2007. A study of the molecular mechanisms of desiccation tolerance in Antarctic Dry Valley nematodes using Expressed Sequence Tags (EST). Joint Meeting of the American Phytopathological Society and the Society of Nematologists, San Diego, California, July.
- Dillman, A.R., S.M. Peat, T.S. Davie, W.R. Miller, C.M. Johannson, E. Ayres, B. Simmons, D.H. **Wall**, and B.J. Adams. 2007 A comparison of morphological taxonomy and molecular phylogeny for the Phylum Tardigrada. Annual Meeting of the Willi Hennig Society, New Orleans, Louisiana, June.
- Barrett, J.E., R.A. Virginia, D.H. **Wall**, and B.J. Adams. 2007. Persistent effects of climate driven hydrological pulses on soil communities in a Polar Desert ecosystem. Soil Ecology Society Meeting, Moab, Utah, April/May.

- Simmons, B.L., D.H. **Wall**, B.J. Adams, E. Ayres, and J.E. Barrett. 2007. Linking Above and Belowground Diversity and Soil Processes in the Dry Valleys, Antarctica. Soil Ecology Society Meetings, Moab, Utah, April/May.
- Dillman, A.R., S.M. Peat, T.S. Davie, W.R. Miller, C.M. Johannson, E. Ayres, B. Simmons, D.H. **Wall**, and B.J. Adams. 2007. Tardigrade Barcoding: A comparison of morphologic taxonomy and a three gene molecular phylogeny for the phylum Tardigrada. Soil Ecology Society Meeting, Moab, Utah, April/May.
- Ayres, E., H. Steltzer, D.H. **Wall**, S. Berg, , B.L. Simmons and M.D.Wallenstein. 2007. Differences in tree species traits influence the soil environment and biota. Soil Ecology Society Meeting, Moab, Utah, April/May.
- Adhikari, B.N., E. Ayres, B. Simmons, D.H. **Wall** and B.J. Adams. 2007. A study of the molecular mechanisms of desiccation tolerance in Antarctic nematodes using Expressed Sequenced Tags (EST). Soil Ecology Society Meeting, Moab, Utah, April/May. *J. Nematol.* 39:102-102.
- Simmons, B. L., D. H. **Wall**, B. J. Adams, R. A. Virginia and J. E. Barrett. 2006. Effects of increased temperature and moisture on nematode abundance, diversity and biomass in the McMurdo Dry Valleys, Antarctica. Long Term Ecological Research All-Scientists Meeting, Estes Park, Colorado, September.
- Ayres, E., D. H. **Wall**, B. J. Adams, J. E. Barrett, and R. A. Virginia. 2006. Soil and sediment properties and invertebrate community structure across lake-soil transition zones in the McMurdo Dry Valleys, Antarctica. Long Term Ecological Research All-Scientists Meeting, Estes Park, Colorado, September.
- Adams, B. J., A. R. Dillman, D. H. **Wall**, B. L. Simmon, E. Ayres, R. A. Virginia, and J. E. Barrett. 2006. Effects of taxonomic precision on studies of distribution ecology and the relationship between biodiversity and ecosystem functioning. Long Term Ecological Research All-Scientists Meeting, Estes Park, Colorado, September.
- Ayres, E., D. H. **Wall**, J. R. Garey, G. Li, R. D. Bardgett.. 2006. Global patterns of soil nematode diversity and ecosystem properties. 91st Annual Meeting of the Ecological Society of America, Memphis, Tennessee, August.
- Ayres, E., D.H. **Wall**, J.R. Garey, G. Li, and R.D. Bardgett. 2006. Global latitudinal gradients: Soil nematode biodiversity and ecosystem properties. British Ecological Society Meeting, Bath, UK, July.
- Poage, M. A., J. E. Barrett, R. A. Virginia and D. H. **Wall**. 2005. Soil geochemical control over nematode populations in Bull Pass, McMurdo Dry Valleys, Antarctica. Annual Fall Meeting of the American Geophysical Union, San Francisco, California, December.
- Barrett, J. E., R. A. Virginia., and D. H. **Wall**. 2005. Controls over soil organic matter accumulation and turnover in the McMurdo Dry Valleys, Antarctica. Annual Fall Meeting of the American Geophysical Union, San Francisco, California, December.
- Norvell, K., J.A. Ippolito, S.W. Blecker, D.H. **Wall**, J. Barrett, and R. Virginia. 2005. Phosphorus fractions and biogeochemical implications in soils of Taylor Valley, Antarctica. Colorado State University Celebrate Undergraduate Research and Creativity, Fort Collins, Colorado, April.
- Norvell, K., J.A. Ippolito, S.W. Blecker, D.H. **Wall**, J. Barrett, and R. Virginia. 2005. Biogeochemical implications of phosphorus fractionation in soils of Taylor Valley, Antarctica, American Society of Agronomy National Meetings, Salt Lake City, Utah, November (2nd place award).
- Wall**, D.H., and M. St. John. 2005. Faunal diversity in the soil food web and its implications for ecosystem processes. First DIVERSITAS Open Science Conference, Oaxaca, Mexico, November.
- Barrett, J.E., Virginia, R.A., **Wall**, D.H., Adams, B.J., and C. Cary. 2005. Soil biodiversity and ecosystem functioning across a latitudinal gradient in Victoria Land, Antarctica. 90th Annual Meeting of the Ecological Society of America (ESA), and the IX international Congress of Ecology (INTECOL), Montreal, Canada, August.
- Nkem, J.N., D.H. **Wall**, R.A. Virginia, J.E. Barrett, and B.J. Adams. 2005. Sources of soil moisture additions and their impacts on soil biodiversity in Taylor Valley, Antarctica. 90th Annual Meeting of the Ecological Society of America (ESA), and the IX international Congress of Ecology (INTECOL), Montreal, Canada, August.

- Aislabie, J.M., M.R. Balks, J.E. Barrett, D.J. Saul, B. Adams, R.A. Virginia, and D.H. **Wall**. 2005. Soils of a penguin rookery, Seebee Hook, Cape Hallett: preliminary investigations of chemical and microbial properties. New Zealand Antarctic Seminar, Christchurch, New Zealand, July.
- Nkem, J.N, D.H. **Wall**, R.A. Virginia, J.E. Barrett, and B.J. Adams. 2005. Changes in soil invertebrate habitat from moisture addition from snow fences at Taylor Valley, Antarctica. McMurdo LTER Meeting, Portland State University, Portland, Oregon, July.
- Nkem, J.N, D.H. **Wall**, R.A. Virginia, J.E. Barrett, and B.J. Adams. A.N. 2005. Groundwater seeps in a Cold Desert Ecosystem: Community changes in soil invertebrates in the McMurdo Dry Valleys. Soil Ecology Society 10th Biennial International Conference "Linkages in Soil Ecology", Argonne National Laboratory, Illinois, May.
- Nkem, J., **Wall**, D.H., Virginia, R.A., Broos, E., Barrett, J.E., and B.J. Adams. 2005. Evaluating salinity thresholds for soil nematode survival: Implications for community establishment in the McMurdo Dry Valleys, Antarctica. Synthesis of Soil Biodiversity and Ecosystem Functioning in Victoria Land, Antarctica: A Workshop, Jekyll Island, Georgia, April.
- Broos, E., **Wall**, D.H., Virginia, R.A., Nkem, J., Powers, L.E., and B.J. Adams. 2005. Trampling effects on soil invertebrate communities. Synthesis of Soil Biodiversity and Ecosystem Functioning in Victoria Land, Antarctica: A Workshop, Jekyll Island, Georgia, April.
- Barrett, J.E., Virginia, R.A., and D.H. **Wall**. 2005. Soil organic matter dynamics in the Antarctic Dry Valleys. Synthesis of Soil Biodiversity and Ecosystem Functioning in Victoria Land, Antarctica: A Workshop, Jekyll Island, Georgia, April.
- Aislabie, J.M., Balks, M.R., Barrett, J.E., Saul, D.J., Virginia, R.A., and D.H. **Wall**. 2005. Soils of a penguin rookery, Seebee Hook, Cape Hallett: preliminary investigations of chemical and microbial properties. Synthesis of Soil Biodiversity and Ecosystem Functioning in Victoria Land, Antarctica: A Workshop, Jekyll Island, Georgia, April.
- Treonis, A, and D.H. **Wall**. 2005. Soil nematodes and dessication survival in the extreme arid environment of the Antarctic Dry Valleys. Society for Integrative and Comparative Biology, San Diego, California, January.
- Broos, E.J., D.H. **Wall**, R.A. Virginia, J.N. Nkem, L.E. Powers, and B.J. Adams. 2004. Human disturbance and nematode decline in Antarctic Dry Valley soil. Society of Nematologists, Estes Park, Colorado, August.
- Nkem, J.N, D.H. **Wall**, R.A. Virginia, E.J. Broos, J.E. Barrett, and B.J. Adams, and A.N. Parsons. 2004. Response of soil nematodes to moisture additions from snow fences in Taylor Valley, Antarctica. Society of Nematologists, Estes Park, Colorado, August.
- Wall**, D. H. 2004. Biodiversity and Ecosystem Functioning in Terrestrial Habitats in Antarctica. Scientific Committee on Antarctic Research, Bremen, Germany, July.
- St. John, M. G., D. H. **Wall** and H. Reed. 2004. The relationship between soil mite species richness and decomposition in a tallgrass prairie: a contest among models. Ecological Society of America, Portland, Oregon, August.
- Adams, B. J. and D. H. **Wall**. 2004. Trophic Phylogeography: a research program for examining ecosystem function within a historical and evolutionary framework. International Symposium on Impacts of Soil Biodiversity on Biogeochemical Processes in Ecosystems: International Workshop on Molecular Methods in Soil Biological and Biochemical Diversity in Terrestrial Ecosystems, Taipei, Taiwan, April.
- Wall**, D. H., B. J. Adams, J. E. Barrett and R. A. Virginia. 2004. Factors determining phylogeographical distribution of soil nematodes in the Antarctic Dry Valleys. International Symposium on Impacts of Soil Biodiversity on Biogeochemical Processes in Ecosystems: International Workshop on Molecular Methods in Soil Biological and Biochemical Diversity in Terrestrial Ecosystems, Taipei, Taiwan, April.
- Lyons, W. Berry, K. A. Welch, A. E. Carey, D. H. **Wall**, R. A. Virginia, A. Fountain, B. Csatho and C. Tremper. 2004. Groundwater Seeps in Taylor Valley Antarctica: An example of a Decadal Subsurface Melt Event. Annual Meeting of the Ecological Society of America, Portland, Oregon, July.
- Lyons, W. B., P. T. Doran, A. Fountain, D. M. McKnight, D. Moorhead, J. C. Priscu, R. A. Virginia and D. H. **Wall**. 2004. The Evaluation of Interdisciplinary Science: An Example from the McMurdo Dry Valleys Long-Term Ecological Research Program. National Academy of Sciences meeting on Multidisciplinary Science. Washington, DC, January.

- St. John, Mark, D. H. **Wall** and V. Behan-Pelletier. 2003. Effects of an invasive grass on the community of associated soil mites in a tallgrass prairie. Soil Ecology Society Meetings, Palm Springs, California, May.
- Barrett, J.E., R.A. Virginia, D.H. **Wall** and A.N. Parsons. 2003. Does legacy C fuel soil food webs in the Antarctic Dry Valleys? All Scientists Meeting, Seattle, Washington, September.
- Barrett, J.E., R.A. Virginia, D.H. **Wall** and W.B. Lyons. 2003. Stoichiometric evolution of Antarctic Dry Valley landscapes. Annual Meeting of the Ecological Society of America, Savannah, Georgia, August.
- St. John, Mark, D. H. **Wall** and V. Behan- Pelletier. 2003. Relationship between above- and belowground diversity: grasses and soil mites in a natural tallgrass prairie. British Ecological Meetings, Lancaster, UK, March.
- Barrett, J. E. , C. A. McManus, R. A. Virginia, A. N. Parsons, and D. H. **Wall**. 2002. Soil Carbon Turnover in Antarctic Dry Valley Ecosystems, an Analytical Approach. Annual Meeting of the Ecological Society of America, Tucson, Arizona, August.
- Porazinska, D.L., J. Six, and D.H. **Wall**. 2002. Plant Diversity and the Soil Environment. Annual Meeting of the Ecological Society of America, Tucson, Arizona, August.