

CURRICULUM VITAE

JIANGUO (JINGLE) WU

Dean's Distinguished Professor of Landscape Ecology and Sustainability Science
School of Life Sciences, School of Sustainability & Julie A. Wrigley Global Institute of Sustainability
Arizona State University, Tempe, AZ 85287

Ph: (480) 965-1063 * Fax: (480) 965-6899 * E-mail: Jingle.Wu@asu.edu
<http://LEML.asu.edu/jingle/>

Short Biography

Dean's Distinguished Professor of Sustainability Science, School of Life Sciences & School of Sustainability, *Arizona State University*, Tempe, Arizona, USA. B.S. (1982) in biology from *Inner Mongolia University* and M.S. (1987) and Ph.D. (1991) in ecology from *Miami University*, Oxford, Ohio, USA. National Science Foundation (NSF) postdoctoral fellow at *Cornell University* (1991-1992) and *Princeton University* (1992-1993). Current research areas: landscape ecology, urban ecology, and sustainability science. Authored **16** books and about **350** journal articles and book chapters (<http://LEML.asu.edu/Jingle/>).

Editor-in-Chief of *Landscape Ecology* since 2005, and Editorial Board member for several international journals on ecology and interdisciplinary research. Other professional services: *Chair of Asian Ecology Section* of Ecological Society of America (1999-2000); *Program Chair* of the US Association for Landscape Ecology (US-IALE) in 2001; *Councilor-at-Large* of US-IALE (2001-2003); *Founding Director* of Sino-US Center of Conservation, Energy and Sustainability Science (2007-); *Founding Director* of Center for Human-Environment System Sustainability (CHESS), Beijing Normal University (2012-). Major awards and honors: *American Association for the Advancement of Science (AAAS) Award for International Scientific Cooperation* (2006); *Elected AAAS Fellow* (2007); *Leopold Leadership Fellow* (2009); *Distinguished Landscape Ecologist Award* from United States Association for Landscape Ecology (2010); *Served with Distinction as Editor-in-Chief of Landscape Ecology* from the United States Association for Landscape Ecology (2010); *Outstanding Scientific Achievements Award* from International Association for Landscape Ecology (2011); *Distinguished Service Award* from the United States Association for Landscape Ecology (2012); *Outstanding International Scientific and Technological Cooperation Award*, The Government of Inner Mongolia Autonomous Region (2012); *Employee Service Recognition, 20 Years of Valued Service*, Arizona State University (2016); *Elected Fellow of Ecological Society of America* (2019).

ACADEMIC POSITIONS

- 2008 – **Dean's Distinguished Professor** of Sustainability Science, School of Life Sciences and School of Sustainability, Arizona State University, Tempe, AZ 85287
- 2010 – **Senior Sustainability Scientist**, Global Institute of Sustainability, Arizona State University, Tempe, AZ 85287
- 2005 – **Professor**, School of Life Sciences and School of Sustainability, Global Institute of Sustainability, ASU, Tempe, AZ 85287
- 2001 – 2005: **Associate Professor**, School of Life Sciences, Arizona State University, Tempe, AZ 85287
- 1999 – 2001: **Associate Professor**, Department of Life Sciences, ASU-West, Phoenix, AZ 85069

- 1995 – 1999: **Assistant Professor**, Department of Life Sciences, ASU-West, Phoenix, AZ 85069
- 1993 – 1995: **Assistant Research Professor**, Biological Sciences Center, Desert Research Institute, University of Nevada System, Reno, NV 89506 (10/1993-8/1995)
- 1993 – 1994: **Senior Research Associate** (joint appointment), Department of Forestry, Fisheries and Wildlife, University of Nebraska, Lincoln (9/1993-2/1994)
- 1992 – 1993: **NSF Postdoctoral Research Associate**, Department of Ecology and Evolutionary Biology, Princeton University, Princeton (8/1992-9/1993)
- 1991 – 1993: **NSF Postdoctoral Research Associate**, Section of Ecology and Systematics, Cornell University, Ithaca (9/1991-8/1993)
- 1987 – 1991: **Teaching Fellow**, Botany Department, Miami University, Oxford (8/1987-8/1991)
- 1989, 1990: **Summer Lecture Instructor**, Botany Department, Miami University
- 1986 – 1987: **Teaching Assistant**, Botany Department, Miami University, Oxford
- 1985 – 1986: **Visiting Scientist**, Department of Land, Air and Water Resources, University of California, Davis, CA 95616 (9/1985 – 8/1986)
- 1982 – 1985: **Assistant Professor**, Department of Biology, Inner Mongolia University, Hohhot, China (3/1982 – 9/1985)

EDUCATION AND TRAINING

- Postdoc: NSF Postdoctoral Fellow, Cornell University and Princeton University (1991-1993); Mentor: Simon A. Levin
- Ph. D.: Miami University (8/1991), Department of Botany, Oxford, OH; Mentors: John L. Vankat and Ori L. Loucks
- M. S.: Miami University (8/1987), Department of Botany, Oxford, OH; Mentor: John L. Vankat
- B. S.: Inner Mongolia University (1/1982), Department of Biology, Hohhot, China

HONORS AND AWARDS

- 2019 Elected Fellow of Ecological Society of America, 2019
- 2016 Employee Service Recognition, 20 Years of Valued Service, Office of Knowledge Enterprise Development, Arizona State University, April 29, 2016
- 2016 Certificate of Appreciation for 20 Years of Valued Service, Julie Ann Wrigley Global Institute of Sustainability, Arizona State University, March 28, 2016
- 2012 Outstanding International Scientific and Technological Cooperation Award, The Government of Inner Mongolia Autonomous Region, Hohhot, October 2012
- 2012 Distinguished Service Award, The United States Association for Landscape Ecology (US-IALE), April 2012
- 2011 Outstanding Scientific Achievements Award, International Association for Landscape Ecology (IALE), August 2011
- 2010 Distinguished Landscape Ecologist Award, The United States Association for Landscape Ecology (US-IALE), April 2010

- 2010 Service with Distinction Award for Editor-in-Chief of Landscape Ecology, The United States Association for Landscape Ecology (US-IALE), 2010
- 2009 2009 Leopold Leadership Fellow (Woods Institute for the Environment, Stanford University)
- 2008 Dean's Distinguished Professorship in landscape ecology and sustainability science, Arizona State University (2008-2013)
- 2007 Elected Fellow of the American Association for the Advancement of Science (AAAS fellow)
- 2006 AAAS Award for International Scientific Cooperation (\$5000), American Association for the Advancement of Science (AAAS)
- 2006 Certificate of Appreciation for Outstanding Service, National Science Foundation (NSF) Ecosystem Panel (2001-2006)
- 2003 Certificate of Appreciation for Service as Councilor-at-Large (2001-2003), The US Association of Landscape Ecology (US-IALE)
- 2003 – 2005 Distinguished Scholar of the 100-Talent Programme, Chinese Academy of Sciences, Beijing, China (Host institution: Institute of Botany, CAS, Beijing)
- 2001 Award of Outstanding Books in Science and Technology, China (Wu 2000. Landscape Ecology. Higher Education Press, Beijing)
- 2000 – Who's Who in America , Marquis Who's Who, New Providence, NJ, USA (since 54th Edition 2000)
- 1996 Honorable Mention of the Best Paper in Landscape Ecology (Wu and Loucks 1995), Annual Meeting of the US Association of Landscape Ecology
- 1991 – 1993 US National Science Foundation (NSF) Postdoctoral Fellowship
- 1991 Charles Heimsch Award for Teaching Excellence in Botany, Miami University
- 5/1990 Jeff Stein Memorial Graduate Scholarship, Miami University, Oxford, OH
- 1989 – 1990 Dissertation Fellowship, Miami University, Oxford, OH
- 1988 – 1999 Graduate Students' Achievement Award; 4 times, Miami University, Oxford, Ohio

Guest Professorships

- 2012 – Distinguished Guest Professor and Founding Director, Center for Human-Environment System Sustainability (CHESS), Beijing Normal University, Beijing
- 2007 – 2012 Distinguished Guest Professor, Inner Mongolia University, Hohhot
- 2007 – 2012 Distinguished Guest Prof., Institute of Botany, Chinese Academy of Sciences
- 2006 – 2009 Distinguished Guest Professor (Guangbiao Guest Professor), Zhejiang University, Hangzhou, China
- 2006 – 2011 Distinguished Guest Professor, Inner Mongolia Agricultural Univ, Hohhot
- 2013 – 2016 Guest Professor, Tsinghua University, Beijing
- 2009 – 2014 Guest Professor, Ningxia University, Yinchuan, China

- 2009 – 2014 Guest Professor, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing
- 2006 – 2011 Guest Professor, Beijing University, Beijing
- 2003 – 2008 Guest Professor, Graduate School of Chinese Academy of Sciences, Beijing
- 2003 – 2008 Advisory Professor, East China Normal University, Shanghai
- 2000 – 2005 Guest Professor, International Institute of Earth Sciences, Nanjing University
- 1996 – 2007 Guest Professor, Institute of Botany, Chinese Academy of Sciences, Beijing
- 1994 – 2007 Adjunct Professor, Inner Mongolia University, Hohhot, China

PROFESSIONAL LEADERSHIP AND SERVICES

Professional Leadership:

- 2005 – Editor-in-Chief, *Landscape Ecology*, the flagship journal of the International Association for Landscape Ecology, published by Springer
- 2012 – Founding Director, Center for Human-Environment System Sustainability (CHESS), Beijing Normal University, Beijing
- 2004 – Chair of the Academic Committee for the International Symposium on Modern Ecology Series (ISOMES)
- 2007 – 2012 Founding Director, Sino-US Center for Conservation, Energy, and Sustainability Science in Inner Mongolia (SUCCESS)
- 2007 – 2012 Founding Director, Beijing Normal University Center for Landscape Ecology and Sustainability Science (CLESS), Beijing, 2007-2012
- 2003 – 2010 Advisor to the President's Office on China Affairs, Arizona State University
- 2001 – 2003 Councilor-at-Large, The US Association of Landscape Ecology (US-IALE)
- 2000 – 2001 Program Chair, The United States Association of Landscape Ecology (US-IALE)
- 1999 – 2000 Chair, Asian Ecology Section, Ecological Society of America (ESA)

National and International Panels and Committees:

- 2017 – 2022 Science Advisory Board, Committee of Sustainable Use of Resources and Disaster Risk Reduction, Chinese Society of Natural Resources
- 2016 – International Advisory Board, The Global Biosphere Institute of Brazil, Rio de Janeiro
- 2013 – Member, Awards Committee, the US Association of Landscape Ecology (US-IALE)
- 2013 – International Forum Series on Landscape Sustainability Science (***LSS Forum Series***)
- Chair, The 7th International Forum on Landscape Sustainability Science, Xi'ning, China, July 13-15, 2019
 - Chair, The 6th International Forum on Landscape Sustainability Science, Beijing, June 7-9, 2018
 - Chair, The 5th International Forum on Landscape Sustainability Science, Beijing, August 18-20, 2017
 - Chair, The 4th International Forum on Landscape Sustainability Science, Beijing, June 6-8, 2016

- Chair, The 3rd International Forum on Landscape Sustainability Science, Beijing, June 8-10, 2015
 - Chair, The 2nd International Forum on Landscape Sustainability Science, Beijing, May 27-31, 2014
 - Chair, The 1st International Forum on Landscape Sustainability Science, Beijing, June 27-29, 2013
- 2014 International Review Panel for Research Assessment of Environmental and Sustainability Sciences, organized by the Netherlands Research School for Socio-economic and Natural Sciences of the Environment (SENSE), June 9-13, 2014
- 2009 External Review Panel for Evaluating the Performance of Research Institutes of the Chinese Academy of Sciences, 2009
- 2001 – 2006 US National Science Foundation (NSF) Ecosystems Panel (2001, 2003, 2004, 2005, 2006)
- 2004 – 2007 The National Natural Science Foundation of China (NSFC) Ecology Panel (2004, 2005, 2006, 2007)
- 2005 – 2006 US Environmental Protection Agency (EPA) Office of Research and Development, Board of Scientific Counselors, Ecological Research Subcommittee, 2005-2006
- 2000 – 2004 US EPA STAR Graduate Fellowship Review Panel (2000, 2002, 2004)
- 1999 – 2004 US EPA Research Proposal Review Panel (1999, 2001, 2004)
- 2000 – 2002 Urban/Suburban Ecosystems Work Group, The State of the Nation's Ecosystems Project, Heinz Center for Science, Economics and the Environment, Washington, DC, 2000–2002
- 2000 US EPA EMAP Research Strategy Review Panel, Dec. 14-15, 2000, Research Triangle Park
- 1999 US Environmental Protection Agency (EPA) Review Panel, Information and Computing Technology for Multi-Discipline Ecosystem Modeling, August 4-6, 1999
- 1997 – 2000 Task Leader, International Geosphere-Biosphere Programme (IGBP), Global Change and Terrestrial Ecosystems (GCTE), Task 2.1.4 (Semiarid and Arid Ecosystems), 1997–2002
- 1999 – 2008 Member, Foreign Scholar Travel Award Committee, the US Association of Landscape Ecology (US-IALE), (1999-2008)
- 1998 NASA/NSF/USDA/DOE/NOAA Review Panel, Terrestrial Ecology & Global Change
- 1997 US EPA Review Panel, Landscape/ Environmental Assessment Project, May 1997
- 1994 – International Symposium Series on Modern Ecology (*ISOMES Series*)
- Chair, Academic Committee, The 9th International Symposium on Modern Ecology (ISOME-9), Shanghai, May 15-18, 2017
 - Chair, Academic Committee, The 8th International Symposium on Modern Ecology (ISOME-8), Tianjin, June 11-14, 2015
 - Chair, Academic Committee, The 7th International Symposium on Modern Ecology (ISOME-7), Guangzhou, June 9-15, 2013
 - Chair, Academic Committee, The 6th International Symposium on Modern Ecology (ISOME-6), Nanjing, August 1-6, 2011
 - Chair, Academic Committee, The 5th International Symposium on Modern Ecology (ISOME-5), Lanzhou, June 25-July 2, 2009

- Chair, Academic Committee, The 4th International Symposium on Modern Ecology (ISOME-4), Hohhot, May 28-June 3, 2007
- Chair of the Academic Committee, The 3rd International Symposium on Modern Ecology (ISOME-3), Beijing, June 1-7, 2005
- Member, Academic Committee, 2nd Intern. Symposium on Modern Ecology (ISOME-2), Beijing, June 15-19, 1999
- Member, Academic Committee, 1st International Symposium on Modern Ecology (ISOME-1, Hohhot, Sept. 4-13, 1994

-
- 2017 International Advisory Committee, the 9th Ecosystem Services Partnership (ESP) World Conference, Shenzhen, China, December 11-15, 2017
- 2017 Co-organizer, Symposium on Landscape Sustainability Science – Linking Biodiversity, Ecosystem Function, Ecosystem Services, and Human Wellbeing, the 12th International Congress of Ecology (INTECOL 2017), Beijing, August 21, 2017
- 2017 Co-organizer, Symposium on Evolving Landscapes under Institutional Change, Globalization, and Cultural Influence in Contrasting Urban Systems, the 2017 Annual Meeting of the US Association of Landscape Ecology (US-IALE), April 10, 2017
- 2016 Co-organizer, Symposium on Climate change and landscape sustainability of global drylands, the 2016 Annual Meeting of the US Association of Landscape Ecology (US-IALE), April 6, 2016
- 2015 Co-organizer, Symposium on Urban Landscape Ecology: Global Perspectives, at the 9th World Congress on Landscape Ecology, Portland, Oregon, July 5-10, 2015
- 2015 Conference Co-Chair, International Workshop of Habitat Fragmentation and Biodiversity Conservation in the Thousand Island Lake, Chuan'an, Zhejiang, China, May 3-10, 2015
- 2014 Co-Chair, Academic Committee, The 3rd International Conference on Energy and Environmental Protection, Xi'an, China, April 26-27, 2014
- 2013 Chair, Organizing Committee, Urban Ecology Symposium, Beijing Normal University, Beijing, May 31, 2013
- 2013 Co-Chair, Academic Committee, The 2nd International Conference on Energy and Environmental Protection, Guilin, China, April 20-21, 2013
- 2012 Co-Chair, Academic Committee, The 1st International Conference on Energy and Environmental Protection, Hohhot, June 23-24, 2012
- 2011 Academic Committee, The 8th World Congress on Landscape Ecology, Beijing, August 18-23, 2011
- 2010 Co-Chair, Academic Committee, The International Symposium on Adaptive Management of Family Farms in Temperate Grasslands, Hohhot, Inner Mongolia, July 24-27, 2010
- 2009 Co-Organizer, Special Session on Biodiversity and Ecosystem Function: Current Trends and Future Directions. The 94th ESA Annual Meeting, Albuquerque, August 2-7, 2009
- 2009 Academic Committee, International Symposium on Grassland Ecosystem Research: Issues and perspectives, Beijing, August 12-14, 2009
- 2004 Member, Organizing Committee, International Symposium on Biological Invasion, Beijing, June 8-11, 2004

- 2004 Co-Organizer, Symposium on Interdisciplinary and Transdisciplinary Approaches for Sustainable Landscapes. At the Annual Symposium of US Association for Landscape Ecology, Las Vegas, March 30-April 2, 2004 (with B. Tress, G. Tress, and G. Fry)
- 2003 Organizer, Symposium on Key Issues and Research Questions in Landscape Ecology, The 2003 World Congress on Landscape Ecology, Darwin, Australia, July 13-17, 2003
- 2003 Member, Academic Committee, The 4th National Congress on Landscape Ecology, Beijing, Dec. 12-15, 2003
- 2002 Organizer, Workshop on Scaling and Uncertainty Analysis in Ecological Studies, Arizona State University, Tempe, AZ, USA, October 17-19, 2002
- 2002 Co-Chair of Academic Committee, International Symposium on Ecosystem Succession Theory and Ecological Restoration, Guangzhou, December 27-29, 2002
- 2002 Member, Academic Committee, International Symposium on Urban Forestry and Eco-Cities, Shanghai, Sept. 16-22, 2002
- 2002 Co-organizer (with L. Musacchio), Symposium on Cities of Resilience: Integrating Ecology Into Urban Planning, Design, Policy, And Management, at the 87th Annual Meeting of the Ecological Society of America, Tucson, Arizona, USA, August 7, 2002
- 2001 Chair of Organizing Committee, 2001 Annual Symposium of the US Association for Landscape Ecology (US-IALE), Arizona State University, Tempe, AZ, April 24-29, 2001
- 2001 Organizer, Special Session on the Top 10 List in Landscape Ecology. 2001 US-IALE Annual Symposium, Arizona State University, Tempe, AZ, April 24-29, 2001
- 2000 Organizer, Symposium on Urban Landscape Ecology: Integrating Ecology with Geography, The 2000 Annual Meeting of International Association of Landscape Ecology, US Section, Fort Lauderdale, Florida, USA, April 15-19, 2000
- 2000 Organizer, Symposium on Urban Ecology. The 2000 Annual Meeting of Ecological Society of America, Snowbird, UT, August 6-10, 2000
- 2000 Member, Organizing Committee, International Conference on Modeling Complex Systems. Montreal, July 31-Aug. 4, 2000
- 1997 Member, Academic Committee, International Symposium on Grassland Management, Hohhot, Aug. 15-18, 1997

Editorial Boards of Journals:

Current services

- 2005 - Editor-in-Chief, *Landscape Ecology* (Springer)
- 2018 - Advisory Board, *Socio-Ecological Practice Research* (Springer)
- 2017 - Editorial Board, *International Journal of Disaster Risk Science* (Springer)
- 2016 - Editorial Board, *Current Landscape Ecology Reports* (Springer)
- 2016 - Editorial Board, *Sustainability* (<http://www.mdpi.com/journal/sustainability>)
- 2012 - Editorial Board, *PeerJ* (<https://peerj.com>)
- 2008 - Editorial Board, *Ecological Economics* (Elsevier)
- 2004 - Editorial Board, *Landscape and Ecological Engineering* (Springer)
- 2010 - Editorial Board, *Chinese Journal of Applied Ecology* (Chinese Academy of Science)
- 2004 - Editorial Board, *Biodiversity Science* (Chinese Academy of Science)
- 1999 - Editorial Board, *Acta Ecologica Sinica* (Chinese Academy of Science)

Past services

2008-2017 Editorial Board, *Frontiers in Energy* (Springer)
 2011-2016 Editorial Board, *Ecological Processes* (Springer)
 1999-2013 Editorial Board, *Chinese Journal of Plant Ecology*
 2007-2010 Editorial Board, *Journal of Plant Ecology* (Oxford U Press)
 2008-2009 Editorial Board, *Research Letters in Ecology* (Hindawi Publ. Co.)
 2005-2008 Editorial Board, *Journal of Integrative Plant Biology* (Blackwell)
 2001-2005 Editorial Board, *Landscape Ecology*
 1999-2007 Editorial Board, *Geographic Information Sciences (Annals of GIS since 2009)*
 1996-2010 Editorial Board, *Chinese Journal of Ecology*

Reviewer for Major Funding Agencies:

National Science Foundation (*NSF*)
 United States Department of Agriculture (*USDA*)
 The Environmental Protection Agency (*EPA*)
 National Institute for Global Environmental Change (*NIGEC*)
 National Natural Science Foundation of China (*NSFC*)
 The Nature Conservancy (*TNC*)
 European Science Foundation (*ESF*)
 Natural Environment Research Council of United Kingdom (*NERC-UK*)
 Israel Science Foundation (*ISF*)

Reviewer for Professional Journals:

General: Nature; Science; PNAS; Science Advances; Scientific Reports; Science in China; PeerJ; PLoS One

Ecological and Biological Sciences: BioScience; Conservation Biology; Conservation Ecology; Ecological Applications; Ecological Modelling; Ecological Monographs; Ecology; Ecology Letters; Ecosphere; Ecosystems; Frontiers in Ecology and the Environment; J of Theoretical Biology; Landscape Ecology; Mathematical Biosciences; Methods in Ecology & Evolution; Urban Ecosystems

Geographical and Environmental Sciences: Cities; Catena; Environmental Management; Geography Compass; GIScience & Remote Sensing; Global Environmental Change; Habitat International; International J Remote Sensing; Landscape & Urban Planning; J Arid Environments; J Biogeography; J Climate; J Environmental Management; J of Soil and Water Conservation; Photogrammetric Engineering & Remote Sensing; Progress in Physical Geography; Remote Sensing; Remote Sensing of Environment

Sustainability Science: Nature Sustainability; Sustainability; Ecological Economics; Ecological Indicators; Environment, Development and Sustainability

Major University/Campus Service Activities:

2017 - Committee of Research and Training Initiative, School of Life Sciences, Arizona State University, Tempe
 2006 - Graduate Committee, School of Sustainability, Arizona State University
 2009 - 2017 Personnel Committee, Faculty of Ecology, Evolution, and Environmental Science, School of Life Sciences, Arizona State University, Tempe
 2014 - Advisory Board for SoilCarbon Research Project, School of Sustainability, Arizona State University, Tempe

2014-2015 Wrigley Lecture Committee, Global Institute of Sustainability, Arizona State University
 2006-2011 Graduate Committee, School of Sustainability, Arizona State University
 2013-2014 Faculty Search Committee, School of Sustainability, ASU
 2003-2010 Advisor to the Office of the President on China Affairs
 2009-2011 Research and Training Initiatives Committee, School of Life Sciences, ASU
 2008 ASU Biodiversity Committee
 2007/2008 Faculty Search Committee (Ecological Economics), School of Life Sciences,
 2006 Steering Committee, CAPLTER/DCDC Summer Summit, 2006
 2003-2005 Executive Committee, Graduate Program in Computational Biosciences, Arizona State University, Tempe, 2003-2005
 2003-2004 Faculty Search Committee (Computational Biologist), School of Life Sciences, Arizona State University, 2003-2004
 2001-2002 Seminar Committee, Department of Plant Biology, Arizona State University, 2001-2002
 1996-2001 Chair, Graduate Committee, Dept of Life Sciences, ASU West, 1996-2001
 1998-2000 Information Technology Advisory Committee, ASU West, 8/1998 – 6/2000
 1998-1999 Search Committee for the Dean of College of Arts and Sciences, ASU West
 1996 Space and Facilities Committee, Dept of Life Sciences, ASU West, 1996
 1996 Salary Equity Committee, College of Arts and Science, ASU West, 1996

Other Activities:

1998-1999 Invited participant of Arizona Town Hall, 1998-1999
 1989-1990 President, Chinese Students Association, Miami University, Oxford, OH, 1989-1990
 1988 Co-founder, Sino-Ecologists Club Overseas (Sino-ECO), 11/1988
 85-1986 President, Chinese Visiting Scholars Association, Univ. of California, Davis, 1985-1986

PROFESSIONAL ORGANIZATIONS

- US Association for Landscape Ecology (US-IALE)
- International Association for Landscape Ecology (IALE)
- Ecological Society of America (ESA)
- International Association for Ecology (INTECOL)
- American Association for the Advancement of Science (AAAS)
- Ecological Society of China (ESC)
- Chinese Society of Natural Resources

TEACHING EXPERIENCE

Courses taught at Arizona State University since 1995:

- BIO 421/521 – ***Landscape Ecology*** (3 credits)
- SOS 510 – ***Perspectives on Sustainability*** (3 credits)
- SOS 513 – ***Science for Sustainability*** (3 credits)
- SOS 442/542 – ***Sustainability Indices*** (3 credits)

- SOS 511 – *Quantitative Methods in Sustainability* (4 credits)
- BIO 320 – *Fundamentals of Ecology* (3 credits)
- PLB 494 – *Ecological Modeling* (4 credits)
- PLB 591 – *Scaling Theory and Methods in Ecology* (2 credits)
- PLB 591 – *Urban Modeling: Theory and Methods* (2 credits)
- LSC300 – *Modes of Biological Thought* (3 credits)
- BIO 319 – *Ecology and Conservation* (3 credits)
- LSC 494 – *Spatial Analysis and Modeling* (2 credits)
- BIO 330 – *Global Environment* (3 credits)
- LSC 494 – *Global Models* (1 credit)

Courses taught at Miami University from 1986 to 1991:

- BOT 171 – *Ecology of North America*, Miami Univ., Oxford, 1989-90
- BOT 131 – *Plants, Humanity & Environment*, Miami Univ., 1990-91 (Instructor)
- BOT 131 – *Plants, Humanity & Environment*, Miami Univ., 1986-89 (TA, 6 semesters)

RESEARCH GRANTS

Extramural:

- 1/2014-08/2019: **National Science Foundation (NSF)**, “Dimensions US-China: Collaborative Research: Phylogenetic, Functional, and Genetic Diversity and Ecosystem Functions in a Fragmented Landscape,” \$1.25 M (in collaboration with GIT; ASU portion, \$576,675.00, PI).
- 1/2014-12/2018: **Ministry of Science and Technology of China**, “Integrative Modeling and Strategic Planning for Regional Sustainability under Climate Change in Northern China”, \$2.4 M (PI; Center for Human-Environment System Sustainability, Beijing Normal University, in collaboration with several Chinese institutions)
- 2010-2018: **National Science Foundation (NSF)**, “Central Arizona-Phoenix Long-term Ecological Research (CAPLTER-III),” \$5.95 M (Co-PI & Research Leadership Team)
- 2015-2016: **National Science Foundation (NSF)**, “Building US-China Collaboration in Biodiversity Studies – Frontier Issues, New Approaches, and Opportunities” – Workshop Grant (Co-PI/Collaborator; PI: Jenny Xiang, NC State University, \$49,798.00)
- 2013-2014: **National Geographic**, “Gauging environmental effects of China's South-North Water Transfer Project: Water loss by evaporation and biodiversity impacts by fragmentation”, \$50,000 (Collaborator and Supervisor; with Xiaoyan Li, Max Wilson, and Andrew Smith)
- 2012-2016: **US Environmental Protection Agency STAR Fellowship**, “Off the sand and onto the asphalt: Does the urban heat island influence desert lizards? \$68,000 (as Advisor of J. Ackley)
- 2004-2010: **National Science Foundation (NSF)**, “Central Arizona-Phoenix Long-term Ecological Research (CAPLTER-II),” \$4.9 M (Co-PI and Team Leader for Urban and Landscape Modeling)
- 1997-2004: **National Science Foundation (NSF)**, “Central Arizona - Phoenix Long-term Ecological Research (CAPLTER-I),” \$4.2 M (Co-PI and Team Leader for Theoretical/Modeling/GIS)
- 2006-2012: **National Science Foundation (NSF)**, “Testing Biodiversity-Ecosystem Functioning Relationships in an Ecological Stoichiometry Framework in the World’s Largest Natural Grassland,” \$1.07 M; ASU portion, \$834,750.00 (PI/PD)

- 2010: **National Science Foundation (NSF)**, REU Supplement: Testing Biodiversity-Ecosystem Functioning Relationships in an Ecological Stoichiometry Framework in the World's Largest Natural Grassland, \$ 6,000.
- 2009: **National Science Foundation (NSF)**, REU Supplement: Testing Biodiversity-Ecosystem Functioning Relationships in an Ecological Stoichiometry Framework in the World's Largest Natural Grassland, \$ 7,600.
- 2005-2010: **National Science Foundation (NSF)**, "Urban landscape patterns: Complex dynamics and emergent properties," \$430,740 (ASU PI; in collaboration with Univ. of Washington; total funding = \$1.39 million)
- 2000-2005: **National Science Foundation (NSF)**, "IGERT-Integrative Graduate Education and Research Traineeship in Urban Ecology," ASU, \$2.7 M. (**Senior Personnel**)
- 10/15/2002 – 05/31/2004: **US Environmental Protection Agency (EPA)**, Workshop on Scaling Issues in Regional Ecological Analysis and Assessment, \$49,968.00 (PI/PD)
- 10/15/1999 - 05/31/2004: **US Environmental Protection Agency (EPA)**, "A hierarchical patch dynamics approach to regional modeling and scaling," \$629,540.00 (PI/PD)
- 1/2001 - 1/2004: **Chinese Natural Science Foundation (CNSF)**, "An Integrative Study of the Landscape Pattern and Ecosystem Processes in the Inner Mongolia Grassland Region," 400,000.00 Yuans. (PI)
- 9/1995 - 8/1999: **United States Department of Agriculture (USDA)**, "Linking landscape pattern to ecosystem properties in the Great Basin," \$194,000.00 (Co-PI)
- 1/1994 - 1/1998: **NASA** (Subcontract through University of Nebraska), "Ecological controls on surface energy and water balances in boreal forest landscapes," \$25,000.00 (PI)
- 10/1996 - 10/1997: **Biosphere II**, Columbia University, "Scaling up from the leaf to biome: Effects of elevated CO₂ on ecosystem processes," \$15,000.00 (PI)
- 1993: **US National Academy of Sciences**, "Study of Grassland Ecosystem of Mongolian Steppe," \$2,000.00 (PI)
- 9/1991 - 9/1993: **National Science Foundation (NSF)**, "A spatially-explicit, hierarchical model of pattern-process dynamics of a grassland landscape," \$80,000.00 (PI)
- 1991: **Sigma Xi**, Grant-in-Aid, "Effects of landscape fragmentation on species richness dynamics," \$600.00 (PI)
- 1988: **Sigma Xi**, Grant-in-Aid, "A computer simulation study of population dynamics in fragmented landscapes," \$450.00 (PI)

Intramural:

- 2008-2009: Global Engagement Seed Grant, Arizona State University, \$9,880 (PI)
- 2005-2006: Research and Training Initiatives Grant, Arizona State University, \$4,200 (PI)
- 1/2001 - 1/2002: Scholarship, Research and Creative Activities Grant (SRCA), "Effects of Urbanization on Ecosystem Process in Metropolitan Phoenix: A Simulation Study," Arizona State University, \$5,197 (PI)
- 1/2000 - 1/2001: Scholarship, Research and Creative Activities Grant (SRCA), "Pattern and Process of Desertification in Inner Mongolia," Arizona State University, \$3,746 (PI)

- 7/1998 - 6/1999: Arizona State University, West Campus (IDSG), “Developing a dynamic, interactive and state-of-the-art learning environment for teaching ecology, global environment, and biological modeling,” \$4,998 (PI)
- 3/1998 - 2/1999: Scholarship, Research and Creative Activities Grant (SRCA), Arizona State University, West Campus, \$4,125 (PI)
- 2/1997 - 2/1998: Scholarship, Research and Creative Activities Grant (SRCA), Arizona State University, \$5,470 (PI)
- 5/1996 - 5/1997: Faculty Grant-In-Aid Award (FGIA), Arizona State University, \$6,000 (PI)
- 4/1995 - 8/1995: Nevada EPSCoR, “Research in hierarchical patch dynamics,” \$4,500 (PI)
- 10/1990: Academic Challenge Fund, Miami Univ., “Modeling landscape diversity,” \$790 (PI)
- 1/1990: Academic Challenge Fund, Miami Univ., “Modeling landscape dynamics,” \$645 (PI)
- 10/1988: Academic Challenge Fund, Miami University, “Integrating metapopulation theory, landscape ecology and conservation biology,” \$1,520 (PI)

PUBLICATIONS

Books

- [1] Wu, J.G., X.Y. Chen, Y.Y., Li, and Q. Ma (eds). 2019. *Lectures in Modern Ecology (9): Advances in Ecological Research on Urbanization and Global Change*. Higher Education Press, Beijing.
- [2] He, C., Q. Huang, Z. Liu, Q. Ma, and J. Wu. 2018. *Urban Landscape Ecology: Processes, Impacts, and Sustainability*. Science Press, Beijing. 302 pp.
- [3] Y.B. Gao and J.G. Wu (eds). 2017. *Lectures in Modern Ecology (8): Advances in Community, Ecosystem and Landscape Ecology*. Higher Education Press, Beijing. 404 pp.
- [4] Barrett, G.W., T.L. Barrett, and J.G. Wu (eds). 2015. *History of Landscape Ecology in the United States*. Springer, Springer, New York. ISBN 978-1-4939-2275-8. 194 pp.
- [5] Wu, J.G. and S.Q. An (eds). 2013. *Lectures in Modern Ecology (6): Global Climate Change and Ecological Patterns and Processes*. Higher Education Press, Beijing. 315 pp.
- [6] Hong, S.K., J.G. Wu, J.E. Kim, and N. Nakagoshi (eds). 2011. *Landscape Ecology in Asian Cultures*. Springer, Dordrecht, The Netherlands. 334 pp.
- [7] Wu, J.G. and F.M. Li (eds). 2011. *Lectures in Modern Ecology (5): Large-Scale Ecology and Sustainability Science*. Higher Education Press, Beijing. 381 pp.
- [8] Wu, J.G. and J. Yang (eds). 2009. *Lectures in Modern Ecology (4): Theory and Applications*. Higher Education Press, Beijing. 392 pp.
- [9] Carriero, M., Y. Song, and J.G. Wu (eds). 2008. *Ecology, Planning, and Management of Urban Forests: International Perspectives*. Springer, New York. 467 pp.
- [10] Gu, B., J. Wu, J. Chen, and Y. Wu (eds). 2008. *Green Careers*. Higher Education Press, Beijing.
- [11] Wu, J.G. and R. Hobbs (eds). 2007. *Key Topics in Landscape Ecology*. Cambridge University Press, Cambridge. 297 pp.
- [12] Wu, J.G. 2007. *Landscape Ecology: Pattern, Process, Scale and Hierarchy*. 2nd Edition. Higher Education Press, Beijing. 266 pp.

- [13] Wu, J.G. (ed). 2007. *Lectures in Modern Ecology (3): Advances and Key Topics*. Higher Education Press, Beijing. 383 pp.
- [14] Wu, J.G., B. Jones, H. Li, and O. L. Loucks (Eds). 2006. *Scaling and Uncertainty Analysis in Ecology*. Springer, Dordrecht, The Netherlands. 351 pp.
- [15] Wu, J.G., X. Han, and J. Huang (eds). 2002. *Lectures in Modern Ecology (2): From Basic Science to Environmental Issues*. Science and Technology Press, Beijing. 229 pp.
- [16] Wu, J.G. 2000. *Landscape Ecology: Pattern, Process, Scale and Hierarchy*. 1st Edition. Higher Education Press, Beijing. [“Award of Outstanding Books in Science and Technology of China”]

Translated Book

- [1] Wu, J., Z. Liu, G. Huang, L. Huang, Y. Liu, W. Shen, J. Yang, Y. Zhao, W. Zhou, and W. Zhu, 2017. Chinese Translation of Forman, R.T.T. 2014. *Urban Ecology: Science of Cities*. Higher Education Press, Beijing. 579 pp.

Edited Journal Special Issues

- [1] Wu, J.G. (Guest Editor). 2017. **Defining and assessing landscape and urban sustainability: Linking spatial patterns, ecosystems services, and human wellbeing**. Special issue, Sustainability (http://www.mdpi.com/journal/sustainability/special_issues/Human_Wellbeing).
- [2] Nassauer, J.I. and J.G. Wu (Guest Editors). 2014. **Urbanization in China and the world: Transdisciplinary insights from urban ecology, design, and planning**. Special issue, Landscape and Urban Planning Vol. 125.
- [3] Han, X., K. Owens, X. Wu, J. Wu, J. Huang (Guest Editors). 2009. **Grasslands of Inner Mongolia**, Special Issue of Journal Rangeland Ecology & Management 62(4).
- [4] L. Musacchio and J.G. Wu (Guest Editors). 2004. **Collaborative Research in Large-Scale Ecosystem Studies: Emerging Trends in Urban and Regional Ecology**. Urban Ecosystems 7:175-314.
- [5] Wu, J.G. and D. Marceau (Guest Editors). 2002. **Modeling Complex Systems**. Ecological Modelling 153:1-196.
- [6] Wu, J.G. and Y. Qi (Quest Editors). 2000. **The Problem of Scale in Spatial Analysis of Landscapes**. Geographic Information Sciences 6(1): 1-80. (The journal’s name was changed to Annals of GIS in 2009.)

Journal Articles and Book Chapters [*Students/Postdocs advised]

2019

- [1] Wu, J. 2019. Linking landscape/land system and design approaches to achieve sustainability. Journal of Land Use Science, <https://doi.org/10.1080/1747423X.2019.1602677>.
- [2] Cao, Q., J. Wu, D. Yu, and W. Wang. 2019. The biophysical effects of the vegetation restoration program on regional climate metrics in the Loess Plateau, China. Agricultural and Forest Meteorology 268:169-180.
- [3] Fan, P., J. Chen, and J. Wu. 2019. Evolving landscapes under institutional change, globalization, and cultural influence in contrasting urban systems. Landscape and Urban Planning 187:129-131.
- [4] *Fernandez, I.C. and J. Wu. 2019. The urban matrix matters: Quantifying the effects of surrounding urban vegetation patterns on natural habitat remnants in Santiago de Chile. Landscape and Urban Planning 187:181-190.

- [5] Frazier, . B. Bryan, A. Buyantuev, L. Chen, C. Echevarria, P. Jia, L. Liu, Q. Li, Z. Ouyang, J. Wu, W. Xiang, J. Yang, L. Yang, S. Zhao. 2019. Ecological civilization: Perspectives from landscape ecology and landscape sustainability science. *Landscape Ecology* 34:1-8.
- [6] Hu, G., M. Wilson, J. Wu, J. Yu, M. Yu. 2019. Decoupling species richness variation and spatial turnover in beta diversity across a fragmented landscape. *PeerJ* 7:e6714 DOI 10.7717/peerj.6714.
- [7] Huang, L., W. N. Xiang, J. G. Wu, C. Traxler, and J. Z. Huang. 2019. Integrating GeoDesign with Landscape Sustainability Science. *Sustainability* 11:10.3390/su11030833.
- [8] *Li, J., C. He, Z. Liu, and J. Wu. 2019. Assessing urban sustainability in global drylands: a review of definitions, methods and research advances. In: J. Wu, X. Chen, Y. Li, and Q. Ma (eds), *Lectures in Modern Ecology (9): Ecological Studies on Urbanization and Global Change*. Higher Education Press, Beijing.
- [9] Liu, Y., J. Wu, and D. Yu. 2019. The spatiotemporal patterns of PM2.5 pollution and population exposure assessment in China. In: J. Wu, X. Chen, Y. Li, and Q. Ma (eds), *Lectures in Modern Ecology (9): Ecological Studies on Urbanization and Global Change*. Higher Education Press, Beijing.
- [10] Liu, Z., M. Ding, C. He, J. Li, and J. Wu. 2019. The impairment of environmental sustainability due to rapid urbanization in the dryland region of northern China. *Landscape and Urban Planning* 187:165-180.
- [11] *Tu, X., G. Huang, and J. Wu. 2019. Review of the relationship between urban greenspace accessibility and human well-being. *Acta Ecologica Sinica* 39(2):DOI:10.5846/stxb201802030294.
- [12] Yu, D., Y. Liu, P. Shi, and J. Wu. 2019. Projecting impacts of climate change on global terrestrial ecoregions. *Ecological Indicators* 103:114-123.
- [13] Zhang, C., W. Kuang, J. Wu, J.Y. Liu, X. Li, H. Tian, D. Lu, B. Xiang, T. Liang, W. Chi, Z. Yin, and T. Pan. 2019. Industrial land expansion in rural China threatens food and environmental securities. *Land Degradation and Development* (in press)
- [14] *Zhou, B., Q. Ma, J. Wu, G. Hu, D. Mao, X. Zeng, J. Guo, X. Fang, Y. Liu, and L. Lyu. 2019. What is sustainability science? Recent advances and new opportunities. *Chinese Journal of Applied Ecology* 30(1):325-336.

2018

- [15] Wu, J. 2018. Seascape ecology and landscape ecology: Distinct, related, and synergistic. Pages 487-491 In: Simon J. Pittman (editor), *Seascape Ecology*, Wiley-Blackwell.
- [16] Bryan, B.A., L. Gao, Y. Ye, X. Sun, J. Connor, N. Crossman, M. Stafford Smith, J. Wu, C. He, D. Yu, Z. Liu, A. Li, Q. Huang, H. Ren, X. Deng, H. Zheng, J. Niu, G. Han, and X. Hou. 2018. China's response to a national land-system sustainability emergency. *Nature* 559:193-204.
- [17] *Cao, Q., D. Yu, M. Georgescu, J. Wu, and W. Wang. 2018. Impacts of future urban expansion on summer climate and heat-related human health in eastern China. *Environment International* 112:134-146.
- [18] *Cao, Q., D. Yu, M. Georgescu, and J. Wu. 2018. Substantial impacts of landscape changes on summer climate with major regional differences: The case of China. *Science of the Total Environment* 625:416-427.
- [19] Chen, J., R. John, G. Sun, P. Fan, G. Henebry, M. Fernandez-Gimenez, Y. Zhang, H. Park, L. Tian, P. Groisman, Z. Ouyang, G. Allington, J. Wu, C. Shao, A. Amarjargal, G. Dong, G. Gutman, F. Huettmann, R. Laforteza, C. Crank, and J. Qi. 2019. Prospects for the sustainability

- of social-ecological systems (SES) on the Mongolian Plateau: five critical issues. *Environmental Research Letters* 13:123004, doi.org/10.1088/1748-9326/aaf27b.
- [20] Chen, S., W. Wang, W. Xu, Y. Wang, H. Wan, D. Chen, Z. Tang, X. Tang, G. Zhou, Z. Xie, D. Zhou, Z. Shangguan, J. Huang, J. He, Y. Wang, J. Sheng, L. Tang, X. Li, M. Dong, Y. Wu, Q. Wang, Z. Wang, J. Wu, F. Chapin III, and Y. Bai. 2018. Plant diversity enhances productivity and soil carbon storage. *Proceedings of the National Academy of Sciences (USA)* 115:4027-4032.
- [21] *Fang, X., B. Zhou, X. Tu, Q. Ma, and J. Wu. 2018. "What kind of a science is sustainability science?" An evidence-based reexamination. *Sustainability* 2018, 10, 1478; doi:10.3390/su10051478.
- [22] *Fernandez, I.C. and J. Wu. 2018. A GIS-based framework to identify priority areas for urban environmental inequity mitigation and its application in Santiago de Chile. *Applied Geography* 94:213-222.
- [23] Li, A., J. Wu, X. Zhang, J. Xue, Z. Liu, X. Han, and J. Huang. 2018. China's new rural "separating three property rights" land reform results in grassland degeneration: Evidence from Inner Mongolia. *Land Use Policy* 71:170-182.
- [24] Li, C., J. Li, and J. Wu. What drives urban growth in China? A multiscale comparative analysis. *Applied Geography* 98:43-51.
- [25] Liu, J.J., M. *Wilson, G. Hu, J.L. Liu, J. Wu, and M. Yu. 2018. How does habitat fragmentation affect the biodiversity and ecosystem functioning relationship? *Landscape Ecology* 33:341-352.
- [26] Liu, Q., A. Buyantuyev, J. Wu, J. Niu, D. Yu, and Q. Zhang. 2018. Intensive land-use drives regional-scale homogenization of plant communities. *Science of the Total Environment* 644:806-814.
- [27] *Liu, Y., J. Wu, and D. Yu. 2018. Disentangling the complex effects of socioeconomic, climatic, and urban form factors on air pollution: A case study of China. *Sustainability* 2018, 10, 776; doi:10.3390/su10030776.
- [28] *Liu, Y., J. Wu, D. Yu, and R. Hao. 2018. Understanding the pattern and drivers of air pollution on multiple time scales: The case of northern China. *Environmental Management* 61:1048-1061.
- [29] *Liu, Y., J. Wu, D. Yu, and Q. Ma. 2018. The relationship between urban form and air pollution depends on seasonality and city size. *Environmental Science and Pollution Research* 25:15554-15567.
- [30] *Ma, Q., J. Wu, C. He, and G. Hu. 2018. Spatial scaling of urban impervious surfaces across evolving landscapes: From cities to urban regions. *Landscape and Urban Planning* 175:50-61.
- [31] *Mao, D., Z. Wang, H. Yang, H. Li, J. Thompson, J. Wu, H. Gao, L. Li, B. Chen, and K. Song. 2018. Spatially variable responses of Tibetan lakes to climate change. *Remote Sensing* 2018, 10, 358; doi:10.3390/rs10030358.
- [32] *Mao, D., Z. Wang, J. Wu, B. Wu, Y. Zeng, K. Song, K. Yi, and L. Luo. 2018. China's wetlands loss to urban expansion. *Land Degradation and Development* 29:2644-2657.
- [33] *Mao, D., L. Luo, Z. Wang, M. Wilson, Y. Zeng, B. Wu, and J. Wu. 2018. Conversions between natural wetlands and farmland in China: a multiscale geospatial analysis. *Science of the Total Environment* 634:550-560.
- [34] Opdam, P., S. Luque, J. Nassauer, P. Verburg, and J. Wu. 2018. How can landscape ecology contribute to sustainability science? *Landscape Ecology* 33:1-7.

- [35] *Qiao, J., D. Yu, and J. Wu. 2018. How do climatic and management factors affect agricultural ecosystem services? A case study in the agro-pastoral transitional zone of northern China. *Science of the Total Environment* 614: 314-323.
- [36] *Shang, C., T. Wu, G. Huang, and J. Wu. 2018. Weak sustainability is not sustainable: Socioeconomic and environmental assessment of Inner Mongolia for the past three decades. *Resources, Conservation & Recycling* 141:243-252.
- [37] Sun, X., L. Gao, H. Ren, Y. Ye, A. Li, M. Stafford-Smith, J. Connor, J. Wu, and B. Bryan. 2018. China's progress towards rural sustainable development and ecological civilization. *Landscape Ecology* 33:1647-1653.
- [38] *Tu, X., G. Huang, and J. Wu. 2018. Contrary to common observations in the West: Urban park access is only weakly related to neighborhood socioeconomic conditions in Beijing, China. *Sustainability* 2018, 10, 1115; doi:10.3390/su10041115.
- [39] *Zeng, X., Z. Liu, C. He, Q. Ma, and J. Wu. 2018. Quantifying surface coal-mining patterns to promote regional sustainability in Ordos, Inner Mongolia. *Sustainability* 2018, 10, 1135; doi:10.3390/su10041135.

2017

- [40] Wu, J. 2017. Thirty years of *Landscape Ecology* (1987-2017): Retrospects and prospects *Landscape Ecology* 32:2225-2239.
- [41] Wu, J. 2017. Landscape ecology. In: Brian Fath (ed.). *Encyclopedia of Ecology*, 2nd ed. Elsevier.
- [42] Wu, J. 2017. In memoriam: Orié L. Loucks (1931-2016). *Landscape Ecology* 32:1-3.
- [43] Gan, X., I. C. *Fernandez, J. Guo, M. *Wilson, Y. Zhao, B. *Zhou, and J. Wu. 2017. When to use what: Methods for weighting and aggregating sustainability indicators. *Ecological Indicators* 81:491-502.
- [44] *Hao, R., D. Yu, and J. Wu. 2017. Relationship between paired ecosystem services in the grassland and agro-pastoral transitional zone of China using the constraint line method. *Agriculture, Ecosystems & Environment* 240:171-181.
- [45] Hu, X.B., P.J. Shi, M. Wang, T. Ye, M.S. Leeson, S.E. van der Leeuw, J.G. Wu, O. Renn, C. Jaeger. 2017. Towards quantitatively understanding the complexity of social- ecological systems - from connection to consilience. *International Journal of Disaster Risk Science* 8: DOI 10.1007/s13753-017-0146-5.
- [46] *Huang, L., J. Wu, and L. Yan. 2017. Sustainability assessment of urban scenario planning cases in Shanghai. Pages 344-365 In: Y. Gao and J. Wu (eds), *Lectures in Modern Ecology (VIII): Advances in Community, Ecosystem and Landscape Ecology*. Higher Education Press, Beijing.
- [47] *Liu, Y., J. Wu, and D. Yu. 2017. Characterizing spatiotemporal patterns of air pollution in China: A multiscale landscape approach. *Ecological Indicators* 76:344-356.
- [48] *Liu, Z., P. Verburg, J. Wu and C. He. 2017. Understanding land system change through scenario-based simulations: A case study from the drylands in northern China. *Environmental Management* 59:440-454.
- [49] *Liu, Z., C. He, and J. Wu. 2017. Habitat loss and fragmentation during urbanization. Pages 327-343 In: Y. Gao and J. Wu (eds), *Lectures in Modern Ecology (VIII): Advances in Community, Ecosystem and Landscape Ecology*. Higher Education Press, Beijing.
- [50] *Sun, Z., Z. Liu, C. He, and J. Wu. 2017. Impacts of urban expansion on ecosystem services in the drylands of northern China: A case study in the Hohhot-Baotou-Ordos urban agglomeration region. *Journal of Natural Resources*, doi: 10.11849/zrzyxb.20160928

- [51] *Wilson, MC, XY Li, YJ Ma, AT Smith, and JG Wu. 2017. A Review of the Economic, Social, and Environmental Impacts of China's South–North Water Transfer Project: A Sustainability Perspective. *Sustainability* 9, 1489; doi:10.3390/su9081489
- [52] *Wilson, M. and J. Wu. 2017. The problems of weak sustainability and associated indicators. *International Journal of Sustainable Development and World Ecology* 24: 44-51.
- [53] *Zeng, X. J., Z. F. Liu, C. Y. He, Q. Ma, and J. G. Wu. 2017. Detecting surface coal mining areas from remote sensing imagery: an approach based on object-oriented decision trees. *Journal of Applied Remote Sensing* 11: doi: 10.1117/1111.JRS.1111.015025.
- [54] *Zhang, D., Q. Huang, C. He, and J. Wu. 2017. Impacts of urban expansion on ecosystem services in the Beijing-Tianjin-Hebei urban agglomeration, China. *Resources, Conservation & Recycling* 125:115-130.
- [55] Zhang Q. and J. Wu. 2017. Research advances in the relationship between functional diversity and ecosystem function. Pages 263-283 In: Y. Gao and J. Wu (eds), *Lectures in Modern Ecology (VIII): Advances in Community, Ecosystem and Landscape Ecology*. Higher Education Press, Beijing.
- [56] Zhao, Y., J. Wu, C. He, and G. Ding. 2017. Linking wind erosion to ecosystem services in drylands: A landscape ecological approach. *Landscape Ecology* 32:2399-2417.
- [57] Zhao, Y. and J. Wu. 2017. Grassland ecosystem services: A research review. Pages 170-205 In: Y. Gao and J. Wu (eds), *Lectures in Modern Ecology (VIII): Advances in Community, Ecosystem and Landscape Ecology*. Higher Education Press, Beijing.

2016

- [58] *Cao, Q., D. Yu, M. Georgescu, and J. Wu. 2016. Impacts of urbanization on summer climate in China: An assessment with coupled land-atmospheric modeling. *Journal of Geophysical Research-Atmospheres*, 121, doi: 10.1002/2016JD025210.
- [59] Chen, D., Q. Pan, S. Hu, J. Huang, Q. Wang, X. Han, S. Naeem, J. Elser, J. Wu, Y. Bai. 2016. Effects of plant functional group loss on soil biota and soil carbon sequestration: A plant removal experiment in the Mongolian grassland. *Journal of Ecology* 104(3):734-743.
- [60] *Fernandez, I., and J. Wu. 2016. Assessing environmental inequalities in the city of Santiago (Chile) with a hierarchical multiscale approach. *Applied Geography* 74:160-169.
- [61] Forman, R.T.T. and J. G. Wu. 2016. Where to put the next billion people. *Nature* 537:608-611.
- [62] Forman, R.T.T. and J. Wu. 2016. Where are the best places for the next billion people? Think globally, plan regionally. Pages 453-473 in: Davide Geneletti (ed.), *Handbook on Biodiversity and Ecosystem Services in Impact Assessment*. Edward Elgar, Cheltenham, UK.
- [63] *Hao, R., D. Yu, J. Wu, Q. Guo, and Y. Liu. 2016. Constraint lines and applications in ecology: A review. *Chinese Journal of Plant Ecology* 40(10):1100-1109.
- [64] Huang, G., Y. Jiang, Z. Liu, M. Nie, Y. Liu, J. Li, Y. Bao, Y. Wang, and J. Wu. 2016. Advances in human well-being research: A sustainability science perspective. *Acta Ecologica Sinica* 36(23):7519-7527.
- [65] *Huang, L., L. Yan, and J. Wu. 2016. Assessing urban sustainability of Chinese megacities: 35 years after the economic reform and open-door policy. *Landscape and Urban Planning* 145:57-70. [*Selected as Editor's Choice by Landscape and Urban Planning*]

- [66] *Liu, Z., C. He, and J. Wu. 2016. The relationship between habitat loss and fragmentation during urbanization: An empirical evaluation from sixteen world cities. *PLoS ONE* 11(4): e0154613. doi:10.1371/journal.pone.0154613.
- [67] *Liu, Z., C. He, and J. Wu. 2016. General spatiotemporal patterns of urbanization: An examination of 16 world cities. *Sustainability* 8, 41; doi:10.3390/su8010041.
- [68] *Ma, Q., J. Wu, and C. He. 2016. A hierarchical analysis of the relationship between urban impervious surfaces and land surface temperatures: spatial scale dependence, temporal variations, and bioclimatic modulation. *Landscape Ecology* 31:1139-1153.
- [69] *Ma, Q., C. He, and J. Wu. 2016. Behind the rapid expansion of urban impervious surfaces in China: Major influencing factors revealed by a hierarchical multiscale analysis. *Land Use Policy* 59:434-445.
- [70] Ma, Y., X. Li, M. Wilson, X. Wu, A. Smith, and J. Wu. 2016. Water loss by evaporation from China's South-North water transfer project. *Ecological Engineering* 95:206-215.
- [71] Pan, Q., D. Tian, S. Naeem, K. Auerswald, J. Elser, Y. Bai, J. Huang, Q. Wang, H. Wang, J. Wu, and X. Han. 2016. Effects of functional diversity loss on ecosystem functions are influenced by compensation. *Ecology* 97:2293-2302.
- [72] *Pope, R., J. Wu, and C. Boone. 2016. Spatial patterns of air pollutants and social groups: A distributive environmental justice study in the Phoenix Metropolitan Region of USA. *Environmental Management* 58:753-766.
- [73] *Sun, Z., Z. Liu, C. He, and J. Wu. 2016. Multi-scale analysis of ecosystem service trade-offs in urbanizing drylands of China: A case study in Hohhot-Baotou-Ordos-Yulin region. *Acta Ecologica Sinica* 36(15):4881-4891.
- [74] Wang, T., L. Feng, P. Mou, J. Wu, J. Smith, W. Xiao, H. Yang, H. Dou, X. Zhao, Y. Cheng, B. Zhou, H. Wu, L. Zhang, Y. Tian, Q. Guo, X. Kou, X. Han, D. Miquelle, C. Oliver, R. Xu, and J. Ge. 2016. Amur tigers and leopards returning to China: direct evidence and a landscape conservation plan. *Landscape Ecology* 31:491-503.
- [75] *Wilson, M., X. Chen, R. Corlett, R. Didham, P. Ding, R. Holt, M. Holyoak, G. Hu, A. Hughes, L. Jiang, W. Laurance, J. Liu, S. Pimm, S. Robinson, S. Russo, X. Si, D. Wilcove, J. Wu, and M. Yu. 2016. Habitat fragmentation and biodiversity conservation: Key findings and future challenges. *Landscape Ecology* 31:219-227.
- [76] *Xu, G. and J. Wu. 2016. Social-ecological transformations of Inner Mongolia: a sustainability perspective. *Ecological Processes* 5:23 DOI 10.1186/s13717-016-0067-z
- [77] Zeng, L., B. Wang, L. Fan, and J. Wu. 2016. Analyzing sustainability of Chinese mining cities using an association rule mining approach. *Resources Policy* 49:394-404.

2015

- [78] Wu, J. and T. Wu. 2015. Response to the United Nations' Sustainable Development Goals (SDG #7): "Ensure access to affordable, reliable, sustainable and modern energy for all". *The UN Chronicle* 52(4):17-18. (Invited contribution)
- [79] Wu, J., S. Naeem, J. Elser, Y. Bai, J. Huang, L. Kang, Q. Pan, Q. Wang, S. Hao, and X. Han. 2015. Testing biodiversity-ecosystem functioning relationship in the world's largest grassland: Overview of the IMGRE project. *Landscape Ecology* 30:1723-1736.
- [80] Wu, J., Q. Zhang, A. Li, and C.Z. Liang. 2015. Historical landscape dynamics of Inner Mongolia: Patterns, drivers, and impacts. *Landscape Ecology* 30:1579-1598.

- [81] Wu, J. 2015. History and evolution of the Journal, *Landscape Ecology*. Pages 55-73 In: G. W. Barrett, T. L. Barrett, and J. Wu (eds). *History of Landscape Ecology in the United States*. Springer, New York.
- [82] *Ackley, J. W., M. J. Angilletta, D. DeNardo, B. Sullivan, and J. Wu. 2015. Urban heat island mitigation strategies and lizard thermal ecology: Landscaping can quadruple potential activity time in an arid city. *Urban Ecosystems* 18:1447–1459.
- [83] *Ackley, J., J. Wu, M. Angilletta, S. Myint, and B. Sullivan. 2015. Rich lizards: How affluence and land cover influence the diversity and abundance of desert reptiles persisting in an urban landscape. *Biological Conservation* 182:87-92.
- [84] Barrett, G.W., T. L. Barrett, Wu, J. 2015. Thirty years of the United States Regional Association of the International Association for Landscape Ecology (USIALE): The evolution of its organization and science. Pages 1-11 In: G. W. Barrett, T. L. Barrett, and J. Wu (eds). *History of Landscape Ecology in the United States*. Springer, New York.
- [85] Barrett, G.W., T. L. Barrett, Wu, J. 2015. A future for US-IALE. Pages 177-189 In: G. W. Barrett, T. L. Barrett, and J. Wu (eds). *History of Landscape Ecology in the United States*. Springer, New York.
- [86] Briske, D., M. Zhao, G. Han, C. Xiu, D. R. Kemp, W. Willms, K. Havstad, L. Kang, Z. Wang, J. Wu, X. Han, and Y. Bai. 2015. Strategies to alleviate poverty and grassland degradation in Inner Mongolia: Intensification vs production efficiency of livestock systems. *Journal of Environmental Management* 152:177-182.
- [87] Bürgi, M., J. Silbernagel, J. Wu, and F. Kienast. 2015. Linking ecosystem services with landscape history. *Landscape Ecology* 30:11-20.
- [88] *Cao, Q., D. Yu, M. Georgescu, Z. Han, and J. Wu. 2015. Impacts of land use and land cover on regional climate: A case study in the agro-pastoral transitional zone of China. *Environmental Research Letters* 10:124025 (doi:10.1088/1748-9326/10/12/124025)
- [89] Fang, J., Y. Bai, and J. Wu. 2015. Towards a better understanding of landscape patterns and ecosystem processes of the Mongolian Plateau. *Landscape Ecology* 30:1573-1578.
- [90] *Huang, L., J. Wu, and L. Yan. 2015. Defining and measuring urban sustainability: A review of indicators. *Landscape Ecology* 30:1175-1193.
- [91] *Huang, L., J. Wu, and L. Yan. 2015. The vision of a city: The sustainability science and indicators-based approach. *Huazhong Architecture* 11:40-46.
- [92] *Mao, Q., G. Huang, and J. Wu. 2015. Urban ecosystem services: A review. *Chinese Journal of Applied Ecology* 26(4):1023-1033.
- [93] Tian, G. and J. Wu. 2015. Comparing urbanization patterns in Guangzhou of China and Phoenix of the USA: The influences of roads and rivers. *Ecological Indicators* 52:23-30.
- [94] *Yuan, F., J. Wu, A. Li, H. Rowe, Y. Bai, J. Huang, and X. Han. 2015. Spatial patterns of soil nutrients, plant diversity, and aboveground biomass in the Inner Mongolia grassland: Before and after a biodiversity removal experiment. *Landscape Ecology* 30:1737-1750.
- [95] *Zhang, D., C. He, J. Wu, and Q. Huang. 2015. Assessing the major resource and environmental constraints for sustainable development in the Beijing-Tianjin-Hebei Region, based on the framework of landscape sustainability science. *Advances in Earth Science* 30(10):1151-1161.

2014

- [96] Wu, J. 2014. Urban ecology and sustainability: The state-of-the-science and future directions. *Landscape and Urban Planning* 125:209-221.

- [97] Wu, J., W. Xiang, and J. Zhao. 2014. Urban ecology in China: Historical developments and future directions. *Landscape and Urban Planning* 125:222–233.
- [98] Wu, J.G., X.C. Guo, J. Yang, G.X. Qian, J.M. Niu, C.Z. Liang, Q. Zhang, and A. Li. 2014. What is sustainability science? *Chinese Journal of Applied Ecology* 25(1):1-11.
- [99] Wu, J., C. He, Q. Zhang, D. Yu, G. Huang, and Q. Huang. 2014. Integrative modeling and strategic planning for regional sustainability under climate change. *Advances in Earth Sciences* 29:1315-1324.
- [100] *Liu, Z., C. He, Y. Zhou, and J. Wu. 2014. How much of the world's land has been urbanized, really? A hierarchical framework for avoiding confusion. *Landscape Ecology* 29:763-771.
- [101] *Luo, S.H., Mao, Q.Z., K.M. Ma, and J.G. Wu. 2014. Distribution characteristics of carbon and nitrogen in urban top soils of Beijing. *Acta Ecologica Sinica* 34:6011-6019.
- [102] *Ma, Q., C. He, J. Wu, Z. Liu, Q. Zhang, and Z. Sun. 2014. Quantifying spatiotemporal patterns of urban impervious surfaces in China: An improved assessment using nighttime light data. *Landscape and Urban Planning* 130:36-49.
- [103] *Mao, Q., G. Huang, A. Buyantuyev, J. Wu, S. Luo, and K. Ma. Spatial heterogeneity of urban soils: The case of the Beijing metropolitan region, China. *Ecological Processes* 3:23 (doi:10.1186/s13717-014-0023-8).
- [104] Nassauer, J.I., J.G. Wu, and W.-N. Xiang. 2014. Actionable urban ecology in China and the world: Integrating ecology and planning for sustainable cities. *Landscape and Urban Planning* 125:207-208.
- [105] *Neil, K., J. Wu, C. Bang, and S. Faeth. 2014. Urbanization affects plant flowering phenology and pollinator community: Effects of water availability and land cover. *Ecological Processes* 3:17; doi:10.1186/s13717-014-0017-6
- [106] *Pope, R. and J. Wu. 2014. Characterizing air pollution patterns on multiple time scales in urban areas: A landscape ecological approach. *Urban Ecosystems* 17:855-874.
- [107] *Pope, R. and J. Wu. 2014. A multi-objective assessment of an air quality monitoring network using environmental, economic, and social indicators and GIS-based models. *Journal of the Air and Waste Management Association* 64:721-737.
- [108] *Tian, Y., J. Wu, T. Wang, and J. Ge. 2014. Climate change and landscape fragmentation jeopardize the population viability of the Siberian tiger (*Panthera tigris altaica*). *Landscape Ecology* 29:621-637.
- [109] *Zhang, J., J. Niu, A. Buyantuyev, and J. Wu. 2014. A multilevel analysis of the impact of land use policy on land-cover change and local land use decisions. *Journal of Arid Environments* 108:19-28.
- [110] Zhang, Q., J. Wu, A. Buyantuyev, J. Niu, Y. Ding, S. Kang, and W. J. Ma. 2014. Plant species diversity is correlated with climatic factors differently at the community and the functional group levels: a case study of desert steppe in Inner Mongolia, China. *Plant Biosystems*, DOI: 10.1080/11263504.2014.974713
- [111] *Zhou, T., W. Ren, S. Peng, L. Liang, S. Ren, and J. Wu. 2014. A riverscape transect approach to studying and restoring river systems: A case study from southern China. *Ecological Engineering* 65:147-158.

2013

- [112] Wu, J. 2013. Landscape sustainability science: Ecosystem services and human well-being in changing landscapes. *Landscape Ecology* 28:999-1023.
- [113] Wu, J. 2013. Key concepts and research topics in landscape ecology revisited: 30 years after the Allerton Park workshop. *Landscape Ecology* 28:1-11.
- [114] Wu, J. G. 2013. Hierarchy theory: An overview. Pages 281-301 in R. Rozzi, S. T. A. Pickett, C. Palmer, J. J. Armesto, and J. B. Callicott, editors. *Linking Ecology and Ethics for a Changing World: Values, Philosophy, and Action*. Springer, New York.
- [115] Wu, J., C. He, G. Huang, and D. Yu. 2013. Urban landscape ecology: Past, present, and future. Pages 37-53 in: Bojie Fu and Bruce Jones (eds). *Landscape Ecology for Sustainable Environment and Culture*. Springer.
- [116] Wu, J. 2013. Patch dynamics. In: Encyclopaedia Britannica, *Encyclopaedia Britannica Online Academic Edition* (<http://www.britannica.com/EBchecked/topic/1924260/patch-dynamics>)
- [117] Wu, J. and T. Wu. 2013. Ecological resilience as a foundation for urban design and sustainability. Pages 211-230 in: Steward T.A. Pickett, Mary L. Cadenasso, Brian P. McGrath, and Kristina Hill (eds), *Resilience in Urban Ecology and Design: Linking Theory and Practice for Sustainable Cities*. Springer.
- [118] Wu, J. 2013. Landscape ecology. Pages 179-200 in R. Leemans (ed.), *Ecological Systems: Selected Entries from the Encyclopedia of Sustainability Science and Technology*, Springer, New York.
- [119] Cha, N., J. Wu, and R. Yu. 2013. Analysis of trends in research on sustainable development in China. *Acta Ecologica Sinica* 33:2637-2644.
- [120] Han, G., T. Liu, Z. Wang, Z. Li, M. Zhao, K. Havstad, J. Wu, and D. Kemp. 2013. Adaptive management of grazing lands. Pages 447-464 in: Chen, J., S. Wan, G. Henebry, J. Qi, G. Gutman, G. Sun, and M. Kappas (eds), *Dryland East Asia: Land Dynamics amid Social and Climate Change*. Walter de Gruyter Publisher.
- [121] *Li, C., J.X. Li, and J.G. Wu. 2013. Quantifying the speed, growth modes, and landscape pattern changes of urbanization: A hierarchical patch dynamics approach. *Landscape Ecology* 28:1875-1888.
- [122] Li, J.X., C. Li, F.G. Zhu, C.H. Song, and J.G. Wu. 2013. Spatiotemporal pattern of urbanization in Shanghai, China between 1989 and 2005. *Landscape Ecology* 28:1545-1565.
- [123] *Li, Q., X.J. Kou, L.M. Feng, and J.G. Wu. The application of camera traps in animal ecology. *Chinese Journal of Applied Ecology* 24:947-955.
- [124] Ma, W.J., Q. Zhang, J.M. Niu, S. Kang, P.T. Liu, X. He, Y. Yang, Y.N. Zhang, and J.G. Wu. 2013. Relationship of ecosystem primary productivity to species diversity and functional group diversity: Evidence from *Stipa breviflora* grassland in Inner Mongolia. *Chinese Journal of Plant Ecology* 37:620-630.
- [125] *Mao, Q., K. Ma, J. Wu, R. Tang, S. Luo, Y. Zhang, and L. Bao. 2013. Distribution pattern of allergenic plants in the Beijing metropolitan region. *Aerobiologia* 29:217-231.
- [126] *Mao, Q., K. Ma, J. Wu, R. Tang, Y. Zhang, S. Luo, L. Bao, and X. Cai. 2013. An overview of advances in research on distributional pattern of urban biodiversity. *Acta Ecologica Sinica* 33(4):1051-1064.
- [127] Qian, G., Y. Zhang, J. Wu, and Y.H. Pan. 2013. Revenue sharing in dairy industry supply chain – A case study of Hohhot, China. *Journal of Integrative Agriculture* 12(12):2300-2309.

- [128] Yang, L. J. Wu, and P. Shen. 2013. Roles of science in institutional changes: The case of desertification control in China. *Environmental Science & Policy* 27:32-54.
- [129] Yang, Q., J. Wu, J. Li, Y. Yu, F. Peng, and C. Sun. 2013. Landscape dynamics of medium- and small-sized cities in eastern and western China: A comparative study of pattern. *Acta Ecologica Sinica* 33:275-285.
- [130] Zhang, C., J. Wu, N. Grimm, M. McHale, and A. Buyantuyev. 2013. A hierarchical patch mosaic ecosystem model for urban landscapes: Model development and evaluation. *Ecological Modelling* 250:81-100.
- [131] *Zhou, T., S.L. Peng, and J.G. Wu. 2013. The concept of sustainable restoration ecology and its application in South China. Pages 146-156 in: Wenhua Li (ed), *Contemporary Ecology in China – Ecosystem Restoration*, Science Press, Beijing.

2012

- [132] Wu, J. 2012. Landscape ecology. Pages 392-396 in: A. Hastings and L. Gross (eds), *Encyclopedia of Theoretical Ecology*. University of California Press.
- [133] Wu, J. 2012. A landscape approach for sustainability science. Pages 59-78 in: M.P. Weinstein and R.E. Turner (eds), *Sustainability Science: The Emerging Paradigm and the Urban Environment*. Springer.
- [134] Wu, J. 2012. Landscape ecology. Pages 5772-5785 in: R.A. Meyers (ed), *Encyclopedia of Sustainability Science and Technology*. Springer.
- [135] Wu, J. and T. Wu. 2012. Sustainability indicators and indices. Pages 65-86 In: Christian N. Madu and C. Kuei (eds), *Handbook of Sustainable Management*. Imperial College Press, London.
- [136] Wu, J. 2012. Landscape ecology: past, present, and future. Pages 15-25 in: X. Han and Y. Wu (eds), *Ecological Vision: Challenge, Response, and Strategy*. Higher Education Press, Beijing.
- [137] *Ackley, J. and J. Wu. 2012. Watering grass in the desert: Can a phoenix change its color? *CITYGREEN* 5:130-137.
- [138] Bai, Y., J. Wu, C. Clark, Q. Pan, L. Zhang, S. Chen, Q. Wang, and X. Han. 2012. Grazing alters ecosystem functioning and C:N:P stoichiometry of grasslands along a regional precipitation gradient. *Journal of Applied Ecology* 49: 1204–1215.
- [139] Buyantuyev, A. and J. Wu. 2012. Urbanization diversifies land surface phenology in arid environments: interactions among vegetation, climatic variation, and land use pattern in the Phoenix metropolitan region, USA. *Landscape and Urban Planning* 105:149-159.
- [140] Buyantuyev, A., P. Xu, J. Wu, S. Piao, and D. Wang. 2012. A space-for-time (SFT) substitution approach to studying historical phenological changes in urban environment. *PLoS ONE* 7(12): e51260. doi:10.1371/journal.pone.0051260.
- [141] Luo, S., Q. Mao, K. Ma, and J. Wu. 2012. A review of carbon cycling and sequestration in urban soils. *Acta Ecologica Sinica* 32(22):7177-7189.
- [142] *Dirks, L., G. Dirks, and J. Wu. 2012. Evolving perspectives on biofuels in the United States. *Frontiers in Energy* 6(4): 379–393.
- [143] *Mao, Q., S. Luo, K. Ma, J. Wu, R. Tang, Y. Zhang, L. Bao, and T. Zhang. 2012. Research advances in ecological assessment of urban greenspace. *Acta Ecologica Sinica* 32(17):5589-5600.
- [144] *Hu, G., J. Wu, K. Feeley, G. Xu, and M. Yu. 2012. The effects of landscape variables on the species-area relationship during late-stage habitat fragmentation. *PLoS ONE* 7(8): e43894. doi:10.1371/journal.pone.0043894.

- [145] *Li, A., J. Wu, and J. Huang. 2012. Distinguishing human-induced changes from climate-driven variations in vegetation pattern of drylands with the RESTREND method. *Landscape Ecology* 27:969-982.
- [146] Li, S., P. Verburg, S. Lv, J. Wu, and X. Li. 2012. Spatial analysis of the driving factors of grassland degradation under conditions of climate change and intensive land use in Inner Mongolia, China. *Regional Environmental Change* 12:461-474.
- [147] *Litteral, J. and J. Wu. 2012. Urban landscape matrix affects avian diversity in remnant vegetation reserves: Evidence from the Phoenix metropolitan region, USA. *Urban Ecosystems* 15:939-959.
- [148] *Liu, J., J. Wu, F. Liu, and X. Han. 2012. Quantitative assessment of bioenergy from crop stalk resources in Inner Mongolia, China. *Applied Energy* 93:305-318.
- [149] Liu, D., X. Wu, J. Chang, Y. Min, Y. Ge, Y. Shi, H. Xue, C. Peng, and J. Wu. 2012. Constructed wetlands as biofuel production systems. *Nature Climate Change* 2(3):190-194.
- [150] *Sun, X.P., T.M. Wang, J.G. Wu, J.P. Ge. 2012. Change trend of vegetation cover in Beijing metropolitan region before and after the 2008 Olympics. *Chinese Journal of Applied Ecology* 23(11):3133-3140.
- [151] *Wang, W., J. Wu, and X. Han. 2012. Estimating soil carbon sequestration potential of the typical steppe in Inner Mongolia and associated uncertainty. *Chinese Journal of Applied Ecology* 23(1):29-37.
- [152] Wang, Z., J. Wu, M. Madden, and D. Mao. 2012. China's wetlands: conservation plans and policy impacts. *AMBIO* 41:782-786.
- [153] Yang, L. and J. Wu. 2012. Knowledge-driven institutional change: an empirical study on combating desertification in northern China. *Journal of Environmental Management* 110:254-266.
- [154] Yu, M.J., Hu, G., K.J. Feeley, J.G. Wu, and P. Ding. 2012. Richness and composition of plants and birds on land-bridge islands: Effects of island attributes and differential responses of species groups. *Journal of Biogeography* 39:1124-1133.
- [155] Yu, Q., H. Wu, N. He, X. Lv, Z. Wang, J. Elser, J. Wu, and X. Han. 2012. Testing the Growth Rate Hypothesis in Vascular Plants with Above- and Below-Ground Biomass. *PLoS ONE* 7(3): e32162.
- [156] *Zhou, T., J. Wu, and S. Peng. 2012. Assessing the effects of landscape pattern on river water quality at multiple scales: A case study of the Dongjiang River watershed, China. *Ecological Indicators* 23:166-175.
- [157] *Dong, N., X. Han, and J. Wu. 2012. Changes in the spatiotemporal pattern of urbanization in Ordos of Inner Mongolia and related driving forces. *Chinese Journal of Applied Ecology* 23(4):1097-1103.
- [158] Huang, J., Q. Pan, Y. Bai, X. Lv, J. Wu, and X. Han. 2012. Biodiversity and ecosystem function. Pages 37-56 in Han, X. G. and L. H. Li (eds), *Mechanisms for Maintaining Inner Mongolian Grassland Ecosystems*. China Agricultural University Press, Beijing.

2011

- [159] Wu, J. 2011. Improving the writing of research papers: IMRAD and beyond. *Landscape Ecology* 26:1345-1349.

- [160] Wu, J., G. D. Jenerette, A. Buyantuyev, and C. L. Redman. 2011. Quantifying spatiotemporal patterns of urbanization: The case of the two fastest growing metropolitan regions in the United States. *Ecological Complexity* 8:1-8.
- [161] Wu, J., A. Buyantuyev, G. D. Jenerette, J. Litteral, and W. Shen. 2011. Quantifying spatiotemporal patterns and ecological effects of urbanization: a multiscale landscape approach. Pages 35-53 *in*: M. Richter and U. Weiland (eds). *Applied Urban Ecology: A Global Framework*, Blackwell.
- [162] Wu, J. 2011. Integrating nature and culture in landscape ecology. Pages 301-321 *in*: S. K. Hong, J. Wu, J.E. Kim, and N. Nakagoshi (eds). *Landscape Ecology in Asian Cultures*. Springer, Dordrecht, The Netherlands.
- [163] Han, G., M. Zhao, M. Hong, Z. Wang, S. Zheng, K. Havstad, W. Willms, B. Bestelmeyer, J. Herrick, J. Wu. 2011. Grassland ecosystem health, services and adaptive management. Pages 218-244 *In*: J. Wu and F. Li (eds), *Lectures in Modern Ecology (V): Large-scale Ecology and Sustainability Science*. Higher Education Press, Beijing. [*In Chinese with English Abstracts*]
- [164] *Hu, G., K.J. Feeley, J.G. Wu, G.F. Xu, and M.J. Yu. 2011. Determinants of plant species richness and patterns of nestedness in fragmented landscapes: Evidence from land-bridge islands. *Landscape Ecology* 26:1405-1417.
- [165] *Li, C., J. Li., and J. Wu. 2011. Effects of urbanization on plant biodiversity: Review of pattern and mechanisms. Pages 347-361 *In*: J. Wu and F. Li (eds), *Lectures in Modern Ecology (V): Large-scale Ecology and Sustainability Science*. Higher Education Press, Beijing. [*In Chinese with English Abstracts*]
- [166] Li, J.X., C.H. Song, L. Cao, F.G. Zhu, X.L. Meng, and J.G. Wu. 2011. Impacts of landscape structure on surface urban heat islands: a case study of Shanghai, China. *Remote Sensing of Environment* 115:3249-3263.
- [167] Pan, Q., Bai, Y., Wu, J., Han, X. 2011. Hierarchical plant responses and diversity loss after nitrogen addition: testing three functionally-based hypotheses in the Inner Mongolia Grassland. *PLoS ONE* 6(5): e20078. doi:10.1371/journal.pone.0020078
- [168] Qian, G., X. Guo, J. Guo, and J. Wu. 2011. China's dairy crisis: impacts, causes and policy implications for sustainable dairy industry. *International Journal of Sustainable Development and World Ecology* 18(5):434-441.
- [169] Shen, W., Y. Lin, G. D. Jenerette, and J. Wu. 2011. Blowing litter across a landscape: effects on ecosystem nutrient flux and implications for landscape management. *Landscape Ecology* 26:629-644.
- [170] Tian, G., Y. Ouyang, Q. Quan, and J. Wu. 2011. Simulating spatiotemporal dynamics of urbanization with mult-agent systems: a case study of the Phoenix metropolitan region, USA. *Ecological Modelling* 222:1129-1138.
- [171] *Tian, Y., J. Wu, A. T. Smith, T. Wang, X. Kou, J. Ge. 2011. Population viability of the Siberian Tiger in a changing landscape: Going, going and gone? *Ecological Modelling* 222:3166-3180.
- [172] *Tian, Y., J. Wu, X. Kou, T. Wang, A. T. Smith, and J. Ge. 2011. Methods and applications of population viability analysis (PVA): A review. *Chinese Journal of Applied Ecology* 22(1):257-267.
- [173] Wang, Z.J., J. Wu, H. Shang, and J. Cheng. 2011. Landscape connectivity shapes the spread pattern of the rice water weevil: a case study from Zhejiang, China. *Environmental Management* 47:254-262.

- [174] *Zhou, T., J. Wu, and S. Peng. 2011. Sustainable restoration ecology: A new conceptual framework for making restoration sustainable. Pages 362-381 In: J. Wu and F. Li (eds), Lectures in Modern Ecology (V): Large-scale Ecology and Sustainability Science. Higher Education Press, Beijing. [In Chinese with English Abstracts]

2010

- [175] Wu, J. 2010. Landscape of culture and culture of landscape: does landscape ecology need culture? *Landscape Ecology* 25:1147–1150.
- [176] Wu, J. 2010. Urban sustainability: an inevitable goal of landscape research. *Landscape Ecology* 25:1-4.
- [177] Yu, Q., Q. Chen, J. Elser, N. He, H. Wu, G. Zhang, J. Wu, Y. Bai, and X. Han. 2010. Linking stoichiometric homeostasis with ecosystem structure, functioning and stability. *Ecology Letters* 13:1390-1399.
- [178] Bai, Y. J. Wu, C. M. Clark, S. Naeem, Q. Pan, J. Huang, L. Zhang, and X. Han. 2010. Tradeoffs and thresholds in the effects of nitrogen addition on biodiversity and ecosystem functioning: evidence from Inner Mongolia Grasslands. *Global Change Biology* 16:358–372.
- [179] Wang, J., G. Lin, J. Wu, X. Han and J. Huang. 2010. Habitat insularization affects the foraging behavior and dynamics of local rodent populations: Exploring ecological consequences of the Three Gorges Dam. *Frontiers in Ecology and the Environment* 8(1):13–19.
- [180] *Wang, T., J. Wu, X. Kou, C. Oliver, P. Mou, and J. Ge. 2010. Ecologically asynchronous agricultural practice erodes sustainability of Loess Plateau of China. *Ecological Applications* 20:1126–1135.
- [181] *Wang, T., X. Kou, Y. Xiong, P. Mou, J. Wu, and J. Ge. 2010. Temporal and spatial patterns of NDVI and their relationship to precipitation in the Loess Plateau of China. *International Journal of Remote Sensing* 31:1943–1958.
- [182] *Wang, H.F., V. L. Sork, J.G. Wu, J.P. Ge. 2010. Effect of patch size and isolation on mating patterns and seed production in an urban population of Chinese pine (*Pinus tabulaeformis* Carr.). *Forest Ecology and Management* 260:965-974.
- [183] *Yang, L.H., Z.R. Lan and J.G. Wu. 2010. Roles of scholars in the practice of combating-desertification: a case study in northwest China. *Environmental Management* 46:154–166.
- [184] *Yang, L. and J. Wu. 2010. Seven design principles for promoting scholars' participation in combating desertification. *International Journal of Sustainable Development and World Ecology* 17:109-119.
- [185] *Neil, K., L. Landrum, and J. Wu. 2010. Effects of Urbanization on Flowering Phenology in the Metropolitan Phoenix region of USA: Findings from herbarium records. *Journal of Arid Environments* 74:440–444.
- [186] *Buyantuyev, A. and J. Wu. 2010. Urban heat islands and landscape heterogeneity: linking spatiotemporal variations in surface temperatures to land-cover and socioeconomic patterns. *Landscape Ecology* 25:17–33.
- [187] *Buyantuyev, A., C. Gries, and J. Wu. 2010. Multiscale Analysis of the Urbanization Pattern of the Phoenix Metropolitan Landscape of USA: Time, Space and Thematic Resolution. *Landscape and Urban Planning* 94:206-217.
- [188] Lu, J., L. Zhu, G. Hu, and J. Wu. 2010. Integrating animal manure-based bioenergy production with invasive species control: A case study at Tongren Pig Farm in China. *Biomass and Bioenergy* 34:821-827.

- [189] Tian, G., J. Wu, and Z. Yang. 2010. Spatial Pattern of Urban Functions in the Beijing Metropolitan Region. *Habitat International* 34:249-255.
- [190] Tang, L., G. Shao, Z. Piao, L. Dai, M. Jenkins, S. Wang, G. Wu, J. Wu, J. Zhao. 2010. Forest degradation deepens around and within protected areas in East Asia. *Biological Conservation* 143:1295-1298.
- [191] Qian, G., Y. Zhang, and J. Wu. 2010. Decomposition analysis on changes of energy-related CO₂ emission in Inner Mongolia. *Technology Economics* 29:77-84.
- [192] Qian, G., X. Guo, J. Wu and J. Guo. 2010. Root causes of China's dairy crisis and policy recommendations. *Issues in Agricultural Economy* 3:30-36.
- [193] Wu, J.G. and T. Wu. 2010. Green GDP. Pages 248-250 in: *Berkshire Encyclopedia of Sustainability, Vol. II – The Business of Sustainability*. Berkshire Publishing, Great Barrington, MA, USA.
- [194] Jenerette, G. and J. Wu. 2010. Quantitative measures and ecological hierarchy. Pages 75-95 In: Larry Kapustka, Wayne Landis, and Alan Johnson (eds), *Environmental Risk Assessment and Management from a Landscape Perspective*. John Wiley & Sons.
- [195] Wu, J. 2010. Landscape ecology and sustainability science. Pages 50-67 in: Y.G. Wu and J.W. Fan (eds), *Ecological Complexity and Ecological Vision*. Higher Education Press, Beijing.

2009

- [196] *Buyantuyev, A. and J. Wu. 2009. Urbanization alters spatiotemporal patterns of ecosystem primary production: A case study of the Phoenix metropolitan region, USA. *Journal of Arid Environments* 73:512-520.
- [197] Chen, X. and J. Wu. 2009. Sustainable landscape architecture: implications of the Chinese philosophy of “unity of man with nature” and beyond. *Landscape Ecology* 24: 1015-1026.
- [198] *Yang, L. and J. Wu. 2009. Scholar-participated governance as an alternative solution to the problem of collective action in social-ecological systems. *Ecological Economics* 68: 2412–2425.
- [199] Han, X., K. Owens, X. B. Wu, J. Wu, and J. Huang. 2009. The Inner Mongolia Grassland: A special feature. *Rangeland Ecology and Management* 62:303-304.
- [200] Xiao, H., F. Yuan, and J. Wu. 2009. Factors affecting citations: a comparison between Chinese and English journals in ecology. *Chinese Journal of Applied Ecology* 20(5):1253-1262.
- [201] *Li, Z., J. Wu, X. Kou, Y. Tian, T. Wang, P. Mou, and J. Ge. 2009. Land use pattern and dynamics in the distribution region of the Amur tiger. *Chinese Journal of Applied Ecology* 20 (3): 713-724.
- [202] *Tian, Y., J. Wu, X. Kou, Z. Li, T. Wang, P. Mou, and J. Ge. 2009. Spatiotemporal patterns and main drivers of the Amur tiger population dynamics. *Biodiversity Science* 17 (3): 211-225
- [203] Wu, J. 2009. Ecological dynamics in fragmented landscapes. Pages 438-444 In: S. A. Levin (ed.), *Princeton Guide to Ecology*. Princeton University Press, Princeton.
- [204] Yuan, F., J. Wu, Y. Bai, and X. Han. 2009. Biodiversity and ecosystem functioning relationship. Pages 1-37 In: J. Wu and J. Yang (eds). *Lectures in Modern Ecology (IV): Theory and Applications*. Higher Education Press, Beijing.

2008

- [205] Wu, J. 2008. Making the case for landscape ecology: an effective approach to urban sustainability. *Landscape Journal* 27:41-50.

- [206] Wu, J. 2008. Changing perspectives on biodiversity conservation: from species protection to regional sustainability. *Biodiversity Science* 16(3):205-213.
- [207] Bai, Y., J. Wu, Q. Xing, Q. Pan, J. Huang, D. Yang, and X. Han. 2008. Primary production and rain use efficiency across a precipitation gradient on the Mongolia Plateau. *Ecology* 89: 2140–2153.
- [208] Grimm, N., S. Faeth, N. Golubiewski, C. Redman, J. Wu, X. Bai, and J. Briggs. 2008. Global change and the ecology of cities. *Science* 319:756-760.
- [209] Shao, G. and J. Wu. 2008. On the accuracy of landscape pattern analysis using remote sensing data. *Landscape Ecology* 23:505–511.
- [210] Shen, W., J. Wu, N. Grimm, and D. Hope. 2008. Effects of urbanization-induced environmental changes on ecosystem functioning in the Phoenix metropolitan region, USA. *Ecosystems* 11:138-155.
- [211] *Liu, J. and J. Wu. 2008. Perspectives and prospects of biofuels. *Acta Ecologica Sinica* 28(4):1339-1353.
- [212] *Yuan, F., X. Han, J. Ge, and J. Wu. 2008. Net primary productivity of *Leymus chinensis* steppe in Xilin River basin of Inner Mongolia and its responses to global climate change. *Chinese Journal of Applied Ecology* 19:2168-2176.
- [213] Tian, G. J. and J. Wu. 2008. Simulating land use change with agent-based models: progress and prospects. *Acta Ecologica Sinica* 28(9):4451-4459.
- [214] *Sun, Q., J. Lu, J. Wu, and F. Zhang. 2008. Effects of island area on plant species distribution and conservation implementations in the Thousand Island Lake Region. *Biodiversity Science* 16:1-7.
- [215] Wu, J. 2008. Landscape ecology. Pages 2103-2108 in: S. E. Jorgensen (ed), *Encyclopedia of Ecology*. Elsevier, Oxford.
- [216] Wu, J. 2008. Toward a landscape ecology of cities: Beyond buildings, trees, and urban forests. Pages 10-28 In: M. M. Carreiro, Y. C. Song, and J. G. Wu, editors. 2008. *Ecology, Planning and Management of Urban Forests: International Perspectives*. Springer, New York.
- [217] Wu, J. 2008. On scholarship and universities of the future. Pages 2-8 in: B. Gu et al. (eds.) *Green Careers*. Higher Education Press, Beijing.

2007

- [218] Wu, J. 2007. Past, present and future of landscape ecology. *Landscape Ecology* 22:1433-1435.
- [219] Bai, Y., J. Wu, Q. Pan, J. Huang, Q. Wang, F. Li, A. Buyantuyev, and X. Han. 2007. Positive Linear Relationship between Productivity and Diversity: Evidence from the Eurasian Steppe. *Journal of Applied Ecology* 44:1023-1034.
- [220] *Buyantuyev, A. and J. Wu. 2007. Estimating vegetation cover in an urban environment based on Landsat ETM+ imagery: A case study in Phoenix, USA. *International Journal of Remote Sensing* 28: 269-291.
- [221] *Buyantuyev, A. and J. Wu. 2007. Effects of thematic resolution on landscape pattern analysis. *Landscape Ecology* 22:7-13.
- [222] Turner, M.G., G.W. Barrett, R.H. Gardner, L.R. Iverson, P.G. Risser, J.A. Wiens, and J. Wu. 2007. In memoriam – Frank B. Golley (1930-2006). *Landscape Ecology* 22:1-3.
- [223] Lu, J., Z. Fu, L. Zhu, and J. Wu. 2007. Water Hyacinth in China: A Sustainability Science-Based Management Framework. *Environmental Management* 40:823–830.

- [224] Hong, S.-K., I.-J. Song, and J. Wu. 2007. Fengshui theory in urban landscape planning. *Urban Ecosystems* 10:221-237.
- [225] Zhang, N., Z. Yu, G. Yu, and J. Wu. 2007. Scaling up ecosystem productivity from patch to landscape: A case study of the Changbai Mountain Nature Reserve. *Landscape Ecology* 22:303-315.
- [226] Ren, H., Z. LI, W. Shen, Z. Yu, S. Peng, C. Liao, and J. Wu. 2007. Changes in biodiversity and ecosystem function during the restoration of a tropical forest in south China. *Science in China Series C: Life Sciences* 50:277-284.
- [227] Liu, Zhimin, Xiaolan Li, Qiaoling Yan, and Jianguo Wu. 2007. Species richness and vegetation pattern in interdune lowlands of an active dune field in Inner Mongolia, China. *Biological Conservation* 140:29-39.
- [228] Wu, J. and R. Hobbs. 2007. Landscape ecology: The state of the science. Pages 271-287 In: J. Wu and R. Hobbs (eds). *Key Topics in Landscape Ecology*. Cambridge University Press, Cambridge.
- [229] Wu, J. 2007. Scale and scaling: A cross-disciplinary perspective. Pages 115-142 In: J. Wu and R. Hobbs (eds). *Key Topics in Landscape Ecology*. Cambridge University Press, Cambridge.
- [230] Hobbs, J. and J. Wu. 2007. Perspectives and prospects of landscape ecology. Pages 3-8 In: J. Wu and R. Hobbs (eds). *Key Topics in Landscape Ecology*. Cambridge University Press, Cambridge.
- [231] Li, H. and J. Wu. 2007. Landscape pattern analysis: Key issues and challenges. Pages 39-61 In: J. Wu and R. Hobbs (eds). *Key Topics in Landscape Ecology*. Cambridge University Press, Cambridge.
- [232] Li, H., J. Wu. 2007. Application of spatial pattern analysis in landscape ecology. Pages 222-244 In: J. Wu (ed). *Lectures in Modern Ecology (III): Advances and Key Topics*. Higher Education Press, Beijing.
- [233] *Wang, H., J. Ge, and J. Wu. 2007. An overview of landscape genetics. Pages 245-260 In: J. Wu (ed). *Lectures in Modern Ecology (III): Advances and Key Topics*. Higher Education Press, Beijing.

2006

- [234] Wu, J. 2006. Cross-disciplinarity, landscape ecology, and sustainability science. *Landscape Ecology* 21:1-4.
- [235] *Neil, K. and J. Wu. 2006. Effects of urbanization on plant flowering phenology. *Urban Ecosystems* 9:243-257.
- [236] Jiang, G., X. Han, and J. Wu. 2006. Restoration and management of the Inner Mongolia Grassland requires a sustainable strategy. *AMBIO* 35:269-270.
- [237] Jenerette, G. D., J. Wu, N. Grimm, and D. Hope. 2006. Points, patches and regions: Scaling soil biogeochemical patterns in an urbanized arid ecosystem. *Global Change Biology* 12:1532-1544.
- [238] Li, H.T., X. Han, and J. Wu. 2006. Variant scaling relationship for mass-density across tree-dominated communities. *Journal of Integrative Plant Biology* 48:268-277.
- [239] Wu, J. and H. Li. 2006. Concepts of scale and scaling. Pages 3-15 In: J. Wu, B. Jones, H. Li and O.L. Loucks (eds). *Scaling and Uncertainty Analysis in Ecology*. Springer, Dordrecht, The Netherlands.
- [240] Wu, J. and H. Li. 2006. Perspectives and methods in scaling: A review. Pages 17-44 In: J. Wu, B. Jones, H. Li and O.L. Loucks (eds). *Scaling and Uncertainty Analysis in Ecology*. Springer, Dordrecht, The Netherlands.

- [241] Li, H. and J. Wu. 2006. Uncertainty analysis in ecological studies: An overview. Pages 45-66 In: J. Wu, B. Jones, H. Li and O.L. Loucks (eds). *Scaling and Uncertainty Analysis in Ecology*. Springer, Dordrecht, The Netherlands.
- [242] Wu, J., H. Li, B. Jones, and O. L. Loucks. 2006. Scaling with known uncertainty: A synthesis. Pages 329-346 In: J. Wu, B. Jones, H. Li and O.L. Loucks (eds). *Scaling and Uncertainty Analysis in Ecology*. Springer, Dordrecht, The Netherlands.
- [243] Reynolds, James F., Paul R. Kemp, Kiona Ogle, Roberto J. Fernández, Qiong Gao and Jianguo Wu. 2006. Modeling the Unique Attributes of Dryland Ecosystems. Pages 321-353 in: Huenneke LF, Havstad KM, Schlesinger WH (eds) *Structure and Function of a Chihuahuan Desert Ecosystem*. Oxford University Press, Oxford, UK.

2005

- [244] Wu, J., Y. Bai, X. Han, L. Li, and Z. Chen. 2005. Ecosystem stability in Inner Mongolia. *Nature* 435:E6-E7 (doi:10.1038/nature03584).
- [245] Shen, W., J. Wu, P. R. Kemp, J. F. Reynolds, and N. B. Grimm. 2005. Simulating the dynamics of primary productivity of a Sonoran ecosystem: Model parameterization and validation. *Ecological Modelling* 189:1-24.
- [246] Li, H.T., X. Han, and J. Wu. 2005. Lack of evidence for 3/4 scaling of metabolism in terrestrial plants. *Journal of Integrative Plant Biology* 47:1173-1183.
- [247] Wu, J., 2005. Changes in editorship of *Landscape Ecology*. *Landscape Ecology* 20, 895.

2004

- [248] Wu, J. 2004. Effects of changing scale on landscape pattern analysis: Scaling relations. *Landscape Ecology* 19:125-138.
- [249] Wu, J., J. Huang, X. Han, X. Gao, F. He, M. Jiang, Z. Jiang, R. B. Primack, and Z. Shen. 2004. Three Gorges Dam: An Ecological Perspective. *Frontiers in Ecology and the Environment* 2(5): 241-248.
- [250] Wu, J. 2004. Key research topics in landscape ecology. *Acta Ecologica Sinica* 24(9):2074-2076.
- [251] Bai, Y., X. Han, J. Wu, Z. Chen, and L. Li. 2004. Ecosystem stability and compensatory effects in the Inner Mongolia Grassland. *Nature* 431:181-184.
- [252] *Berling-Wolff, S. and J. Wu. 2004. Modeling urban landscape dynamics: A case study in Phoenix, USA. *Urban Ecosystems* 7:215-240.
- [253] *Berling-Wolff, S. and J. Wu. 2004. Urban growth models: A historical review. *Ecological Research* 19:119-129.
- [254] Ding, L., J. Lu, G. Xu, and J. Wu. 2004. Effects of ecological protection and development on landscape pattern in the Thousand-Island Lake region, Zhejiang Province, China. *Biodiversity Science* 12(5):473-480.
- [255] *Jenerette, G. D. and J. Wu. 2004. Limitation interactions of ecosystem processes with spatial heterogeneity: The puzzle of nitrogen. *Oikos* 107:273-282.
- [256] Li, H. and J. Wu. 2004. Use and misuse of landscape indices. *Landscape Ecology* 19: 389-399.
- [257] Musacchio, L. and J. Wu. Collaborative landscape-scale ecological research: Emerging trends in urban and regional ecology. *Urban Ecosystems* 7:175-178.
- [258] Musacchio, L. and J. Wu. 2004. Cities of resilience: integrating ecology into urban design, planning, policy, and management. *Landscape Journal* 23(1):80-82.

- [259] Shen, W., G. D. Jenerette, J. Wu and R. H. Gardner. 2004. Evaluating empirical scaling relations of pattern metrics with simulated landscapes. *Ecography* 27: 459-469.
- [260] Tong, C., J. Wu, S. Yong, J. Yang, and W. Yong. 2004. A landscape-scale assessment of steppe degradation in the Xilin River Basin, Inner Mongolia, China. *Journal of Arid Environments* 59:133-149.

2003

- [261] Wu, J., J. Huang, and X. Han. 2003. Three-Gorges Dam: Risk to ancient fish. *Science* 302:1149-1150.
- [262] Wu, J., J. Huang, X. Han, Z. Xie, and X. Gao. 2003. Three-Gorges Dam: Experiment in Habitat Fragmentation? *Science* 300:1239-1240.
- [263] Shao, G.F., W.C. Wu, G. Wu, X.H. Zhou, and J. Wu. 2003. An explicit index for assessing the accuracy of cover class areas. *Photogrammetric Engineering and Remote Sensing* 69:907-913.
- [264] Peng, S.L., H. Ren, J. Wu, and H.F. Lu. 2003. Effects of litter removal on plant species diversity: A case study in tropical Eucalyptus forest ecosystems in South China. *Journal of Environmental Sciences* 15(3):367-371.
- [265] Shen, W., J. Wu, Y. Lin, H. Ren, and M. Li. 2003. Effects of changing grain size on landscape pattern analysis. *Acta Ecologica Sinica* 23(11):2506-2231.
- [266] *Shen, W., J. Wu, H. Ren, Y. Lin and M. Li. 2003. Effects of changing spatial extent on landscape pattern analysis. *Acta Ecologica Sinica* 23(12):2219-2519.
- [267] *Shen, W., S. Peng, J. Wu, and Y. Lin. 2003. Simulation studies on carbon and nitrogen accumulation and its allocation pattern in forest ecosystems of Heshan in low subtropical China. *Acta Phytocologica Sinica* 27(5):690-699.
- [268] Wu, J., G. D. Jenerette, and J. L. David. 2003. Linking land use change with ecosystem processes: A hierarchical patch dynamics model. In: Subhro Guhathakurta (ed.), *Integrated Land Use and Environmental Models*. Springer, Berlin. pp.99-119.

2002

- [269] Wu, J., W. Shen, W. Sun, and P. T. Tueller. 2002. Empirical patterns of the effects of changing scale on landscape metrics. *Landscape Ecology* 17:761-782.
- [270] Wu, J. and R. Hobbs. 2002. Key issues and research priorities in landscape ecology: An idiosyncratic synthesis. *Landscape Ecology* 17:355-365.
- [271] *Luck, M. and J. Wu. 2002. A gradient analysis of urban landscape pattern: a case study from the Phoenix metropolitan region, Arizona, USA. *Landscape Ecology* 17:327-339.
- [272] Wu, J. and D. Marceau. 2002. Modeling complex ecological systems: An introduction. *Ecological Modelling* 153:1-6.
- [273] Wu, J. and J. L. David. 2002. A spatially explicit hierarchical approach to modeling complex ecological systems: Theory and applications. *Ecological Modelling* 153:7-26.
- [274] Wu, J. and C. Overton. 2002. Asian ecology: Pressing problems and research challenges. *Bulletin of Ecological Society of America* 83(3):189-194.
- [275] Qi, Ye, Ming Xu, and Jianguo Wu. 2002. Temperature sensitivity of soil respiration and its effects on ecosystem carbon budget: Nonlinearity begets surprises. *Ecological Modelling* 153:131-142.

- [276] Zhang, H. and J. Wu. 2002. A statistical thermodynamic model of the organizational order of vegetation. *Ecological Modelling* 153:69-80.
- [277] He, F., K. J. Gaston and J. Wu. 2002. On species occupancy-abundance models. *Ecoscience* 9(1):119-126.
- [278] Zhang, H., J. Wu and X. Han. 2002. The organizational order of vegetation and its global pattern. *Acta Phytocologica Sinica*. 26(2):129-139.
- [279] Wu, J. and W. Shen. 2002. The science of complexity and its applications in ecology. Pages 6-15 In: J. Wu, X. Han and J. Huang (eds), *Lectures in Modern Ecology: From Basic Ecology to Environmental Issues*. Science and Technology Press, Beijing.
- [280] Ren, H., S.L. Peng, and J. Wu. 2002. Ecosystem degradation and restoration ecology in China. Pages 190-210 In: M. H. Wong and A. D. Bradshaw (eds), *The Restoration and Management of Derelict Land*. World Scientific, New Jersey.
- [281] Ren, H., S.-L. Peng and J. Wu. 2002. Restoration ecology. Pages 144-158 In: J. Wu, X. Han and J. Huang (eds), *Lectures in Modern Ecology: From Basic Ecology to Environmental Issues*. Science and Technology Press, Beijing.
- [282] Zhu, W., J. Wu and L. Zhang. 2002. Urban Ecology: An ecological field facing new challenges. Pages 220-229 In: J. Wu, X. Han and J. Huang (eds), *Lectures in Modern Ecology: From Basic Ecology to Environmental Issues*. Science and Technology Press, Beijing.

2001

- [283] *Luck, M., G. D. Jenerette, J. Wu and N. Grimm. 2001. The urban funnel model and spatially heterogeneous ecological footprint. *Ecosystems* 4:782-796.
- [284] *Jenerette, G. D. and J. Wu. 2001. Analysis and simulation of land use change in the central Arizona - Phoenix region. *Landscape Ecology* 16:611-626.
- [285] Price, D. T., N. E. Zimmermann, P. J. van der Meer, M. Lexer, P. Leadley, I. Jorritsma, J. Schaber, D. F. Clark, P. Lasch, S. McNulty, J. Wu, and B. Smith. 2001. Regeneration in gap models: Priority issues for studying forest responses to climate change. *Climatic Change* 51:475-508.
- [286] Gao, Q. Yu, M., Yang, X., and Wu, J. 2001. Scaling simulation models for spatially heterogeneous ecosystems with diffusive transportation. *Landscape Ecology* 16 (4): 289-300.
- [287] Fagan, W. F., E. Meir, S. S. Carroll, and J. Wu. 2001. The ecology of urban landscapes: modeling housing starts as a density-dependent colonization process. *Landscape Ecology* 16(1):33-39.
- [288] Wu, J. 2001. Desertification. In: R. Robinson, ed. *Plant Sciences*. Macmillan Reference USA, New York, Volume 2: 70-73.

2000

- [289] Wu, J. and Y. Qi. 2000. Dealing with scale in landscape analysis: An overview. *Geographic Information Sciences* 6(1):1-5. (The journal name has changed to *Annals of GIS* in 2009.)
- [290] Wu, J., D. E. Jelinski, M. Luck and P. T. Tueller. 2000. Multiscale analysis of landscape heterogeneity: Scale variance and pattern metrics. *Geographic Information Sciences* 6(1):6-19. (The journal name has changed to *Annals of GIS* in 2009.)
- [291] Wu, J., Y. Liu and D. E. Jelinski. 2000. Effects of leaf area profiles and canopy stratification on simulated energy fluxes: The problem of vertical spatial scale. *Ecological Modelling* 134:283-297.

- [292] Zipperer, W. C., J. Wu, R. V. Pouyat, and S. T. A. Pickett. 2000. The application of ecological principles to urban and urbanizing landscapes. *Ecological Applications* 10(3): 685-688.
- [293] Collins, J.P., A.P. Kinzig, N.B. Grimm, W.F. Fagan, D. Hope, J. Wu, and E.T. Borer. 2000. A new urban ecology. *American Scientist* 88:416-425.
- [294] *Jenerette, G. D. and J. Wu. 2000. On the definitions of scale. *Bulletin of Ecological Society of America* 81(1): 104-105.
- [295] Wu, J. 2000. Landscape ecology: Concepts and theory. *Chinese Journal of Ecology* 19(1):42-52.
- [296] Wu, J. 2000. What is metapopulation, really? *Acta Phytocologica Sinica* 24(1):123-126.
- [297] Ren, H., J. Wu, S.-L. Peng, and L.-Z. Zhao. 2000. Concept of ecosystem management and its essential elements. *Chinese Journal of Applied Ecology* 11(3):455-458.
- [298] Ren, H., J. Wu and S.-L. Peng. 2000. Evaluation and Monitoring of ecosystem health. *Tropical Geography* 20(4):310-316.
- [299] Wu, J. 2000. Landscape ecology. Pages 308-330 In: Li Bo (ed), *Ecology*. Higher Education Press, Beijing.

1999

- [300] Wu, J. 1999. Hierarchy and scaling: Extrapolating information along a scaling ladder. *Canadian Journal of Remote Sensing* 25(4): 367-380.
- [301] Pickett, S. T. A., J. Wu and M. L. Cadenasso. 1999. Patch dynamics and the ecology of disturbed ground: A framework for synthesis. Pages 707-722 In: L. R. Walker (ed.), *Ecosystems of Disturbed Ground*. *Ecosystems of the World* 16. Elsevier, Amsterdam.
- [302] Reynolds, J. and J. Wu. 1999. Do landscape structural and functional units exist? Pages 273-296 In: Tenhunen, J. D. and P. Kabat, eds. *Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes*. John Wiley.
- [303] Aber, J. D., I. C. Burke, B. Acock, H. K. M. Bugmann, P. Kabat, J.-C. Menaut, I. R. Noble, J. F. Reynolds, W. L. Steffen, and J. Wu. 1999. Hydrological and biogeochemical processes in complex landscapes: What is the role of temporal and spatial ecosystem dynamics? Pages 335-355 In: Tenhunen, J. D. and P. Kabat, eds. *Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes*. John Wiley, Chichester.

1998

- [304] Jiang, M., J. Wu and Y. Jin. 1998. Landscape ecology and its application in conservation biology. *Journal of Wuhan Botanical Research* 16(3):273-279.
- [305] Chang, X. and J. Wu. 1998. Spatial analysis of pattern of sandy landscapes in Kerqin, Inner Mongolia. *Acta Ecologica Sinica* 18(3):225-232.

1997

- [306] Wu, J. and S. A. Levin. 1997. A patch-based spatial modeling approach: conceptual framework and simulation scheme. *Ecological Modelling* 101:325-346.
- [307] Wu, J., W. Gao and P.T. Tueller. 1997. Effects of changing spatial scale on the results of statistical analysis with landscape data: A case study. *Geographic Information Sciences* 3:30-41. (The journal name was changed to *Annals of GIS* in 2009.)
- [308] Wickham, J. D., J. Wu and D. F. Bradford. 1997. A conceptual framework for selecting and analyzing stressor data to study species richness at large spatial scales. *Environmental Management* 21(2): 247-257.

- [309] Chang, X. and J. Wu. 1997. Species diversity dynamics during desertification on Kerqin Sandy Land. *Chinese Journal of Applied Ecology* 8(2):151-156.

1996

- [310] Jelinski, D. E. and J. Wu. 1996. The modifiable areal unit problem and implications for landscape ecology. *Landscape Ecology* 11(3):129-140.
- [311] Qi, Y. and J. Wu. 1996. Effects of changing spatial resolution on the results of landscape pattern analysis using spatial autocorrelation indices. *Landscape Ecology* 11(1):39-50.
- [312] Wu, J. 1996. An overview of paradigm shift in ecology. *Acta Ecologica Sinica* 16(5):449-460.
- [313] Chang, X. and J. Wu. 1996. Fractal models and their ecological applications. *Chinese Journal of Ecology* 15(3):35-42.

1995

- [314] Wu, J. and O. L. Loucks. 1995. From balance-of-nature to hierarchical patch dynamics: A paradigm shift in ecology. *Quarterly Review of Biology* 70:439-466.
- [315] Wu, J. and W. Gao. 1995. Spatial patterns of species richness: A hierarchical perspective. *Chinese Biodiversity (Supplemental Issue in English)* 3:12-21.
- [316] Wu, J. and J. L. Vankat. 1995. Island biogeography: theory and applications. Pages 371-379 In: W. A. Nierenberg (ed), *Encyclopedia of Environmental Biology*. Vol. 2. Academic Press, San Diego.
- [317] Wu, J. 1995. Modeling dynamics of patchy landscapes: linking metapopulation theory, landscape ecology and conservation biology. Pages 97-116 In: R. Wang et al. (eds), *Wealth, Health and Faith*. China Environmental Science Press, Beijing.
- [318] Stockwell, J. D., T. V. Burkey, B. Cazelles, F. Menard, F. A. Ascoti, P. Himschoot, and J. Wu. 1995. Detecting periodicity in quantitative versus semi-quantitative time series. Pages 99-115 In: T. Powell and J. Steele (eds), *Ecological Time Series*. Chapman & Hall, New York.
- [319] Wu, J. and D. E. Jelinski. 1995. Pattern and scale in ecology: The modifiable areal unit problem. In: Li Bo (ed), *Lectures in Modern Ecology*. pp.1-9, Science Press, Beijing.

1994

- [320] Wu, J. and S. A. Levin. 1994. A spatial patch dynamic modeling approach to pattern and process in an annual grassland. *Ecological Monographs* 64(4):447-464.
- [321] Wu, J. 1994. The role of theory and models in ecology: An overview. *Chinese Journal of Ecology* 13(3): 76-79.

1993

- [322] Wu, J., J. L. Vankat and Y. Barlas. 1993. Effects of patch connectivity and arrangement on animal metapopulation dynamics: A simulation study. *Ecological Modelling* 65:221-254.
- [323] Wu, J. 1993. A simulation study of energy exchange processes and micrometeorology in an ecosystem. *CAASS Journal* 3:44-60.
- [324] Deutschman, D., G. A. Bradshaw, W. M. Childress, K. Daly, D. Grunbaum, M. Pascual, N. Schumaker and J. Wu. 1993. Mechanisms of patch formation. Pages 184-209 In: S.A. Levin, T.M. Powell, J.H. Steele (eds.). *Patch Dynamics*. Springer-Verlag, Berlin.

- [325] Garcia-Moliner, G., D. M. Mason, C. H. Greene, A. Lobo, B. Li, J. Wu and G. A. Bradshaw. 1993. Description and analysis of spatial patterns. Pages 70-89 In: S.A. Levin, T.M. Powell, J.H. Steele (eds.). Patch Dynamics. Springer-Verlag, Berlin.

1992

- [326] Wu, J. 1992. Detecting spatial patterns: the net-function interpolation. *Coenoses* 7(3):137-143.
- [327] Wu, J. 1992. Mathematical modeling and nature conservation. *Chinese Journal of Applied Ecology* 3:286-288.
- [328] Wu, J., B. Li and Y. Wu. 1992. Patchiness and patch dynamics: I. Concepts and mechanisms. *Chinese Journal of Ecology* 11(4):41-45.
- [329] Li, B., Y. Wu. and J. Wu. 1992. Patchiness and patch dynamics: II. Description and analysis. *Chinese Journal of Ecology* 11(5):28-37.
- [330] Wu, Y., J. Wu and B. Li. 1992. Patchiness and patch dynamics: III. Ecological and evolutionary consequences. *Chinese Journal of Ecology* 11(6): 34-41.
- [331] Wu, J. and O. L. Loucks. 1992. Xilingele grassland. Pages 67-84 In: The US National Research Council (ed), Grasslands and Grassland Sciences in Northern China. National Academy Press, Washington, D.C.
- [332] Loucks, O. L. and J. Wu. 1992. The Northeast. Pages 55-66 In: The US National Research Council (ed), Grasslands and Grassland Sciences in Northern China. National Academy Press, Washington, D.C.
- [333] Wu, J. and O. L. Loucks. 1992. The balance-of-nature and modern ecological theory: A shift in ecological thinking. Pages 16-29 In: SinoEco (ed), Advances in Modern Ecology. Science and Technology Press, Beijing.
- [334] Wu, J. 1992. Nature conservation and conservation biology: Concepts and models. Pages 174-186 In: SinoEco (ed), Advances in Modern Ecology. Science and Technology Press, Beijing.
- [335] Wu, J., J. L. Vankat and W. Gao. 1992. Ecological succession: An overview of theories and models. Pages 49-64 In: SinoEco (ed), Advances in Modern Ecology. Science and Technology Press, Beijing.

1991

- [336] Wu, J. and J. L. Vankat. 1991. A System Dynamics model of island biogeography. *Bulletin of Mathematical Biology* 53:911-940.
- [337] Wu, J. and J. L. Vankat. 1991. An area-based model of species richness dynamics of forest islands. *Ecological Modelling* 58:249-271.
- [338] Wu, J. 1991. Dissipative structure, hierarchy theory and ecosystems. *Chinese Journal of Applied Ecology* 2:181-186.
- [339] Vankat, J. L., J. Wu and S. Fore. 1991. Old growth by design: applying the concepts of landscape ecology. Pages 153-170 In: D. Henderson and L. D. Hedrick (eds), Restoration of Old Growth Forests in the Interior Highlands of Arkansas and Oklahoma. Ouachita National Forest and Winrock International Institute for Agricultural Development, Winrock.

1990

- [340] Wu, J. 1990. Modelling the energy exchange processes between plant communities and environment. *Ecological Modelling* 51:233-250.

- [341] Wu, J. 1990. Nature conservation theory and MacArthur-Wilson model. *Acta Ecologica Sinica* 10(2):187-191.
- [342] Wu, J., Y. Barlas and J.L. Vankat. 1990. Modelling patchy ecological systems using the System Dynamics approach. Pages 1355-1369 In: D.F. Andersen, G.P. Richardson and J.D. Sterman (eds), *System Dynamics 1990*, Vol. III. The System Dynamics Society, MIT, Cambridge.

1989

- [343] Wu, J. 1989. The theory of island biogeography: models and applications. *Chinese Journal of Ecology* 8(6):34-39.
- [344] Wu, J. and Y. Barlas. 1989. Simulating the dynamics of natural populations using the System Dynamics approach. Pages 6-11 In: S. Spencer and G. Richardson, (eds), *System Dynamics*. Society for Computer Simulation International. Western Multi-conference, SCS, San Diego.
- [345] Gao, W. G. and J. Wu. 1987. Advances in micrometeorological models of vegetation-atmospheric systems: From K-theory to higher-order closure approaches. *International Agricultural Meteorology (China)*, No.2, pp.8-11.
- [346] Zhong, Y., J. Wu and W. Shi. 1987. Investigation on vegetation types and characteristics of the mown natural grasslands at Baiyinxile Livestock Farm region. In: Inner Mongolia Univ. (ed), *Collection of Scientific Research Achievements in Plant Ecology*. pp. 672-681, Inner Mongolia University Press, Hohhot.

Book Reviews

- [1] Wu, J. 2011. Rangeland Degradation and Recovery in China's Pastoral Lands. *Restoration Ecology* 19:681-682.
- [2] Wu, J. 2006. A guide for spatial analysis in ecology. *BioScience* 56:938-939.
- [3] Wu, J. 2005. Effects of land-use change on ecosystems. *Ecology* 86(12):3420-3421.
- [4] Wu, J. 2005. A new paradigm for a transdisciplinary science of desertification. *Diversity and Distributions* 11:362-363.
- [5] Wu, J. 2001. A top-down approach to landscape ecology. *Ecology* 82(2):604-606.
- [6] Wu, J. 2001. Urban ecology. *Ecological Engineering* 16:581-582.
- [7] Wu, J. 1998. Scaling-Up: From Cell to Landscape. *Ecological Engineering* 10(4): 369-371.
- [8] Wu, J. 1995. Modelling dynamic systems using STELLA II. *Ecological Modelling* 82(2):208-210.
- [9] Wu, J. 1995. Biodiversity and Landscapes: A Paradox of Humanity, *Journal of Environmental Quality* 24(3):554-556.

Reports, Proceedings Papers, and Other Publications

- [1] Wu, J. 2016. Landscape sustainability science: Why, what, and how in a nutshell. *LifeScienceToday* (<http://blogs.springer.com/lst/landscape-sustainability-science-why-what-and-how-in-a-nutshell/>).
- [2] Wu, J. 2012. A sustainability paradigm: scientific integration, university design, and sustainability practice. In: *Proceedings of the 2nd SUCCESS Forum on Sustainability Science*, Sino-US Center for Conservation, Energy, and Sustainability Science, Inner Mongolia University, Hohhot.

- [3] Wu, J. (ed.) 2012. Proceedings of the Second SUCCESS Symposium on Sustainability Science, Sino-US Center for Conservation, Energy, and Sustainability Science, Inner Mongolia University, Hohhot.
- [4] 2011. Sustainability for Arizona — The Issue of Our Age (Chinese Translation), Sino-US Center for Conservation, Energy, and Sustainability Science, Inner Mongolia University, Hohhot.
- [5] Wu, J. (ed.) 2008. Proceedings of the First SUCCESS Symposium on Sustainability Science, Sino-US Center for Conservation, Energy, and Sustainability Science, Inner Mongolia University, Hohhot.
- [6] Wu, J. 2008. Changing perspectives in ecology and biodiversity conservation: Achieving landscape and regional sustainability. In: Proceedings of the Conference on Biodiversity Conservation in Tropical Planted Forests in Southeast Asia, Bintulu, Sarawak, Malaysia, January 15-18, 2007.
- [7] Alberti, M., C. Redman, J. Wu, J. Marzluff, M. Handcock, J. Anderies, P. Waddell, D. Fox, H. Kautz, J. Hepinstall. 2006. "Urban Landscape Patterns and Global Environmental Change (GEC): Complex dynamics and emergent properties." Newsletter of the *International Human Dimension of Global Climate Change*. Spring 2006.
- [8] Musacchio, L. and J. Wu. 2003. Pattern, Process, Scale, and Hierarchy: Advancing Interdisciplinary Collaboration for Creating Sustainable Urban Landscapes and Communities. Arizona State University, Tempe, 54pp.
- [9] The Heinz Center for Science, Economics and the Environment. 2004. The State of the Nation's Ecosystems: Measuring the Lands, Waters, and Living Resources of the United States. The H. John Heinz III Center for Science, Economics and the Environment, Cambridge University Press, Cambridge. (Panelist of the Urban/Suburban Work Group)
- [10] Wu, J. and O. L. Loucks. 1998. Hierarchical patch dynamics as a framework for scaling. Proc. of the Workshop on Scaling and Modelling in Forestry: Applications in Remote Sensing & GIS, University of Montreal, Montreal, March 19-21, 1998. pp. 64-71.
- [11] Wu, J. and J. F. Reynolds. 1998. Developing models across multiple scales based on hierarchy theory. Proc. of the Modelling Complex Systems Conference, New Orleans, July 12-17, 1998. pp.189-215.
- [12] Wickham, J. D., J. Wu, and D. F. Bradford. 1995. Stressor Data Sets for Studying Species Diversity at Large Spatial Scales. US EPA 600/R-95/018. Office of Research and Development, U.S. United States Environmental Protection Agency, Washington, DC.
- [13] Wu, J. 1993. Modeling the landscape as a dynamic mosaic of patches: some computational aspects. Cornell Theory Center Technical Report Series, CTC93TR140, Cornell University, Ithaca, New York, 20pp.
- [14] Wu, J. 1993. A method for studying spatial patterns: the net-function interpolation. Cornell Theory Center Technical Report Series, CTC93TR116, Cornell University, Ithaca, NY, 20pp.
- [15] Wu, J. 1992. Balance of nature and environmental protection: a paradigm shift. Proceedings of the 4th International Conference of Asia Experts. pp. 1-20, Portland State University, Portland, OR, May 7-8, 1992.
- [16] Wu, J. 1990. Emerging ecological paradigms and sustainable agriculture. Proc. 2nd Ann. Conf. CAASS, pp. 74-76, Oregon State University, Corvallis, OR, July 27-28, 1990.

Reprinted Articles:

- [1] Wu, J. and T. Wu. 2014. Ecological resilience as a foundation for urban design and sustainability, originally published in *Resiliency in Ecology and Urban Design* (2013), reprinted in Forster O. Ndubisi (ed.), *The Ecological Design and planning Reader*, Island Press.
- [2] Wu, J., J. L. Vankat and Y. Barlas. 1993. Effects of patch connectivity and arrangement on animal metapopulation dynamics: a simulation study. *Ecological Modelling* 65:221-254. In *“Handbook of Ecological and Environmental Models,”* Edited by S. E. Jorgensen et al., CRC Press, 1996, pp.495-496.
- [3] Wu, J. and J. L. Vankat. 1991. A System Dynamics model of island biogeography. *Bulletin of Mathematical Biology* 53:911-940. In *“Environmental Science Stella Stacks,”* Edited by D. Kesler, Wm C. Brown Publishers, 1993.
- [4] Wu, J. and J. L. Vankat. 1991. An area-based model of species richness dynamics of forest islands. *Ecological Modelling* 58:249-271. In *“Handbook of Ecological and Environmental Models,”* edited by S.E. Jorgensen et al., CRC Press, 1996, pp. 343-344.
- [5] Wu, J. 1990. Modelling the energy exchange processes between plant communities and environment. *Ecological Modelling* 51:233-250. In *“Handbook of Ecological and Environmental Models,”* ed. by S.E. Jorgensen et al., CRC Press, 1996, pp. 537-538.

INVITED PRESENTATIONS & SELECTED CONFERENCE TALKS

2019

- [1] Wu., J. “China’s urbanization: Patterns, drivers, and environmental consequences”, The Hong Kong Jockey Club University of Chicago Academic Complex and the University of Chicago Francis and Rose Yuen Campus, Hong Kong, March 9-13, 2019.
- [2] Wu, J. “Landscape Sustainability Science (LSS): Linking Ecological, Geographical, and Design Sciences to Improve Human Wellbeing”, Department of Forestry and Natural Resources, Purdue University, West Lafayette, Feb. 19, 2019.

2018

- [3] Wu, J. “Landscapes, cities, and sustainability”, College of Architecture and Urban Planning, Beijing University of Technology, Beijing, December 13, 2018.
- [4] Wu, J. “Landscape sustainability science: Integrating biodiversity, ecosystem services and human wellbeing”, The 1st International Symposium on Lifecourse Epidemiology and Spatial Science (ISLES), Leiden, The Netherlands, July 17, 2018.
- [5] Wu, J. “The History and Key Ideas of Modern Landscape Ecology”, College of the Architecture, Tsinghua University, Beijing, June 5, 2018.
- [6] Wu, J. “History and state of the science of modern landscape ecology”, College of the Environment and Ecology, Xiamen University, Xiamen, June 1, 2018.
- [7] Wu, J. “The state of the science in urban ecology”, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, May 31, 2018.
- [8] Wu, J. “Landscape sustainability science: theory and practice”, Plenary presentation at the 2018 Tongji-NJAU Symposium on Ecophronetic Practice Research”, Nanjing Agricultural University, Nanjing, May 20, 2018.
- [9] Wu, J. “Thirty years of landscape ecology: advances and challenges”, Jingshi Lecture Series in Geographical Sciences, Beijing Normal University, Beijing, May 16, 2018.

- [10] Wu, J. “Sustainability science as the scientific foundation of ecological civilization”, Jiangxi University of Finance and Economics, May 4, 2018.
- [11] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, & Human Wellbeing: The Landscape Sustainability Science Paradigm”, Nanchang University, Nanchang, May 2, 2018.
- [12] Wu, J. “Landscape ecology: past, present and future”, Sun Yat-sen University, Guangzhou, April 26, 2018.
- [13] Wu, J. “Hierarchy and Spatial Scaling: A Cross-disciplinary Perspective”, Zhejiang University, Hangzhou, April 23, 2018.
- [14] Wu, J. “What Is Landscape Sustainability Science (LSS)?”, Shanghai Normal University, Shanghai, April 20, 2018.
- [15] Wu, J. “Thirty Years of Landscape Ecology (1987-2017): Retrospects and Prospects”, Banquet Presentation, 2017 Annual Symposium of US-IALE, Chicago, April 10, 2018.
- [16] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, & Human Wellbeing for Sustainability”, Roger E. Wilson Lecture, Department of Biology, Miami University, Oxford, April 4, 2018.
- [17] Wu, J. “Landscapes, cities, and sustainability science”, Environmental Science Forum and Leadership Training Program, Chinese Research Academy of Environmental Sciences, Beijing, Feb. 2., 2018.
- [18] Wu, J. “Urban ecology and sustainability”, National Natural Science Foundation of China – Urban Agglomerations Research Project Annual Meeting, Xijiao Hotel, Beijing, January 26, 2018.

2017

- [19] Wu, J. “Understanding and operationalizing Ecosystem Services in Changing Landscapes: The Landscape Sustainability Science Paradigm”, Ecosystem Services Partnership World Congress: Ecosystem Services for Eco-civilization, Shenzhen, December 11-15, 2017.
- [20] Wu, J. “Urban ecology and urban sustainability”, Sun Yat-Sen University, Guangzhou, China, November 13, 2017.
- [21] Wu, J. “Thirty years of landscape ecology: Retrospect and prospect”, The 9th National Congress on Landscape Ecology, Guangzhou, China, November 10-12, 2017.
- [22] Wu, J. “Linking Biodiversity, Ecosystem Services, and Human Wellbeing for Sustainability: With an Emphasis on Research Challenges and Opportunities in China”, State University of New York, Albany, Sept. 23, 2017.
- [23] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, and Human Wellbeing”, at the 12th International Congress on Ecology (INTECOL), Beijing, August 22, 2017.
- [24] Wu, J. “The ecology of landscapes and cities”, Department of Earth System Science, Tsinghua University, Beijing, July 13, 2017.
- [25] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, & Human Wellbeing: The Landscape Sustainability Science Paradigm”, Ningxia University, Yinchuan, July 10, 2017.
- [26] Wu, J. “Past, present, and future of landscape ecology”, Dalian Minzu University, Dalian, July 5, 2017.
- [27] Wu, J. “Urban Ecology and Sustainability: A Landscape Ecological Perspective”, University of Chile, Santiago, May 29, 2017.

- [28] Wu, J. “The Past, Present, and Future of Landscape Ecology”, The 1st Conference of the Chilean Association for Landscape Ecology (Chile-IALE), Valparaiso, May 25, 2017.
- [29] Wu, J. “Urban Ecology and Sustainability: A Landscape/Transdisciplinary Perspective”, Shanghai Normal University, Shanghai, May 15, 2017.
- [30] Wu, J. “What is landscape sustainability science?”, Zhejiang Forestry Research Institute, Hangzhou, May 9, 2017.
- [31] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, and Human Wellbeing: The Landscape Sustainability Science Paradigm”, Zhejiang University, Hangzhou, May 8, 2017.
- [32] Wu, J. “Landscape Sustainability Science”, Inner Mongolia University, Hohhot, May 3, 2017.
- [33] Wu, J. “What is landscape sustainability science?”, Beijing Normal University, Beijing, April 27, 2017.
- [34] Wu, J. “Patterns, Processes, and Sustainability of Urbanization: An Urban Landscape Ecology Framework”, The 2017 Annual Symposium of US-IALE, Baltimore, April 9, 2017.
- [35] Wu, J. “Linking Biodiversity, Ecosystem Function, Ecosystem Services, and Human Wellbeing: The Landscape Sustainability Science Paradigm”, The 2016 Ecological Integration Symposium, Texas A&M University, College Station, March 23, 2017.
- [36] Wu, J. “The Past, Present, and Future of Landscape Ecology”, Department of Landscape Architecture, Tsinghua University, February 28, 2017.
- [37] Wu, J. “Ecology and Sustainability of Urban Areas: A Landscape Perspective”, Nanjing Agricultural University, February 24, 2017.
- [38] Wu, J. “Sustainability Indicators”, Nanjing Agricultural University, February 23, 2017.
- [39] Wu, J. “Landscape Sustainability Science: A Scientific Paradigm for Spatially Optimizing the Regional Landscape Mosaic”, Yunnan University, February 16, 2017.

2016

- [40] Wu, J. “Landscapes Ecology: Past, Present, and Future”, Fudan University, Shanghai, October 20, 2016.
- [41] Wu, J. “Landscape sustainability science: A new paradigm for promoting ecosystem services and human wellbeing on the Mongolian Plateau”, The 11th International Conference on Sustainable Natural Resources and Development in the Mongolian Plateau, Ulaanbaatar, Mongolia, August 8-9, 2016.
- [42] Wu, J. “Ecology and sustainability of urban areas: A landscape perspective”, Keynote at the Second World Congress of the Society of Urban Ecology, Shanghai, July 8-10, 2016.
- [43] Wu, J. “Landscape ecology: Past, present and future”, Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, June 27, 2016.
- [44] Wu, J. “Urban ecology and landscape sustainability”, School of Architecture and Urban Planning, Nanjing University, Nanjing, June 21, 2016.
- [45] Wu, J. “landscape sustainability science: Coupling ecosystem services with human wellbeing in changing landscapes”, International Workshop on Problems and Challenge in Grassland Ecology on the Mongolian Plateau, Hohhot, June 16, 2016.
- [46] Wu, J. “Measuring sustainability: Concepts and indicators. College of Economics and Management, Inner Mongolia University, Hohhot, June 14, 2016.

- [47] Wu, J. “Urban ecology, landscape ecology, & sustainability science - a confluence of studies of human-environment systems”, Zhejiang Sci-Tech University, Hangzhou, June 2, 2016.
- [48] Wu, J. “Urban sustainability and landscape ecology”, National Taipei University, Taiwan, April 25, 2016.
- [49] Wu, J. “Linking biodiversity, ecosystem function, ecosystem services, and human wellbeing: the landscape sustainability science paradigm”, Keynote, The 7th EAFES International Congress, Daegu, Korea, April 19-22, 2016.
- [50] Wu, J. “Landscape sustainability science: Coupling ecosystem services with human wellbeing in changing landscapes”, US-IALE Annual Symposium, Asheville, NC, USA, April 3, 2016.
- [51] Wu, J. “Landscape ecology: Past, present, and future”, College of Geographical Science and Planning, Sun Yat-Sen University, March 2, 2016.
- [52] Wu, J. “Linking biodiversity, ecosystem function, ecosystem services, and human wellbeing”, College of Life Sciences, Sun Yat-Sen University, March 2, 2016.

2015

- [53] Wu, J. “Hierarchy and spatial scaling: A cross-disciplinary perspective”, Invited by Graduate Students, Department of Ecosystem Science and Management, Texas A&M University, College Station, Nov. 10, 2015.
- [54] Wu, J. “Testing the Biodiversity-Ecosystem Functioning Relationship in the World’s Largest Grassland: Overview of the IMGRE Project”, Workshop on Building US-China Collaboration in Biodiversity Studies, Raleigh, NC, USA, October 15-18, 2015.
- [55] Wu, J. “Landscape ecology and landscape sustainability science”, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, August 11, 2015.
- [56] Wu, J. “The science of ecological civilization”, Forum on Ecological Civilization and Economic Development for the Silk Road Zone, August 05, 2015.
- [57] Wu, J. “Landscape ecology in regional contexts: American, European, and Asian perspectives”, Symposium on “Shaping Landscape Ecology Approaches Worldwide in Different Regional Contexts”, the 9th IALE World Congress on Landscape Ecology, Portland, OR, July 9, 2015.
- [58] Wu, J. “Urban landscape ecology: A retrospective and prospective overview”, Symposium on “Urban landscape ecology: Global perspectives”, the 9th IALE World Congress on Landscape Ecology, Portland, OR, July 6, 2015.
- [59] Wu, J. “The state of the science of landscape ecology and sustainability”, School of Architecture, Tsinghua University, Beijing, July 2, 2015.
- [60] Wu, J. “Theory and practice of nature conservation: Landscape ecology and sustainability science perspectives”, School of Nature Conservation, Beijing Forestry University, Beijing, July 1, 2015.
- [61] Wu, J. “Landscape ecology and sustainability science”, College of Public Administration and College of Land Management, Nanjing Agricultural University, Nanjing, June 18, 2015.
- [62] Wu, J. “Advances in sustainability science”, the 8th International Symposium on Modern Ecology, Tianjin, June 12, 2015.
- [63] Wu, J. “What is landscape sustainability science?” The 3rd International Forum on Landscape Sustainability Science, Beijing, June 9, 2015.

- [64] Wu, J. “Testing the biodiversity-ecosystem functioning relationship in the world’s largest grassland: Overview of the IMGRE project”, International Workshop on Habitat Fragmentation and Biodiversity Conservation in the Thousand Island Lake, Qiandaohu, China, May 5, 2015.
- [65] Wu, J. “Ecology and sustainability of Inner Mongolia: Past, present, and future”, Inner Mongolia University, Hohhot, March 19, 2015.
- [66] Wu, J. “Ecology and sustainability of dryland ecosystems and landscapes”, International Workshop on Future Earth: Science and Technology for Society, Michigan State University, East Lansing, Feb. 25, 2015.

2014

- [67] Wu, J. “Ecology and sustainability of landscapes: The state of the science”, School of Geographical Sciences and Urban Planning, ASU, Tempe, November 7, 2014.
- [68] Wu, J. “Landscape sustainability science: A new direction and the ultimate goal for natural resources research”, The 7th National Congress of the Chinese Society of Natural Resources, Zhengzhou, October 12, 2014.
- [69] Wu, J. “Landscape ecology and sustainability: Key topics and major advances”, Nanjing University, Nanjing, August 4, 2014.
- [70] Wu, J. “Scientific writing: Basic rules and IMRaD”, Inner Mongolia University, Hohhot, China, July 15, 2014.
- [71] Wu, J. “Urban ecology: The state of the science and future directions”, The 2nd International Forum on Landscape Sustainability Science, Beijing Normal University, May 28, 2014.
- [72] Wu, J. “Landscape sustainability science: improving ecosystem services and human well-being in changing landscapes”, University of Maine, Orono, ME, April 2014.
- [73] Wu, J. “Ecology and sustainability of cities and landscapes: Integrating research with practice”, University of Toledo, Toledo, OH, March 21, 2014.
- [74] Wu, J. “Urban ecology: Past, present, and future”. Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China, February 24, 2014.
- [75] Wu, J. “Urban ecology and sustainability: The state of the science and future directions,” Graduate Student Research Proposal Workshop, National Socio-Environmental Synthesis Center, SESYNC, Annapolis, Maryland, Jan. 15-17, 2014.

2013

- [76] Wu, J. “Convergence of landscape ecology and urban ecology, with US and China perspectives,” Colloquium on Ecology for Land and City: Exploring the Confluences of Landscape, Road, and Urban Ecology (in honor of Richard T.T. Forman’s retirement), Harvard University, Sept. 13-15, 2013.
- [77] Wu, J. “The state-of-the-science in urban ecology and sustainability: a landscape perspective,” World Congress on Ecology (INTECOL 2013), London, August 18-23, 2013.
- [78] Wu, J. “Urban ecology: The state of the science,” Workshop on Urban Ecology, Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, August 13, 2013.
- [79] Wu, J. “Landscape sustainability science,” The 1st CHESS Symposium on Landscape Sustainability Science,” Beijing Normal University, Beijing, June 27-29, 2013.

- [80] Wu, J. "Landscape sustainability science: improving ecosystem services and human well-being in changing landscapes," Symposium on Coupled Natural and Human Systems, Nanjing, June 18-20, 2013.
- [81] Wu, J. "Urban ecology: past, present, and future," Zhongshan University, Guangzhou, June 17, 2013.
- [82] Wu, J. "Landscape ecology: state-of-the-science and implications for conservation and restoration," The 7th International Symposium on Modern Ecology, Guangzhou, June 9-15, 2013.
- [83] Wu, J. "Urban landscape ecology: an overview," Urban Ecology Symposium, Beijing Normal University, Beijing, May 31, 2013.
- [84] Wu, J. "Landscape Principles of Ecological Restoration: Nothing Sustains without Supporting Context," The Chinese Academy of Sciences Forum on Ecological Reconstruction and Restoration, Beijing, April 25-26, 2013.
- [85] Wu, J. "The science of sustainability," Mingde Forum Lecture, Qinghua University, Beijing, April 18, 2013.
- [86] Wu, J. "The science of sustainability: From ecosystem services to human well-being," The 2nd International Conference on Energy and Environmental Protection, Guilin, China, April 20-21, 2013.
- [87] Wu, J. "Key issues in landscape ecology," Symposium on Ecological Civilization and Landscape Ecology, Beijing, Feb. 22, 2013.
- [88] Wu, J. "Landscape ecology and sustainability," Beijing Forestry University, Feb. 22, 2013.

2012

- [89] Wu, J. "Landscape Ecology and Landscape Sustainability Science: A State of the Science Overview," Keynote at the IUFRO International Conference on Landscape Ecology, Concepcion, Chile, November 5-12, 2012.
- [90] Wu, J. "The State of the Science of Urban Ecology: A Landscape Perspective," Plenary presentation at the International Symposium on Frontiers in Urban Ecological Research and Planning: Linking Ideas from the East and West, Shanghai, China, October 25—30, 2012.
- [91] Wu, J. "Sustainability, Energy, and Landscapes: An Actionable Science Perspective," Keynote speech at the 2012 International Conference on Energy and Environmental Protection (ICEEP 2012), Hohhot, China, June 23-24, 2012.
- [92] Wu, J. "Landscape ecological principles for conservation," Advanced Ecology Lectures: Biodiversity and Climate Change. Fudan University, Shanghai, May 30-31, 2012.
- [93] Wu, J. "Landscape Ecology and Sustainability Science," East China Normal University, Shanghai, May 29, 2012.
- [94] Wu, J. "Landscape Ecological Principles on Biodiversity Conservation," presented at Chinese Research Academy of Environmental Sciences, Beijing, March 5, 2012

2011

- [95] Wu, J. "Landscape Ecology, Urban Ecology, and Sustainability Science," Beijing Normal University, Beijing, December 19, 2011.
- [96] Wu, J. "Sustainability science and grassland ecosystem management," Plenary talk at the Sustainable Grassland Ecosystem Management Conference, Institute of Botany, The Chinese Academy of Sciences, Beijing, October 28-30, 2011.

- [97] Wu, J. "Urban landscape ecology: Key issues and future directions," Keynote Speech at the World Congress on Landscape Ecology, Beijing, August 19-22, 2011.
- [98] Wu, J. "Landscape sustainability," Symposium on Key Issues and Research Priorities in Landscape Sustainability, IALE 2011, Beijing, August 19, 2011.
- [99] Wu, J. "Landscape ecology and climate change research," Keynote speech, International Symposium on Modern Ecology, Nanjing University, August 1-4, 2011.
- [100] Wu, J. "Landscape ecology and climate change in the Mongolian Plateau," Plenary speech at the International Symposium on the Mongolian Plateau and Climate Change, Hohhot, July 23-24, 2011.
- [101] Wu, J. "Grassland research and landscape ecology: Beyond community and ecosystem perspectives," Plenary speech at the International Symposium on Frontiers in Grassland Ecology, Hohhot, July 12-14, 2011.
- [102] Wu, J. "Climate change and ecological impacts in Inner Mongolia," The 2nd MAIRS Workshop on Coupled Human-Environment Systems in Dryland, Harbin, June 8-10, 2011
- [103] Wu, J. "Hierarchy theory in ecology", Invited talk at the 2011 Cary Conference, Cary Institute of Ecosystems, New York, May 10, 2011.
- [104] Wu, J. "Landscape ecology and sustainability", presented at Chinese Research Academy of Environmental Sciences, Beijing, June 13, 2011
- [105] Wu, J. "Landscape ecology and sustainability", presented at Graduate School of Chinese Academy of Sciences, Beijing, June 13, 2011
- [106] Wu, J. "Landscape ecology and sustainability", presented at Northeastern Forestry University, Harbin, June 9, 2011
- [107] Wu, J. "Landscape ecology and sustainability", presented at Chinese Academy of Forestry, Beijing, Feb. 20, 2011

2010

- [108] Wu, J. "Landscape ecology and sustainability science: a transdisciplinary perspective. Beijing Capital Normal University, China, December 15, 2010.
- [109] Wu, J. "Landscape ecology: past, present, and future," School of Life Sciences, Sun Yat-Sen University (Zhongshan University), Guangzhou, December 13, 2010.
- [110] Wu, J. "Paradigm shift in urban ecological research: toward "sustainability of cities". The 2nd Xiamen International Forum on Urban Environment. Xiamen (Amoy), China, December 11, 2010.
- [111] Wu, J. "A Landscape Ecological Approach to Sustainability: Theory, Design Principles, and Measures," Invited presentation at the International Symposium on Sustainability Science: The Emerging Paradigm and the Urban Environment," Montclair State University, Montclair, NJ, Oct. 25-27, 2010.
- [112] Wu, J. "Principles of Resilience and Sustainability: Implications for Grassland Management in Inner Mongolia," The International Symposium on Adaptive Management of Family Pasture on Temperate Grassland, Hohhot, July 24-26, 2010.
- [113] Wu, J. "Urban Ecology: Past, Present, and Future," National Taipei University, San Shia, Taiwan, June 17, 2010.
- [114] Wu, J. "Landscape Ecology and Landscape Architecture: Two Fields with One Common Goal," Taiwan Cultural University, Taipei, June 15, 2010.

- [115] Wu, J. "Ecological Resilience and Sustainability," Symposium on China's Ecology in Rapidly Changing Environment, Wuyishan, China, May 15, 2010.
- [116] Wu, J. "Landscape Ecology and Sustainability Science - A Hierarchical and Pluralistic Perspective," University of British Columbia-Okanagan, May 7, 2010.
- [117] Wu, J. "Landscape Ecology: A Pluralistic and Hierarchical Perspective," 2010 Annual Symposium of US-IALE, University of Georgia, Athens, April 6, 2010.
- [118] Wu, J. "Landscape ecology: the state of the science," College of Life Sciences, Inner Mongolia University, Hohhot, January 18, 2010.

2009

- [119] Wu, J. "Quantifying Spatial Pattern and Ecological Processes in Urban Landscapes: A Case Study of Phoenix, AZ," The 2nd US-China Workshop on Climate Change, Arizona State University, Tempe, October 27, 2009
- [120] Wu, J. "Landscape Ecology: Past, Present, and Future," Graduate University of the Chinese Academy of Sciences, Beijing, Oct. 10, 2009
- [121] Wu, J. "Landscape Ecology," ASLA Media Roundtable: Journals for Professional Research, The 2009 American Society of Landscape Architects Annual Meeting, September 18-21, Chicago
- [122] Wu, J. "Landscape Sustainability: A Search for Principles and Measures," The 10th World Congress of International Association for Ecology (INTECOL), Brisbane, August 16-21, 2009
- [123] Wu, J. "Testing Biodiversity-Ecosystem Functioning Relationships: Overview of the Inner Mongolia Grassland Removal Experiment (IMGRE)," International Symposium on Grassland Ecosystem Research: Issues and perspectives, Beijing, August 12-14, 2009
- [124] Wu, J, S Naeem, J Elser, Y Bai, J Huang, L Kang, C Clark, Q Wang, Q Pan, X Han. "Testing Biodiversity-Ecosystem Functioning Relationships," The 94th ESA Annual Meeting, Albuquerque, August 2-7, 2009
- [125] Wu, J. "Landscape Ecology: Past, Present, and Future," International Forum on Ecological Vision: Challenge, Response and Strategy. Institute of Applied Ecology, Chinese Academy of Sciences, Shengyang, July 15-17, 2009
- [126] Wu, J. "Landscape Ecology and Sustainability Science," Ningxia University, Yinchuan, July 3, 2009
- [127] Wu, J. "Sustainability Paradigm: Scientific Integration, University Design Aspirations, and Sustainable Practices," The 5th International Symposium on Modern Ecology, Lanzhou, June 25-July 2, 2009
- [128] Wu, J. "Paradigm Shift in Urban Ecological Research: From Ecology in Cities, Ecology of Cities to Sustainability of Cities," The 2009 International Ecocity Forum, Huaibei, May 22-25, 2009
- [129] Wu, J. "Landscape ecology and sustainability science," Department of Renewable Resources, University of Alberta, Edmonton, March 25, 2009.
- [130] Wu, J. "Scaling pattern and process in ecology: Beyond allometry," School of Forestry, Northern Arizona University, Flagstaff, January 28, 2009.

2008

- [131] Wu, J. "Changing perspectives on biodiversity conservation: From species to sustainability," Plenary talk at the 8th National Symposium on Biodiversity Conservation and Sustainable Utilization, Jinhua, Zhejiang, China, October 17, 2008.

- [132] Wu, J. "From ecology in cities, ecology of cities, to sustainability of cities," US-China Symposium on Urban Sustainability. Beijing, June 24, 2008.
- [133] Wu, J. "Landscape ecology and sustainability science: What are they, really?," Nanjing University, Nanjing, China, May 26, 2008.
- [134] Wu, J. "Pattern, Process, and Scale: Ecology and Sustainability of Landscapes," Dartmouth College, Hanover, NH, April 30, 2008.
- [135] Wu, J. "Integrating ecological, economic, and social processes in landscapes: Sustainability modeling approaches," Presented at the 2008 Annual Symposium of the US Association for Landscape Ecology (US-IALE), Madison, WI, April 9, 2008.

2007

- [136] Wu, J. "Changing perspectives in biodiversity conservation: Towards global sustainability," Institute of Botany, Chinese Academy of Sciences, Beijing, Nov. 24, 2007.
- [137] Wu, J. "Landscape ecology and sustainability science: The expanding human dimension," Ecology Center Seminar Series, Utah State University, Logan, UT, Nov. 15, 2007.
- [138] Wu, J. "Urban ecology and the Central Arizona-Phoenix LTER project," Ecology Center Seminar Series, Utah State University, Logan, UT, Nov. 16, 2007.
- [139] Wu, J. "Landscape ecology and design principles for sustainability." Presented at World Congress on Landscape Ecology, Wageningen, The Netherlands, July 8-13, 2007.
- [140] Wu, J. "Urban landscape sustainability: the whole is larger than the sum of parts." Invited talk at Conference on Urban Ecology and Management, Salzburg, Austria, June 29-30, 2007.
- [141] Wu, J. "Urbanization and sustainability science." Invited seminar at Graduate University of Chinese Academy of Sciences, Beijing, June 12, 2006.
- [142] Wu, J. "Changing perspectives in ecology and biodiversity conservation: achieving landscape and regional sustainability." Keynote speech at the Conference on Biodiversity Conservation in Tropical Planted Forests in Southeast Asia, Bintulu, Sarawak, Malaysia, January 15-18, 2007.

2006

- [143] Wu, J. "Landscape ecology of cities." The 1st Workshop of the ASU-Chinese Academy of Science Joint Center for Urban Sustainability, Beijing, December 9-11, 2006.
- [144] Wu, J. "Urbanization and sustainability science." Invited seminar at Beijing University, Beijing, October 31, 2006.
- [145] Wu, J. "Landscape ecology and sustainability science: Emerging paradigms." Invited seminar at Purdue University, West Lafayette, Indiana, September 26, 2006.
- [146] Wu, J. "Urbanization and sustainability science." Invited seminar at Sichun University, Chengdu, August 17, 2006.
- [147] Wu, J. "Urbanization and sustainability science." Invited seminar at Zhejiang University, Hangzhou, June 10, 2006.
- [148] Wu, J. "Urbanization and sustainability: a landscape ecological perspective." Invited speech at the H.W.S. Cleveland Symposium in Landscape Architecture: Myths and Realities of Ecology, Design, and Ecosystem Health in the Metropolitan Landscape, University of Minnesota, April 21-22, 2006.

- [149] Wu, J., Y. Bai, X. Han. "Biodiversity and ecosystem functioning: Insights from the Inner Mongolia Grassland." Presented at the 59th Annual Meeting of the Society for Range Management, Vancouver, Feb. 14, 2006.

2005

- [150] Wu, J. "Write to publish: Guide for scientific writing," Graduate School of the Chinese Academy of Sciences, Beijing, June 17, 2005.
- [151] Wu, J. "Biodiversity and ecosystem functioning: Past, present, and future," The 3rd International Symposium on Modern Ecology, Beijing, June 1-7, 2005.

2004

- [152] Wu, J. "Scale issues in landscape ecology," Institute of Geographic Sciences and Natural Resources Research, Beijing, October 27, 2004.
- [153] Wu, J. "Landscape ecology," Nankai University, Tianjin, October 25, 2004.
- [154] Wu, J. "Landscape ecology: past, present, and future," Beijing University, Beijing, October 19, 2004.
- [155] Wu, J. "Landscape ecology and its application in urban planning," Qinghua University, Beijing, October 14, 2004.
- [156] Wu, J. "Scale and scaling in ecology," South China Botanical Garden, Guangzhou, October 12, 2004.
- [157] Wu, J. "Spatial scaling: Theory and methods," Graduate School of the Chinese Academy of Sciences, Beijing, July 3, 2004.
- [158] Wu, J. "Key issues in urban ecology," East China Normal University, Shanghai, China, June 20, 2004.
- [159] Wu, J. "Frontiers in landscape ecology," Zhejiang University, Hangzhou, China, June 14, 2004.

2003

- [160] Wu, J. "Landscape ecology: Research priorities and future directions." Keynote speech, The 4th National Congress on Landscape Ecology, Beijing, Dec. 12-15, 2003.
- [161] Wu, J. "A landscape ecological approach to the study of cities." Duke University, Durham, NC, Nov. 7, 2003.
- [162] Wu, J. "Key topics in landscape ecology," Graduate School of the Chinese Academy of Sciences, Beijing, September 23, 2003.
- [163] Wu, J. "A Landscape Perspective on Comparative Urban Ecology." International Workshop on Comparative Ecology of Cities and Towns, Melbourne, Australia, 19-22 July, 2003.
- [164] Wu, J. "Spatial scaling: Universality versus pluralism." The 2003 World Congress on Landscape Ecology, Darwin, Northern Territory, Australia, July 13-17, 2003.
- [165] Wu, J. "Key research topics in landscape ecology," Beijing Normal University, Beijing, January 3, 2003.

2002

- [166] Wu, J. "Landscape ecological principles for nature conservation and ecological restoration," Plenary speech at International Symposium on Ecosystem Succession Theory and Ecological Restoration, Guangzhou, December 27-29, 2002.

- [167] Wu, J. "Landscape ecology as a scientific basis and methodology for understanding and combating desertification and dust/sand storms, Presented at the Sino-US Workshop on Dust Storms and Their Effects on Human Health, Raleigh, North Carolina, November 25–26, 2002.
- [168] Wu, J. "Toward a landscape ecology of cities: Beyond buildings, trees and forests." Plenary talk, International Symp. on Urban Forestry and Eco-Cities, Shanghai, Sept. 16-22, 2002.
- [169] Wu, J. "Spatial Scaling: Extrapolating Information from the Plot to the Region," US Environmental Protection Agency Office of Research and Development, National Center for Environmental Research, Washington, DC, Feb. 13, 2002.
- [170] Wu, J. Scaling across heterogeneous landscapes: Theory and methods. Presented at The VIII International Congress on Ecology, Seoul, Korea, August 11-18, 2002.
- [171] Wu, J. and R. Hobbs. Top 10 list for landscape ecology: An idiosyncratic synthesis. Presented at The 17th Annual Symposium of US-IALE (International Association of Landscape Ecology), Lincoln, Nebraska, April 23-27, 2002.

2001

- [172] Wu, J. "Landscape Ecology: Pattern, Process, Scale and Hierarchy," Guest Lectures, Nanjing University, Nanjing, China, June 4-9, 2001.
- [173] Wu, J. "Pattern, process, scale and hierarchy: A landscape ecology perspective," Institute of Botany, Chinese Academy of Sciences, China, June 12, 2001.
- [174] Wu, J. "Pattern, process, scale and hierarchy: A geospatial modeling perspective," Rutgers University, March 21, 2001.
- [175] Wu, J. "Pattern, process, scale and hierarchy: A landscape ecology perspective," University of Kansas, Lawrence, KS, Feb. 28, 2001.
- [176] Wu, J. Pattern and scale: The behavior of landscape metrics. Presented at the 2001 Annual Meeting of Ecological Society of America, Madison, Wisconsin, Aug. 5-10, 2001.
- [177] Wu, J. Effects of changing grain size and extent in Landscape Characterization and Pattern Analysis: Generalities and idiosyncrasies. The 16th Annual Symposium of US-IALE (International Association of Landscape Ecology), Arizona State University, Tempe, April 25-29, 2001.
- [178] Wu, J. Top 10 List for Landscape Ecology in the 21 Century: Introduction. The 16th Annual Symposium of US-IALE (International Association of Landscape Ecology), Arizona State University, Tempe, April 25-29, 2001.

2000

- [179] Wu, J. "Hierarchical patch dynamics," University of California, Davis, June 8, 2000.
- [180] Wu, J. "Linking landscape pattern with ecological processes: A hierarchical patch dynamics approach," University of Florida, Gainesville, May 30, 2000.
- [181] Wu, J. and S. Pickett. "New paradigms in urban ecology." 2000 Annual Meeting of Ecological Society of America, Snowbird, August 6-10, 2000.
- [182] Wu, J. A landscape ecological approach to the study of urban systems. Proc. 15th Annual Symposium of US-IALE (International Association for Landscape Ecology), Fort Lauderdale, April 15-19, 2000. pp.161.

1999

- [183] Wu, J. "Effects of Changing Scale on Landscape Analysis: A Hierarchical Perspective," ESPM, University of California, Berkeley, November 10, 1999.
- [184] Wu, J. Effects of disturbance on metapopulation dynamics and species coexistence: When and how does space matter? Presented at The 5th World Congress on Landscape Ecology, International Association for Landscape Ecology, Snowmass, July 29-Aug. 3, 1999.
- [185] Wu, J. and J. F. Reynolds. Linking pattern and process using hierarchical patch dynamics modeling (HPDM). Presented at The 5th World Congress on Landscape Ecology, International Association for Landscape Ecology, Snowmass, July 29-Aug. 3, 1999.
- [186] Wu, J., D. Jenerette and M. Luck. A hierarchical patch dynamics approach to urban landscape ecology. Presented at the 1999 Annual Meeting of Ecological Society of America, Spokane, WA, Aug. 8-12, 1999. ESA ABSTRACTS: 215.
- [187] Wu, J. Hierarchical modeling: A scaling ladder approach. Presented at the Annual Meeting of International Society of Ecological Modeling, US Section, Spokane, WA, Aug. 8-12, 1999.
- [188] Wu, Jianguo. Hierarchical patch dynamics and landscape ecology, Presented at The 2nd International Symposium on Modern Ecology, Beijing, June 15-19, 1999.
- [189] Wu, J. (with Orié L. Loucks). Hierarchical Linkages Integrating Forest Decline and Air Pollutants. Presented at the 1999 AAAS Annual Meeting and Science Innovation Exposition, Anaheim, CA, January 21-26, 1999.

1998

- [190] Wu, J. (with Jim Reynolds). Do landscape structural and functional units exist? Dahlem Workshop on Integrating Hydrology, Ecosystem Dynamics, and Biogeochemistry in Complex Landscapes. Berlin, Germany, January 18-23, 1998.
- [191] Wu, J. Ecosystem Dynamics in Complex Landscapes, Institute of Botany, Chinese Academy of Sciences, Jan. 18, 1998
- [192] Wu, J. Disturbance and population dynamics: The role of spatial structure. Presented at the 1998 Annual Meeting of Ecological Society of America, Baltimore, Aug. 2-6, 1998. ESA ABSTRACTS: 230.
- [193] Wu, J. and J. F. Reynolds. Developing models across multiple scales based on hierarchy theory. Presented at the International Conference on Complex Systems Modeling, New Orleans, July 13-17, 1998.
- [194] Wu, J. and O. L. Loucks. Hierarchical patch dynamics and scaling. Presented at the International Workshop on Scaling & Modelling in Forestry: Applications in Remote Sensing & GIS, Université de Montréal, March 19-21, 1998.

1997

- [195] Wu, J. "Landscape Ecology: Principles, Methods, and Applications." Institute of Forestry and Environment, Beijing, August 4, 1997.
- [196] Wu, J., P. T. Tueller, and W. Gao. A study of multiple-scale characteristics of arid landscapes in the Great Basin, USA. pp.3-4 In Proc. Intern. Symp. Grassland Management, Hohhot, August 15-18, 1997.
- [197] Wu, J., and D. E. Jelinski. Hierarchical analysis of spatial patterns: A comparison of different methods. 1997 Ann. Mtg. ESA, Albuquerque, August 10-14, 1997.

- [198] Wu, J., P. T. Tueller and W. Gao. Multiple-scale characteristics of the landscape pattern of the Great Basin, USA. pp.123 In Proc. 12th Annual Symposium on Landscape Ecology, US-IALE, Duke University, Durham, March 16-19, 1997.

1996

- [199] Wu, J. A patch explicit modeling approach and the problem of relevant spatial detail. *Bull. Ecol. Soc. Am.* 77(3):492.
- [200] Wu, J. Hierarchical patch dynamics and landscape ecology. pp.98 In Proc. 11th Annual U.S. Landscape Ecology Symposium, US-IALE, Galveston, TX, March 26-29, 1996.

1995

- [201] Wu, J. Aggregation across spatial scales: Problems and implications for global change research. Presented at Symp. on Global Change, SAC-IV, IGBP, Beijing, Oct 23-27, 1995.
- [202] Wu, J. An overview of the paradigm shift in ecology. pp.181-182 In Proc. of the Vth National Congress of Ecological Society of China, ESC, Zhuhai, China, Nov 7-11, 1995.
- [203] Wu, J. Spatial scales and global change. Institute of Botany, Chinese Academy of Sciences, Oc. 26, 1995.
- [204] Wu, J. and O. L. Loucks. A hierarchical patch dynamics paradigm in ecology: Elements and implications. *Bull. Ecol. Soc. Am.* 76(3):405 (ESA annual meeting).

1994

- [205] Wu, J. "Linking Pattern with Process: A Patch Dynamics Perspective." Boston University, Boston, Dec. 30, 1994.
- [206] Wu, J. "Pattern and Scale in Ecology," International Symposium on Modern Ecology, Hohhot, China, Sept. 4-13, 1994.
- [207] Wu, J., D. E. Jelinski and Y. Qi. Spatial pattern analysis of a boreal forest landscape: scale effects and interpretation. pp.165 In Proc. VI Intern. Congress of Ecology, Manchester, U.K.

1993

- [208] Wu, Jianguo and Zhonghou Li: "Monitoring and Analyzing Natural Resource Utilization Pattern in Xilingol Region of Inner Mongolia Using GIS," 1993 Conference on the Grassland Ecosystem of the Mongolian Steppe, CSC/PRC, National Academy of Sciences and the Johnson Foundation, Wingspread, Racine, Nov. 4-7, 1993.
- [209] Wu, Jianguo. "Linking Pattern and Process: Modeling and Implementations," Huxley College of Environmental Studies, Western Washington University, Bellingham, August 10, 1993.
- [210] Wu, Jianguo. "Modeling Nature: Linking Pattern and Process," Desert Research Institute, The University of Nevada System, Reno, July 20, 1993.
- [211] Wu, Jianguo. "A Spatially Explicit Patch Dynamics Modeling Approach to Pattern and Process in Ecological Systems," Theory Center, Cornell University, Ithaca, May 28, 1993.
- [212] Wu, Jianguo. "Patch Dynamics as a New Paradigm in Ecology: Modeling and Implications," Dept. of Biological Sciences, Bowling Green State Univ., Bowling Green, April 22, 1993.
- [213] Wu, Jianguo: "Linking Pattern and Process: Models and Implications in Conservation Biology," School of Forestry, Michigan Tech. Univ., Houghton, April 15, 1993.
- [214] Wu, Jianguo. "Modeling Nature: The Patch Dynamics Paradigm," Department of Biology, University of Massachusetts, Boston, April 12, 1993.

- [215] Wu, J. and S.A. Levin. A spatially explicit patch dynamic modeling approach: Principles and an example from the Jasper Ridge serpentine grassland. *Bull. Ecol. Soc. Am.* 74(2):494.
- [216] Wu, Jianguo, and Simon A. Levin. A spatially explicit patch dynamic model of a grassland landscape. pp.109 In *Proc. 8th Annual U.S. Landscape Ecology Symp.*, Oak Ridge National Laboratory, Oak Ridge.

1992

- [217] Wu, Jianguo: "Balance of Nature and Environmental Protection: A Philosophical and Ecological Overview," The Fourth International Conference of Asia Experts - China's Environment, Portland State University, Portland, May 7-8, 1992.
- [218] Wu, Jianguo: "Modeling of Grassland Ecosystems," Conference on the Grassland Ecosystem of the Mongolian Steppe, CSC/PRC, National Academy of Sciences and the Johnson Foundation, Wingspread, Racine, March 26-29, 1992.
- [219] Wu, Jianguo: "Modelling Ecological Systems Using the System Dynamics Approach: Some Case Studies," Center for Theory and Simulation, Cornell University, Ithaca, Jan. 17, 1992.
- [220] Wu, J. A new method for studying spatial patterns: the net function interpolation. *Bull. Ecol. Soc. Am.* 73:393.
- [221] Wu, J. Simulating animal metapopulation dynamics in a landscape. pp.119 In *Proc. 5th Ann. Landscape Ecol. Symp.*, US-IALE, Oregon State University, Corvallis, OR.

1991

- [222] Wu, J. and J.L. Vankat. 1991. Effects of habitat fragmentation on species richness: a simulation study. *Bull. Ecol. Soc. Am.* 72:295.

1990

- [223] Wu, J. and J.L. Vankat. 1990. System Dynamics modelling of the theory of island biogeography. pp.413 In *Proc. 5th Intern. Congr. Ecol.*, Yokohama, Japan, Aug. 23-30, 1990.
- [224] Wu, J. and J.L. Vankat. 1990. A mathematical model of forest island dynamics with STELLA simulation. pp.63-64 In *Proc. 5th Ann. Landscape Ecol. Symp.*, US-IALE, Miami Univ., Oxford.
- [225] Wu, J. and J.L. Vankat. 1990. System Dynamics modelling of forest island dynamics. pp.63 In *Proc. 5th Ann. Landscape Ecol. Symp.*, US-IALE, Miami University, Oxford, OH.

1989

- [226] Wu, J. and J.L. Vankat. 1989. A framework for studying species population dynamics of landscape patches. pp.47 In *Proc. 4th Ann. Landscape Ecol. Symp.*, US-IALE, Colorado State University, Fort Collins.

1988

- [227] Wu, J. and Y. Barlas. 1988. A System Dynamics model of population growth and regulation. Presented at the 1988 Annual Meeting of ESA, University of California, Davis.

1987

- [228] Wu, J., K.T. Paw U and J.L. Vankat. 1987. A simulation model of energy exchange processes between plant communities and environment. Presented at the 1987 Annual Meeting of ESA, Ohio State University, Columbus.

MENTORING OF GRADUATE & UNDERGRADUATE STUDENTS

Currently Advised/Co-advised Graduate Students

- [1] Zhou, Bingbing (Ph.D., Landscape sustainability science), School of Sustainability, Arizona State University, 2015-
- [2] Fang, Xuening (Ph.D., Landscape sustainability), Beijing Normal University, 2016-
- [3] Guo, Xuan (Ph.D., Landscape sustainability), Beijing Normal University, 2016-
- [4] Jia, Liuyao (Ph.D., Landscape sustainability), Chongqing University, 2018-
- [5] Jiang, Honglei (Ph.D., Landscape ecology), Beijing Normal University, 2017-
- [6] Kong, Lingqiang (Ph.D., Landscape sustainability), Beijing Normal University, 2018-
- [7] Liu, Lumeng (Ph.D., Landscape sustainability), Beijing Normal University, 2017-
- [8] Liu, Yang (Ph.D., Landscape ecology), Beijing Normal University, 2016-
- [9] Shang, Chenwei (Ph.D., Landscape ecology), Beijing Normal University, 2015-
- [10] Tu, Xingyue (Ph.D., Urban sustainability), Beijing Normal University, 2015-

Completed Ph.D. Students with Wu as Advisor or Co-Advisor

- [1] Wilson, Maxwell (Ph.D., Landscape ecology and biodiversity), School of Life Sciences, Arizona State University; 2012-2018
- [2] Fernandez, Ignacio (Ph.D., Urban ecology and sustainability), School of Sustainability Arizona State University; 8/2012-12/2017
- [3] Jeffrey Ackley (Ph.D., urban landscape ecology), School of Life Sciences, Arizona State University; 8/2009-8/2015
- [4] Ron Pope (Ph.D., urban landscape ecology), School of Life Sciences, Arizona State University; 8/2007-5/2014
- [5] Alexander Buyantuyev (Ph.D., urban landscape ecology), School of Life Sciences; Arizona State University; 2002-2008
- [6] Kaesha Neil (Ph.D., urban landscape ecology), School of Life Sciences, Arizona State University; 8/2002–12/2008
- [7] Darrel Jenerette (Ph.D., landscape/urban ecology), School of Life Sciences, Arizona State University; 1998 –2004
- [8] Zeng, Xiaoji (Ph.D., Landscape sustainability), Beijing Normal University, 2014-2018
- [9] Qiao, Jianmin (Ph.D., Landscape sustainability), Beijing Normal University, 2014-2018
- [10] Hao, Ruifang (Ph.D., Landscape ecology), Beijing Normal University, 2014-2017
- [11] Sun, Zexiang (Ph.D., Urban ecology), Beijing Normal University, 2014-2017
- [12] Zhang, Da (Ph.D., Urban ecology/sustainability), Beijing Normal University, 2014-2017
- [13] Cao, Qian (Ph.D., Landscape Sustainability Science), Beijing Normal University, 2014-2016
- [14] Ma, Qun (Ph.D., Urban Ecology), Beijing Normal University, 2012-2016
- [15] Huang, Lu (Ph.D., Urban Ecology and Planning), Zhejiang Univ., Hangzhou, 2008-2015
- [16] Zhang, Meng (Ph.D., Urban Sustainability), China University of Mining Technology, 2013-2015

- [17] Liu, Zhifeng (Ph.D., Urban Ecology), Beijing Normal University, 2012-2014
- [18] Liu, Yupeng (Ph.D., Urban Ecology), Beijing Normal University, 2012-2014
- [19] Li, Cheng (Ph.D., Urban Landscape Ecology), East China Normal Univ., Shanghai, 2008-2013
- [20] Luo, Shanghua (Ph.D., Urban Landscape Ecology), Research Center for Eco-environmental Science, Chinese Academy of Sciences, Beijing, 2008-2013
- [21] Zhang, Jing (Ph.D., Landscape Ecology), Inner Mongolia University, Hohhot, 2010-2013
- [22] Mao, Qizheng (Ph.D., Urban Landscape Ecology), Research Center for Eco-environmental Science, Chinese Academy of Sciences, Beijing, 2008-2012
- [23] Sun, Xiaopeng (Ph.D., Urban Ecology/Eco-Beijing), College of Life Sciences, Beijing Normal University, 2008-2012
- [24] Liu, Jin (Ph.D., Landscape Ecology/Sustainability Science), Institute of Botany, Chinese Academy of Sciences, Beijing, 2005-2011
- [25] Xu, Guanghua (Ph.D., Landscape Ecology/Sustainability Modeling), Institute of Botany, Chinese Academy of Sciences, Beijing, 2008-2011
- [26] Tian, Yu (Ph.D., Conservation Biology/The Amur tiger), College of Life Sciences, Beijing Normal University, 2008-2011
- [27] Zhou, Ting (Ph.D., Restoration ecology), Sun Yat-Sen University, Guangzhou, 2009-2011
- [28] Hu, Guang (Ph.D., Landscape Ecology/Habitat Fragmentation), Zhejiang Univ., Hangzhou, 2007-2011
- [29] Yang, Qi (Ph.D., Landscape and urban ecology), Nanjing University, 2010-2011
- [30] Yi, Chengbo (Ph.D., Tourism sustainability), Sichuan University, Chengdu, 2007-2010
- [31] Wang, Hongfang (Ph.D., Landscape Genetics), College of Life Sciences, Beijing Normal University, 2006-2010
- [32] Tianming Wang (Ph.D., landscape ecology/watershed analysis), College of Life Sciences, Beijing Normal University, 2006-2008
- [33] Weijun Shen (Ph.D., landscape ecology), South China Institute of Botany, Chinese Academy of Sciences; 1998-2001

Completed M.S. Students with Wu as Advisor or Co-Advisor

- [1] Milena Gross (M.S., Sustainability, Leuphana Program), School of Sustainability; 2016-2017
- [2] Tracy Shoumaker (M.S., Urban ecology), School of Life Sciences; 2008-2016 (part-time)
- [3] Fei Yuan (M.S., grassland ecology), School of Life Sciences, ASU; 2006-2011
- [4] Lisa Dirks (M.S., sustainability science), School of Sustainability, ASU; 2006-2010
- [5] Jennifer Litteral (M.S., landscape/conservation ecology), School of Life Sciences; 2006-2009
- [6] Sheryl Berling-Wolff (M.S., landscape/urban ecology), School of Life Sciences; 1997-2002 (part-time)
- [7] John "EBo" David (M.S., landscape/urban ecology), School of Life Sciences; 1/2000-8/2002
- [8] Matt Luck (M.S., landscape/urban ecology), School of Life Sciences, ASU; 8/1998-5/2001

- [9] Guan, Xuanxuan (M.S., Ecosystem/Landscape Ecology), Institute of Botany, Chinese Academy of Sciences, Beijing, 2008-2012
- [10] Chen, Yun (M.S., Urban Ecology/LUCC of Beijing), College of Life Sciences, Beijing Normal University, 2008-2011
- [11] Li, Qin (M.S., Conservation Ecology/The Amur tiger), College of Life Sciences, Beijing Normal University, 2008-2011
- [12] Wang, Wei (MS, Grassland Ecology/Carbon Sequestration), Institute of Botany, Chinese Academy of Sciences, Beijing, 2007-2011
- [13] Dong, Ning (MS, Landscape Ecology/Sustainability Science), Institute of Botany, Chinese Academy of Sciences, Beijing, 8/2007-2011
- [14] Zhongwen Li (MS, landscape ecology/forest fragmentation), College of Life Sciences, Beijing Normal University, 2006-2008
- [15] Yu Tian (M.S., landscape ecology/population dynamics of the Siberian tiger), College of Life Sciences, Beijing Normal University, 2006-2008
- [16] Que Sun (M.S., landscape ecology), Zhejiang University, Hangzhou, 2006-2008
- [17] Lizhong Ding (M.S., landscape ecology), Zhejiang University, Hangzhou, 2002-2005

Committee Member of Following Graduate Students

- [1] Brian Crnobrna (M.S.), School of Life Sciences, ASU, Ecology; 2016-
- [2] Darin Kopp (Ph.D.), University of Oklahoma, Norman; 2015-
- [3] Doulas Lawton (Ph.D.), School of Life Sciences, ASU, Ecology, 2017-
- [4] Luis Weber (Ph.D.), School of Life Sciences, ASU, Ecology; 2017-
- [5] Kira Sorochnikina (M.S.), School of Life Sciences, ASU, Plant Biology and Conservation; 2016-2017
- [6] Erick Lundgren (M.S.), School of Life Sciences, ASU, Ecology; 2015-2017
- [7] Ze Ren (Ph.D.), School of Life Sciences, ASU, Ecosystem Ecology; 2015-2016
- [8] Palden Choying (Ph.D.), School of Life Sciences, ASU, Conservation Biology; 2011-2016
- [9] Aimee Kessler (Ph.D.), School of Life Sciences, ASU, Ecology; 2006-2015
- [10] Laureano A. Gherardi (Ph.D.), School of Life Sciences, ASU, Ecology; 2010 - 2014
- [11] Rebecca Hale (Ph.D.), School of Life Sciences, ASU, Ecology; 2008-2013
- [12] Max Wilson (M.S.), School of Life Sciences, ASU, Conservation Biology; 2010-2012
- [13] Meg White (Ph.D.), School of Life Sciences, ASU, Ecology; 2005-12/2011
- [14] Sohyun Park (Ph.D.), College of Design, ASU, Environmental Design and Planning; 2006-8/2011
- [15] Brigitte Hogan (Ph.D.), School of Life Sciences, ASU, Ecology; 2005-2010
- [16] Lihua Yang (Ph.D.), School Of Public Affairs, ASU, 2007-2009
- [17] Jason Walker (Ph.D.), School of Life Sciences, ASU, Urban ecology; 2002-2008
- [18] Rychener Tyler (MS), School of Life Sciences, ASU, 2002-2006

- [19] Art Stiles (Ph.D.), School of Life Sciences, ASU, Plant ecology; 1998-2005
- [20] Julia Curro (Ph.D.), Biology, ASU, Ecosystem ecology; 1997-2005
- [21] Jill Welter (MS and Ph.D.), Biology, ASU, Ecosystem ecology; 1995-2004
- [22] Ernesto de Castro (Ph.D.), Plant Biology, ASU, Landscape ecology; 2000-2004
- [23] Todd Katzner (Ph.D.), Biology, ASU, Conservation/Landscape Ecology, 1996-2002
- [24] Ying Xu (Ph.D.), Civil & Environmental Engineering, ASU; 1998-2002
- [25] Lisa Dent (Ph.D.), Biology, ASU, Ecosystem ecology; 1995-1999
- [26] Joyce Francis (Ph.D.), Plant Biology, ASU, Community/landscape ecology; 1995-1999

Supervised undergraduate students:

- [1] Maria Eller (2016-2017); Served as Director of Honors Thesis (entitled: “Musical Improvisation Insights into Systems Thinking”; defended on April 3, 2017), Barrett Honors College, ASU
- [2] Michelle Jones (2015), Undergraduate student researcher
- [3] Jonathan Schultz (2008), Undergraduate student researcher
- [4] Jamie McCullough (2001), Undergraduate student researcher
- [5] Cindy Overton (1999-2002), Undergraduate student researcher
- [6] Ron Pope (1997-1998), undergraduate student researcher

SUPERVISED POSTDOCS AND VISITING SCIENTISTS:

Postdoctoral researchers:

- [1] Hongyan Bian (2016-2020, ASU), Southwest University
- [2] Qian Cao (2016-2019; BNU/ASU), Beijing Normal University
- [3] Dehua Mao (2016-2018, ASU), Chinese Academy of Sciences
- [4] Qun Ma (2016-2018; BNU/ASU), Beijing Normal University
- [5] Yupeng Liu (2014-2017; BNU/ASU), Beijing Normal University
- [6] Zhifeng Liu (2014-2016; BNU/ASU), Beijing Normal University
- [7] Chi Zhang (2009-2011), Chinese Academy of Sciences, Urumqi
- [8] Suying Li (2008-2011; IMU), Inner Mongolia University of Technology, Hohhot
- [9] Chris Clark (2007-2009), US EPA
- [10] Bochul Whang (2007-2008; supported by Korean Science Foundation), Korea
- [11] Weijun Shen (2002-2004), South China Botanical Garden, Chinese Academy of Sciences, Guangzhou
- [12] Wanli Wu (2001)
- [13] Russell Watkins (1999)

Visiting scientists/Research associates:

- [1] Bai, Yongfei (2004, 2005, 2007, 2009, 2010), Institute of Botany, Chinese Academy of Sciences
- [2] Bian, Zhenxing (2016-2017), Shenyang Agricultural University, Shenyang
- [3] Cao, Qian (2014-2015), Beijing Normal University, Beijing
- [4] Chang, Xueli (1994-1995), Ludong University, Yantai
- [5] Fang, Xuening (2017-2018), Visiting Ph.D. student from Beijing Normal University
- [6] Gan, Xiaoyu (2015-2016), Sichuan University, Chengdu

- [7] Gao, Guangkuo (2010-2011), University of Shanghai for Science and Technology, Shanghai
- [8] Gong, Jianzhou (2013-2014), Guangzhou University, Guangzhou
- [9] Gu, Zhihui (2014-2015), Shenzhen University, Shenzhen
- [10] Guo, Jie (2015-2016), Nanjing Agricultural University, Nanjing
- [11] He, Lan (2015-2016), Southwest University, Chongqing
- [12] Hu, Guang (2015), Zhejiang Sci-Tech University, Hangzhou
- [13] Hu, Guohua (2015-2016), Sun Yat-Sen University, Guangzhou
- [14] Hu, Tian (2018; visiting Ph.D. student), Beijing University, Shenzhen
- [15] Huang, Jianhui (2007, 2009, 2010), Institute of Botany, Chinese Academy of Sciences, Beijing
- [16] Huang, Lu (2011-2012), Hangzhou Dianzi University, Hangzhou
- [17] Jia, Zhibin (2011), Inner Mongolia University, Hohhot
- [18] Jiang, Mingxi (1996), Wuhan Institute of Botany, Chinese Academy of Sciences, Wuhan
- [19] Kobayashi, Tatsuaki (2008), Chiba University, Japan
- [20] Leng, Xin (2016-2017), Nanjing University, Nanjing
- [21] Li, Ang (2011), Institute of Botany, Chinese Academy of Sciences, Beijing
- [22] Li, Cheng (2009-2010), Guangdong Institute of Eco-environmental Science and Technology
- [23] Li, Guoqi (2007-2008), Ningxia University, Yinchuan
- [24] Li, Jingwei (2017-2018), Visiting Ph.D. student from Beijing Normal University
- [25] Li, Junxiang (2009-2010, 2007), East China Normal University, Shanghai
- [26] Li, Xiaoyu (2016-2017), Chinese Academy of Sciences, Urumqi
- [27] Li, Xinyu (2016), Beijing Institute of Landscape Architecture, Beijing
- [28] Liang, Cunzhu (2009-2010), Inner Mongolia University, Hohhot
- [29] Liu, Huiyu (2012-2013), Nanjing Normal University, Nanjing
- [30] Liu, Yuanbo (1999), Nanjing Institute of Geography and Limnology, Chinese Academy of Sciences, Nanjing
- [31] Liu, Yupeng (2013-2014), Beijing Normal University, Beijing
- [32] Liu, Zhifeng (2013-2014), Beijing Normal University, Beijing
- [33] Liu, Zhimin (2007), Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang
- [34] Lu, Jianbo (2007), Hangzhou Normal University, Hangzhou
- [35] Ma, Keming (2008), Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing
- [36] Ma, Qun (2014-2015, 2016-2017), Beijing Normal University, Beijing
- [37] Ma, Wenhong (2013-2014), Inner Mongolia University, Hohhot
- [38] Mao, Dehua (2016-2018, ASU), Chinese Academy of Sciences
- [39] Niu, Jianming (2008), Inner Mongolia University, Hohhot
- [40] Ou, Weixin (2012-2013), Nanjing Agricultural University, Nanjing
- [41] Pei, Fengsong (2015-2016), Jiangsu Normal University
- [42] Qian, Guixia (2008-2009), Inner Mongolia University, Hohhot
- [43] Ren, Hai (1999), South China Botanical Garden, Guangzhou
- [44] Shen, Weijun (2000-2001), South China Botanical Garden, Guangzhou
- [45] Sun, Danfeng (2011-2012), China Agricultural University, Beijing

- [46] Sun, Zexiang (2015-2016), Beijing Normal University, Beijing
- [47] Tian, Guangjin (2007-2008), Beijing Normal University, Beijing
- [48] Tian, Yu (2009-2010), Chinese Research Academy of Environmental Sciences, Beijing
- [49] Tu, Xingyue (2017-2018), Visiting Ph.D. student from Beijing Normal University
- [50] Wang, Zhengjun (2009-2010), Capital Normal University, Beijing
- [51] Whang, Bo Chul (2007-2008), Chonbuk National University, Jeonju, South Korea
- [52] Xiao, Hong (2008-2009), Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang
- [53] Xie, Hualin (2012-2013), Jiangxi University of Finance and Economics, Nanchang
- [54] Xie, Zhenglei (2017-2018), Jiangxi Normal University, Nanchang
- [55] Xing, Shaohua (2013-2014), Beijing Forestry University, Beijing
- [56] Xu, Caiyao (Sept. - Nov., 2017), Visiting Ph.D. student from Nanjing University
- [57] Yang, Qi (2009-2010), Chinese Research Academy of Environmental Sciences, Beijing
- [58] Yi, Chengbo (2007-2009), Sichuan University, Chengdu
- [59] Yu, Deyong (2014-2015), Beijing Normal University, Beijing
- [60] Yu, Runbing (2012-2013), Inner Mongolia University, Hohhot
- [61] Yuan, Xiu (2013-2014), Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing
- [62] Zeng, Lijun (2014-2015), Shandong University of Science and Technology, Qingdao
- [63] Zeng, Xiaoji (2016-2017), Beijing Normal University, Beijing
- [64] Zhang, Da (2015-2016), Beijing Normal University, Beijing
- [65] Zhang, Jing (2010-2011), Dalian Minzu University, Dalian
- [66] Zhang, Liquan (2000), East China Normal University, Shanghai
- [67] Zhang, Meng (2013-2014), China Agricultural University, Beijing
- [68] Zhang, Qing (2012-2013), Inner Mongolia University, Hohhot
- [69] Zhao, Chengyi (2000), Chinese Academy of Sciences, Urumqi
- [70] Zhao, Songting (2016), Beijing Institute of Landscape Architecture, Beijing
- [71] Zhao, Yuanyuan (2015-2016), Beijing Forestry University, Beijing
- [72] Zhou, Ting (2009-2010), Sun Yat-Sen University, Guangzhou
- [73] Zhu, Ming (2014-2015), Nanjing University, Nanjing

EXTERNAL DISSERTATION/THESIS EXAMINER

- [1] Department of Geography, University of Victoria, Victoria, BC, Canada: Kristen Kilistoff: On the modifiable areal unit problem and kernel home range analyses: The case of woodland caribou (*Rangifer tarandus caribou*), Sept. 2014 (Thesis)
- [2] Department of Geography, University of Hong Kong: Yujing Xie, Habitat Loss and Fragmentation under Rapid Urbanization: The Spatio-temporal Dynamics of Causes, Processes and Consequences at Landscape Level, 2013. (Dissertation)
- [3] School of Geosciences, University of Sydney, Sydney, Australia: Elizabeth Moylan, An Investigation into Spatio-Temporal Models used in Landscape History Studies, 2006. (Dissertation)
- [4] Department of Geography, University of Hong Kong: Yanfeng (Felix) Yang, Land Use Changes and Ecological Rehabilitation: A Case Study in the Reservoir Region of the Three Gorges Project in China, 2005. (Dissertation)

- [5] Institute of Remote Sensing Applications, Chinese Academy of Sciences: Huang, Remote sensing and landscape analysis, 2003. (Dissertation)
-