Weimin Xi, Ph.D.

Professor of Biology, ESA Certified Senior Ecologist
Department of Biological and Health Sciences
Texas A&M University-Kingsville
700 University Blvd., MSC 158, Kingsville, TX 78363
Office: (361)-593-2758; Email: weimin.xi@tamuk.edu

Xi Lab; Faculty Webpage
Google Scholar Profile; ResearchGate Profile
ORCID (Open Researcher and Contributor ID) Profile

EDUCATION

Doctor of Philosophy	Biology, *University of North Carolina at Chapel Hill, USA*
Master of Science	Biology, *Southwest University, Chongqing, China*
Bachelor of Science with honors	Geography, *Capital Normal University, Beijing, China*

PROFESSIONAL APPOINTMENT

Department of Biological and Health Sciences, Texas A&M University-Kingsville
Professor, Doctoral Graduate Faculty **2022 September-Present**
Associate Professor (tenured), Doctoral Graduate Faculty **2017 September-2022 August**
Assistant Professor, Graduate Faculty **2013 September-2017 August**

Department of Forest and Wildlife Ecology, University of Wisconsin-Madison
Research Associate **2010 May-2013 July**

Department of Entomology, Texas A&M University
Postdoctoral Research Associate **2005 December-2010 April**

Department of Biology, University of North Carolina at Chapel Hill
Ph.D. Candidate/Research Assistant **2000 Sept.-2005 November**

Department of Biology, University of North Carolina at Chapel Hill
Visiting Research Instructor **1998 September-2000 August**

Department of Biology, University of North Carolina at Chapel Hill
Visiting Scholar **1997 August-1998 August**

Department of Geography, Capital Normal University
Associate Professor **1993 August-1997 July**

Department of Geography, Capital Normal University
Assistant Professor **1988 August-1993 July**

Department of Geography, Capital Normal University
Lecturer **1984 August-1988 July**

HONORS AND AWARDS (Selected)

1. Dean's Award for Outstanding Scholarly & Creative Production, College of Arts and Sciences, Texas A&M University-Kingsville, 2019
2. Dean's Award for Outstanding Service, College of Arts and Sciences, Texas A&M University-Kingsville, 2017
3. University Digital Fellow, Texas A&M University-Kingsville, 2017
4. The Albert Nelson Marquis Lifetime Achievement Award, 2017
5. Because You Care Award by Keep Kingsville Beautiful, City of Kingsville, 2015
6. The Impact Award by the Graduate School, University of North Carolina at Chapel Hill, 2009
7. Certified Senior Ecologist by Ecological Society of America, 2008-Present
8. Sigma Xi (The Scientific Research Society), Selected full member 2003-Present

TEACHING PERFORMANCE
SUMMARY

1. Developed and taught **17** undergraduate and graduate courses in ecology, human ecology, disease and health, plant taxonomy, plant systematics, undergraduate research project, writing intensive seminar and research problems in the past years at Texas A&M University-Kingsville (Post-tenure **SRI 4.65/5**)
2. Doctoral graduate faculty membership and supervised/co-supervised **10** Master's degree students **(7 graduated, 3 in progress)**
3. Served or serving on the thesis committees of **3** Ph.D. students **(3 graduated)** and **4** Master's degree students **(4 graduated)**
4. Hosted for **3** international scholars **(3 completed)**
5. Supervised **17** undergraduate senior/honors research and career advisor for about **25** undergraduates annually
6. Developed **2** ecological modeling and meta-data analysis summer workshops

TEACHING EXPERENCE
Department of Biological and Health Sciences, Texas A&M University-Kingsville
Assistant Professor (2013-2017), Associate Professor (2017-2022), Professor (2022- Present)

Thesis/project supervision (Advisor and Graduate Committee Chair, 6 completed, 3 in progress):

1. Sadguni Boppana, Global distribution and health risks of Scrub Typhus caused by *Orientia Tsutsugamushi*, May, 2016 **(Completed)**
2. Mukti Ram Subedi, Evaluating geospatial distribution of drought, drought-induced tree mortality, and biomass loss in east Texas, August 2016 (Award winner for 2015 Javelina Habitat Student Competition $3,000 project, graduated with Ph.D. from Texas Tech University and current a Postdoctoral researcher at UGA) **(Completed)**
3. Alex Rahmlow, Quantifying the benefits of street trees in Corpus Christi, Texas, using i-Tree Streets™, December, 2016 (Texas A&M University System 12th Annual Pathways Student Research Symposium First place Master's Level in Life Science and First place for Master's level Distinguished Poster Presentation in Research, TAMUK John F. Sinclair and Bogusch Scholarship, currently an Operations and Policy Analyst in Western Lane District, Oregon Department of Forestry) **(Completed)**
4. Ruiren Zhou, A cost-benefit analysis and eco-service modeling of urban trees and green infrastructure in the city of Corpus Christi, Texas, December, 2017, currently a Ph.D. student at Texas A&M University) **(Completed)**
5. Tilak Chaudhary, The coupled effects of exceptional drought and climate change on forest structure, tree diversity, and aboveground biomass in east Texas, USA, December, 2021, currently a Ph.D. student at Texas State University) **(Completed)**
6. John Loverin, Assessing resilience of forests to wildfires and fuel management in northern California through forest inventory and aerial photography analyses, December, 2021) **(Completed)**
7. Nicholas Dewez (2021-2022, in progress)
8. Jazmin N. Johns (2022-2023, in progress)
9. Roshan P. Bhatta (2022-2023, in progress)

Thesis supervision (Graduate Committee Co-Chair, 1 completed)

1. Rohan Jayasuriya, Seasonal monitoring of water quality and waste water effluent discharges along the Lower Rio Grande, Texas, December, 2015 (Award winner for 2015 Javelina Habitat Student Competition $3,000 project, currently Project Manager/Engineer, Texas Commission on Environmental Quality). **(Completed)**

International scholar supervision (3 completed)

1. Dr. Hansheng Wang, Institute of Soil and Water Conservation, Chinese Academy of Sciences & Northwest A&F University, China, October 2014 - January 2015. **(Completed)**
2. Dr. Juan Qin, Anhui Agricultural University, China, August 2015 - August 2016. **(Completed)**
3. Dr. Ming Yan, Shanxi Normal University, China, February 2018 - February 2019. **(Completed)**

Ph.D. student committees/Graduate council representative (3 completed)

1. Srikanth Bashetty, 2020. Dynamics of a semi-submersible offshore floating multi-wind-turbine platform **(Completed)**
2. Abe Woodard, 2021. Aspects of hunting on northern bobwhite quail populations: temporal and spatial analysis **(Completed)**
3. Jeff Godwin, 2022. Influence of soil organic carbon on soil dynamic properties and ecological function in the southern Great Plains **(Completed)**

MS student committees (4 completed)

1. Ashley Mccloughan, 2015. *Hoffmannseggia tenella* (slender rush-pea): understanding the community diversity and competitive effects of an endangered south Texas species **(Completed)**
2. Elliott R Cheng, 2018. The effects of saturated fatty acids on adipogenesis **(Completed)**
3. Elizabeth Surovic, 2020. Spatial distribution of the snake genus Chironius in Bolivia **(Completed)**
4. Jose Cortez, 2021. Accelerating maturation of thornscrub habitat for ocelots **(Completed)**

Undergraduate senior/honors research projects supervised (17 completed)

1. Jessica Quintana, Integration of plant species collected in south Texas into a digital collection, 2014
2. Ramon Lopez III, Exploring the conservation implications of an endangered species (Slender Rush-pea, *Hoffmannseggia tenella*), 2015 (Award winner for 2015 Javelina Habitat Student Competition $1,000 project)
3. Robert Ramos, Exploring wildflowers of south Texas, 2016
4. Tiffany Fleming, Field monitoring endangered species (Slender Rush-pea, *Hoffmannseggia tenella*), 2016
5. Vishwa Sureja, Case study on human disease, 2016
6. Tasheena B Moore, An exploration of the knowledge gaps on prostate and ovarian cancer, 2017
7. Daniela Pulido Salinas, Abundance and distribution of mosquitoes in Texas, 2019
8. Raquel Balderas, Assessing the health benefits of urban trees and the challenges of Houston trees, 2019
9. William Corkill, Ecology course redesign support (I), 2019
10. Alexis Hernandez, Ecology course redesign support (II), 2019
11. Cyndi Alvizo, COVID-19: A Study of a Novel Disease, 2019
12. Mario H Gonzalez, Plant collection dataset, 2020
13. Omolara Falade, Forests of south Texas: A regional analysis report, 2021
14. Adesnie Gomez, Forests of south Texas: Changes in tree composition, 2021
15. Bianca Blanco, Forests of south Texas: Changes in stand structure, 2021
16. Veronica Barbosa, Forests of south Texas: Sapling dynamics, 2021
17. Paraculeta Nnadi, Forests of south Texas: Seedling dynamics, 2021

Undergraduate advising

1. Course and career advisor for approximately 25 undergraduates annually from Fall 2013 to Fall 2021
2. Wrote 10+ recommendation letters for undergraduates for applying graduate and professional schools
3. Professor advisor for 4 TAMUK student engagement through service learning projects

Ecological modeling and meta-data analysis workshops

1. Organized and taught a LANDIS-II model workshop and training in the Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences. Beijing, China. July 25-27, 2014
2. Organized and taught a LANDIS-II model and meta-data analysis workshop and training in the College of Forestry, Northwest A&F University, Yangling, China. July 4-12, 2015

Department of Forest and Wildlife Ecology, University of Wisconsin-Madison

Research Associate **2010 May - 2013 July**

1. Instructor for LANDIS-II user training course and workshop, the University of Wisconsin-Madison, January 2012
2. Instructor for a LANDIS-II user training course and workshop in the 8th International Association for Landscape Ecology (IALE) Congress, August 2011, Beijing, China
3. Instructor/coordinator for the LANDIS-II users and developers group at the University of Wisconsin-Madison
4. Advised and coordinated PhD and Masters graduate students to conduct research

Department of Entomology, Texas A&M University

Postdoctoral Research Associate **2005 December - 2010 April**

1. Led, advised and coordinated PhD. and Masters graduate students to conduct research for USDA Forest Service supported research projects
2. Guest lecture for graduate-level 'Landscape Ecology' class

Department of Biology, University of North Carolina at Chapel Hill

Teacher Link Fellow **2003 May - 2005 November**

1. Assisted school teachers learning under a NSF-supported program organized by Duke University, Sigma Xi, and North Carolina Science, Mathematics, and Technology Education Center

Teaching Assistant **2002, 2003, 2005**

1. Taught Human Anatomy lab courses for biology-major undergraduates and graduates
2. Presented research in graduate and department seminars

Visiting Scholar and Research Instructor **1997 August - 2000 July**

1. Instructed undergraduates and graduates for forest ecology research
2. Led assistants to conduct fieldwork for a NSF-supported research project

Department of Geography, Capital Normal University

Associate Professor **1993 August - 1997 July**

1. Served as advisors for 4 graduate and 30+ senior undergraduate students for their thesis work
2. Developed training program for school teachers to take graduate-level courses to improve computer skills
3. Taught for undergraduate (plant geography, biogeography) and for graduates (Ecology, Applied GIS and Spatial Analysis)

Department of Geography, Capital Normal University

Assistant Professor **1988 August - 1993 July**

1. Taught for undergraduate students (Plant taxonomy, Plant geography, Biogeography)
2. Designed and conducted physical geography lab courses and developed field trips

Department of Geography, Capital Normal University

Lecturer **1984 August - 1988 July**

1. Taught for undergraduate students (Plant taxonomy, Plant geography)
2. Designed and conducted plant geography lab courses and developed field trips

PUBLICATIONS

SUMMARY

1. **110+** publications: **81** peer-review journal articles, and **30+** journal special issue/book and encyclopedia chapters
2. **60+** invited papers, seminars, and tutorials presented at international conferences and research institutions
3. Organized/chaired/judged numerous international conferences, symposia, and local student competition events
4. Served or serves as a reviewer of papers for ~4**0** refereed national and international journals
5. Google Scholar Citations: **1609**, h-index: **23**, i10-index: **49**; ResearchGate Research Interest Score: **768.2**

Selected refereed journal articles (*corresponding author or graduate students or visiting scholars I advised):

2022

81. Chaudhary, Tilak, **W. Xi***, Mukti Subedi, Sandra Rideout-Hanzak, Haibin Su, Nicholas Dewez, Stephen Clarke. 2022. East Texas forests show strong resilience to exceptional drought. *Forestry: An International Journal of Forest Research* 1-14, cpac050, https://doi.org/10.1093/forestry/cpac050
80. Yan, Ming, Qingqing Liu, Zhiping Liu, W. Xi*. 2022. Impacts of drought and stand factors on tree mortality: A case study of national forests in east Texas, USA. *Chinese Journal of Applied Ecology* 33(11): 2897-2906 (in Chinese, doi:10.13287/j.1001-9332.202211.002).
79. Yan, Ming, Zhiping Liu, Mukti R. Subedi, Linfeng Liang, **W. Xi***. 2022. The complex impacts of unprecedented drought on forest tree mortality: a case study of dead trees in east Texas, USA. *Acta Ecologica Sinica*, 42(3): 1034-1046 (in Chinese, doi: 10.5846/stxb202101150152).

2021

78. Subedi, Mukti R., **W. Xi***, Christopher B. Edgar, Sandra Rideout-Hanzak, Ming Yan.2021.Tree mortality and biomass loss in drought-affected forests of East Texas, USA. *Journal of Forestry Research*: 32(1):67–80 (Online published 26 March 2020, doi.org/10.1007/s11676-020-01106-w).

2020

77. **Xi, W.***, Xiaohuan Zhou, Jianwei Zhang. 2020. LANDISVIEW 2.0: An upgraded visualization and analytical tool for landscape modeling, *Environmental Modelling & Software* 34: 104849. (doi.org/10.1016/j.envsoft.2020.104849).
76. Ling, Pui-Yu; Stephen Prince; Giovanni Baiocchi, Caren Dymond, **W. Xi**; George. Hurtt. 2020. Impact of fire and harvest on forest ecosystem services in a species-rich area in the Southern Appalachians. *Ecosphere*: 11(6) Article e03150 (doi.org/10.1002/ecs2.3150).

2019

75. **Xi*, W**., Robert K. Peet, Michael T. Lee, Dean L. Urban. 2019. Hurricane disturbances, tree diversity, and succession in North Carolina Piedmont forests, USA. *Journal of Forestry Research* (Invited paper) 30 (1): 219-231.
74. Subedi, Mukti R., **W. Xi***, Christopher B. Edgar, Sandra Rideout-Hanzak, Brent C. Hedquist. 2019. Assessment of geostatistical methods for spatiotemporal analysis of drought patterns in east Texas, USA. *Spatial Information Research* 27 (1): 11–21.
73 Qin, Juan, Zhouping Shangguan, **W. Xi***. 2019. Seasonal variations of leaf traits and drought adaptation strategies of four common woody species in South Texas, USA. *Journal of Forestry Research* (Invited paper) 30(5) 1715-1725 (doi.org/10.1007/s11676-018-0742-2). First Online 10 July 2018.

2018

72. Sun, H., E. Dai, Y. Li, **W. Xi***. 2018. Climate change and sustainable forestry: a regional perspective from northeast China. *The Forestry Chronicle* 94(03): 201-207.
71. Dai, E, Jianjia Zhu, Xiaoli Wang, **W. Xi**. 2018. Multiple ecosystem services of monoculture and mixed plantations: A case study of the Huitong experimental forest of Southern China. *Land Use Policy* 79(10): 717-724.

2017

70. Wu, Z, E. Dai, Q. Ge, **W. Xi**, X. Wang. 2017. Modelling the integrated effects of land use and climate change scenarios on forest ecosystem aboveground biomass, a case study in Taihe County of China (in Chinese). *Acta Geographica Sinica*. 72:1539-1554.
69. Dai, E., X. Wang, J. Zhu, **W. Xi**. 2017. Quantifying ecosystem service trade-offs for plantation forest management to benefit provisioning and regulating services. *Ecology and Evolution* 7:7807-7821.
68. He, B, T. Guo, H. Huang, **W. Xi**, X. Chen. 2017. Physiological responses of *Scaevola aemula* seedlings under high temperature stress. *South African Journal of Botany* 112:203-209.
67. Wu, Z, E. Dai, Q. Ge, **W. Xi**, X. Wang. 2017. Modelling the integrated effects of land use and climate change scenarios on forest ecosystem aboveground biomass, a case study in Taihe County of China. *Journal of Geographical Sciences* 27(2):205-222.
66. McCloughan, Ashley, Sandra Rideout-Hanzak, David Wester, **W. Xi**. 2017. Evaluating Removal of Competition on Morphology of Endangered Slender Rush-Pea (*Hoffmannseggia tenella*) Endemic to Southern Texas, USA. *Natural Areas Journal*: 37(3):382-393.

2016

65. Qin, Juan, **W. Xi***, Alexander Rahmlow, Haiyan Kong, Zhen Zhang, Zhouping Shangguan. 2016. Effects of forest plantation types on leaf traits of Ulmus pumila and Robinia pseudoacacia on the Loess Plateau, China. *Ecological Engineering*: 97:416-425.
64. Dai, Erfu, Heng Zhu, Zuo Wu, Xiaofan Wang, **W. Xi**, Jianjia Zhu. 2016. The impact of climate change on forest aboveground biomass in the Moshao forest farm of Huitong station (in Chinese). *Chinese Journal of Applied Ecology*: 27(10):3059-3069.
63. Dai, E., Z. Wu, Q. Ge, **W. Xi***, X. Wang. 2016. Predicting the responses of forest distribution and aboveground biomass to climate change under RCPs scenarios in southern China. Global Change Biology: 22 (11):3642-3661.
62. **Xi, W.**, E Dai, HS. He. 2016. Advances in forest landscape models: current research and applications. *Progress in Geography*: 35(1):35-46 (in Chinese, invited review).
61. Ren,Yin, Shanshan Chen, Xiaohua Wei, **W. Xi**, Yunjian Luo, Xiaodong Song, Shudi Zuo, Yusheng Yang. 2016. Disentangling the factors that contribute to variation in forest biomass increment in the mid-subtropical forests of China. *Journal of Forestry Research* 27(4): 919-930.

Before 2016

60. Wang, Lai, Chonggao Zhong, Pengxiang Gao, **W. Xi**, Shuoxin Zhang. 2015. Soil infiltration characteristics in agroforestry systems and their relationships with the temporal distribution of rainfall on the Loess Plateau in China. *PLOS ONE* 10 (4):e0124767. doi:10.1371/journal.pone.0124767.
59. Wang, Qingning, Xuehui Yi, Hansheng Wang, **W. Xi**. 2015. Soil moisture regime of fish-scale pits for land preparation engineering in Loess slope vegetation. *Chinese Journal of Soil Science* 46 (4): 866-872 (in Chinese).
58. **Xi, W**. Synergistic effects of tropical cyclones on forest ecosystems: A global synthesis. 2015. *Journal of Forestry Research* 26(1):1-18 (**Invited review, high citation award**).
57. Hou, Lin, **W. Xi**, Shuoxina Zhang. 2015. Effect of understory on a natural secondary forest ecosystem carbon budget. *Russian Journal of Ecology* 46(1): 51-58.
56. Dai, Erfu, Zhuo Wu, Xiaofan Wang, Hua Fu, **W. Xi**, Tao Pan. 2015. Progress and prospect of research on forest landscape models. *Journal of Geographical Sciences* 25(1):113-128.

55. Xu, Huasen, Huaxing Bi, **W. Xi**, Randy L. Powell, Lubo Gao and Lei Yun. 2014. Root distribution variation of crops under walnut-based intercropping systems in the Loess Plateau of China. *Pakistan Journal of Agricultural Sciences* 51(3):1-6.
54. **Xi, W.**, Fugui Wang, Peili Shi, Erfu Dai, Ambrose O. Anoruo, Huaxing Bi, Alexander Rahmlow, Binghui He, and Wenhua Li. 2014. Challenges to sustainable development in China: a review of six large-scale forest restoration and land conservation programs. *Journal of Sustainable Forestry* 33(5): 435-453.
53. Mairota, Paola, Vincenzo Leronni, **W. Xi**, David J. Mladenoff, Harini Nagendra. 2014. Using spatial simulations of habitat modification for adaptive management of protected areas: Mediterranean grassland modification by woody plant encroachment. *Environmental Conservation* 41(2):144-156.
52. Birt, Andrew G., Zeng, Yu, Maria Tchakerian, Robert N. Coulson, Charles W. Lafon, David M. Cairns, John D. Waldron, **W. Xi**, Szu-Hung Chen, Douglas Streett. 2014. Evaluating Southern Appalachian forest dynamics without eastern hemlock: Consequences of herbivory by the hemlock woolly adelgid. *Open Journal of Forestry* 4 (2) 91-99.
51. Xu, Huasen, Huaxing Bi, Lubo Gao, Lei Yun, Yifang Chang, **W. Xi**, Wenchao Liao, Biao Bao. 2013. Distribution and morphological variation of fine root in a walnut-soybean intercropping system in the Loess Plateau of China. *International Journal of Agriculture and Biology* 15(5):998-1002.
50. Wang, Xiaoyan, **W. Xi**, Niels Anten, Huaxing Bi. 2013. Development of root-carving industry leads to ecological and environmental degradation in China. *Forest Research: Open Access* 2:113.
49. Chen, Jingjing, Binghui He, Xiaoyan Wang, Yun Ma, **W. Xi**. 2013. The effects of *Herba Andrographitis* hedgerows on soil erodibility and fractal features on sloping cropland in the Three Gorges Reservoir area. *Environmental Science and Pollution Research* 20(10):7063-7070.
48. Gao, Lubo, Huasen Xu, Huaxing Bi, **W. Xi**, Biao Bao, Xiaoyan Wang, Chao Bi, Yifang Chang. 2013. Intercropping Competition between apple trees and crops in agroforestry systems on the Loess Plateau of China. *PLOS ONE* 8(7):e70739. doi:10.1371/journal.pone.0070739.
47. He, Weiming, **W. Xi***, Niels Anten. 2013. Chronic wind modulates seedling recruitment, inter-specific competition, species abundance, and community productivity. *Journal of Arid Environments* 90(1) 69-76 (*corresponding author).
46. Wang, Lei, Andrew G. Birt, Charles W. Lafon, David M. Cairns, Robert N. Coulson, Maria D. Tchakerian, **W. Xi**, Sorin C. Popescu, James M. Guldin. 2013. Computer-based synthetic data to assess the tree delineation algorithm from airborne LiDAR survey. *Geoinformatica* 17(1):35-61.
45. Shang, Zongbo, Hong S. He, **W. Xi***, Stephen R. Shifley, Brian J. Palik. 2012. Integrating LANDIS model and a multi-criteria decision-making approach to evaluate national forest management plan in Missouri Ozarks, USA. *Ecological Modelling* 229(1):50-63 (*corresponding author).
44. **Xi, W.**, Szu-Hung Chen, Yi-Chien Chu. 2012. The synergistic effects of typhoon and earthquake disturbances on forest ecosystems: Lessons from Taiwan for ecological restoration and sustainable management. *Tree and Forestry Science and Biotechnology* 6(1):27-33.
43. **Xi, W.**, Robert K. Peet, Dean L. Urban. 2012. The impacts of large hurricane on understory sapling dynamics and diversity in North Carolina Piedmont forests, USA. *Tree and Forestry Science and Biotechnology* 6(1):51-59.
42. Jonas, Sarah Z., **W. Xi**, John D. Waldron, Robert N. Coulson. 2012. The impacts of hemlock decline and the ecological considerations for forest restoration following hemlock woolly adelgid outbreaks. *Tree and Forestry Science and Biotechnology* 6(1):22-26.
41. Wu, Yuna, Jianping Tao, **W. Xi**, Ke Zhao, Jianhui Hao. 2011. The edge effects on tree-liana relationship in a secondary natural forest in Bawangling Nature Reserve, Hainan Island, China. *Acta Ecologica Sinica* 31(11): 3054-3059.
40. Birt, Andrew G., Valdez-Vivas, Martin, Richard M. Feldman, Charles W. Lafon, Robert N. Coulson, Maria D. Tchakerian, **W. Xi**, David M. Cairns, James M. Guldin. 2010. A simple, stochastic weather generator for ecological modelling. *Environmental Modelling & Software* 25(10):1252-1255.
39. **Xi, W.**, Robert N. Coulson, Andrew G. Birt, Zongbo Shang, John D. Waldron, Charles W. Lafon, David M. Cairns, Maria D. Tchakerian, Kier D. Klepzig. 2009. Review of forest landscape models: methods, development, and applications. *Acta Ecologica Sinica* (International Journal) 29(1):69-78.
38. Birt, Andrew G., Richard M. Feldman, David M. Cairns, Robert N. Coulson, Maria D. Tchakerian, **W. Xi**, James M. Guldin. 2009. Stage structured matrix models for organisms with non-geometric development times. *Ecology* 90(1):57-68. **Impact Factor: 5.72**
37. **Xi, W.**, John D. Waldron, Charles W. Lafon, David M. Cairns, Andrew G. Birt, Maria D. Tchakerian, Robert N. Coulson, Kier D. Klepzig. 2009. Modeling long-term effects of altered fire regimes following southern pine beetle outbreaks. *Ecological Restoration* 27(1):24-26.
36. Birt, Andrew G., **W. Xi***, Robert N. Coulson. 2009. LANDISVIEW: A visualization tool for landscape modeling. *Environmental Modelling & Software* 24(11):1339-1341 (*corresponding author).

35. **Xi, W.**, Lei Wang, Andrew G. Birt, Maria D. Tchakerian, Robert N. Coulson, Kier D. Klepzig. 2008. An integrated approach to mapping forest conditions in the southern Appalachians. *Ecological Restoration* 26(4): 290-292.
34. **Xi, W.**, Robert K. Peet, James K. DeCoster, Dean L. Urban. 2008. Tree damage risk factors associated with large, infrequent wind disturbances of Carolina forests. *Forestry* 81(3):317-334.
33. **Xi, W.**, Robert N. Coulson, John D. Waldron, Maria D. Tchakerian, Charles W. Lafon, David M. Cairns, Andrew G. Birt, Kier D. Klepzig. 2008. Landscape modeling for forest restoration planning and assessment: Lessons from the southern Appalachian Mountains. *Journal of Forestry* 106(4):191-197.
32. **Xi, W.**, Robert K. Peet, Dean L. Urban. 2008. Changes in forest structure, species diversity, and spatial pattern following hurricane disturbance in a Piedmont North Carolina forest, USA. Journal of Plant Ecology 1(1):43-57.
31. **Xi, W.**, Robert K. Peet. 2008. Hurricane effects on the Piedmont forests: Patterns and implications. *Ecological Restoration* 26(4):295-298.
30. Cairns, David M., Charles W. Lafon, John D. Waldron, Maria Tchakerian, Robert N. Coulson, Kier D. Klepzig, Andrew G. Birt, **W. Xi**. 2008. Simulating the reciprocal interaction of forest landscape structure and southern pine beetle herbivory using LANDIS. *Landscape Ecology* 23(4):403-415 (Henry C. Cowles Award of Association of American Geographers for outstanding paper).
29. **Xi, W.**, Robert K. Peet. 2008. Long-term studies of forest dynamics in the Duke Forest, southeastern United States: A synthesis. *Chinese Journal of Plant Ecology* 32(2):299-318 (in Chinese) (**Invited review**).
28. Cairns, David M., Charles W. Lafon, Andrew G. Birt, John D. Waldron, Maria Tchakerian, Robert N. Coulson, **W. Xi**, Kier D. Klepzig. 2008. Simulation modeling as a tool for understanding the landscape ecology of southern pine beetle infestations in southern Appalachian forests. *Geography Compass* 2(3):580-599.
27. Palmer, Michael W., Robert K. Peet, Rebecca A. Reed, **W. Xi**, Peter S. White. 2007. A multiscale study of vascular plants in a North Carolina Piedmont forest. *Ecology* 88(10):2674. **Impact Factor: 5.72**
26. Qinfeng Guo, Hong Qian, Robert E. Ricklefs, **W. Xi**. 2006. Distributions of exotic plants in eastern Asia and North America. *Ecology Letters* 9(7):827-834. **Impact Factor: 10.772**
25. **Xi, W.** 1999. Geographic Information Systems (GIS) Technology in geographical education. *Teaching Resources for Geographical Education* (1&2):1-7 (in Chinese).
24. Dai, E. H. Fu, Y. Liu, **W. Xi**, J. Liu. 1998. Vegetation resource and development in the Sunzhazi Village of Huairou County, Beijing. *Journal of Capital Normal University* (Natural Science Edition) 19(4):91-94 (in Chinese).
23. **Xi, W.**, Hua Fu, Weiming Bi. 1998. Environmental characteristics and ecological economic developing models in Beijing suburban region, China. *Economic Geography* 18(1):62-68 (in Chinese).
22. **Xi, W.** 1997. Forest species diversity of Wuling National Natural Reserve. *Biodiversity Science* 5(2):121-125 (in Chinese).
21. Jian Li, **W. Xi**, Hua Fu, Lin Su. 1997. New approach for developing a web-based Geographical Information System, *Computer Engineering and Applications* 33(9):18-20 (in Chinese).
20. **Xi, W.**, Hua Fu, Yanan Ren, Jian Li. 1997. Design and development of a natural resource management information system for the Beijing mountainous region. *Journal of Capital Normal University* (Natural Science Edition) 18(2):113-118, (in Chinese).
19. Li, X., **W. Xi**, Y. Wang. 1997. The environmental characteristics and regional sustainable development in Miyun County, Beijing. *Journal of Capital Normal University* (Natural Science Edition) 18(4): 70-73 (in Chinese).
18. **Xi, W.**, **Z**. Tian, Y. Wang, X. Li. 1996. Specialty product project planning and sustainable economic development in Beijing. *Economic Geography* 16(1):55-61 (in Chinese).
17. **Xi, W.** 1996. Environmental assessment for the sustainable food product developing regions in Beijing. China. *Journal of Capital Normal University* (Natural Science Edition) 17(1):96-100 (in Chinese).
16. Li, X.,Y. Wang, **W. Xi**, Z. Tian. 1996. Environmental assessment for the sustainable food product developing regions in Beijing. China. *Journal of Capital Normal University* (Natural Science Edition) 17(1): 96-100 (in Chinese).
15. **Xi, W.** 1996. Wild economic plant resources in the Wuling National Natural Reserve. *Territory and Natural Resources Research* (3):63-66 (in Chinese).
14. Peng, Y., **W. Xi**. 1996. Design and development of a geographical teaching management information system. *Journal of Capital Normal University* (Natural Science Edition) 17(4):98-103 (in Chinese).
13. **Xi, W.**, Y. Wang, X. Li, Z.Tian. 1996. On organic food Project planning. *Chinese Agricultural Science Bulletin* 12(3):32-34 (in Chinese).
12. **Xi, W.** 1995. Environmental assessment and project planning for sustainable food product developing regions in Beijing, China. *Territorial development and management* 5(1):151-154 (in Chinese).

11. **Xi, W.** 1995. Wild economic plants in Huairou mountainous region. *Territorial Development and Management* 5(5):82-86.
10. **Xi, W.**, Y. Wang, X. Li, Z. Tian. 1995. Environmental assessment and project planning for sustainable food product developing regions in Beijing, China. *Territorial Development and Management* 5(1):151-154 (in Chinese).
9. **Xi, W.** 1994. Wild ornamental plant resources in Beijing mountainous region. *Journal of Mountain Science* 12(3):169-173 (in Chinese).
8. **Xi, W.** 1993. Niche structure of dominant shrub population in Beijing mountainous region. *Journal of Plant Ecology* 7(4):324-330 (in Chinese).
7. **Xi, W.,** Zhangcheng Zhong, Runcheng Bi. 1993. Gap edge effect in the subtropical forest communities in Jinyun mountain, Sichuan, China. *Journal of Plant Ecology* 17(3):232-242 (in Chinese).
6. Xi, W., JianZhong Liu, Weimin He. 1993. Numerical classification of forest vegetation in Wuling National Natural Reserve. *Journal of Mountain Science* 11(1):37-42 (in Chinese).
5. **Xi, W.** 1993. Characteristics of grassland resource and utilization policies in Beijing mountainous region. *Journal of Shanxi Normal University* (Natural Science Edition) (2):27-30 (in Chinese).
4. **Xi, W.**, Zhangcheng Zhong, Runcheng Bi. 1992. Advance in forest gap research: An overview. *Journal of Southwest University* 17(2):274-286 (in Chinese).
3. **Xi, W.** 1992. Numerical classification on deciduous broad-leaved shrubs in Beijing Huairou mountainous region. *Journal of Capital Normal University* (Natural Science Edition) 13(2):81-86 (in Chinese).
2. **Xi, W.** 1992. Vegetation characteristics of deciduous, broad-leaved shrub communities in Beijing Huairou mountainous region. *Journal of Capital Normal University* (Natural Science Edition) 13(1):85-88 (in Chinese).
1. **Xi, W.** 1991. Ordination of deciduous broad-leaved shrub communities in Beijing Huairou mountainous region. *Journal of Southwest University* (Natural Science Edition) 16(4):479-486 (in Chinese).

Selected journal special issue/book and encyclopedia chapters:

1. **Xi, W.** 2017. (Editorial Board Member & Reviewer) in Ecological Geoscience (University Textbook in Chinese, 381 p). Editor-in-Chief: Zhou, Q. Science Press.
2. David Ramirez, **W. Xi**, Kailas Malwade, Oluwatosin Oyelakin. 2017. The climate change-air pollution connection: adsorption as a mitigation strategy. In Facing the Threat: Climate Change. Jose A. Raynal Villaseñor, María Elena Raynal-Gutiérrez, Benito Corona-Vasquez, Polioptro F. Martínez-Austria, Carlos Patiño-Gómez (Eds.). Universidad de las Américas Puebla.
3. Larocque, G.R., H.H. Shugart, **W. Xi**, J.A. Holm. 2016. Forest succession models. Pages 179-221 in Larocque (ed.) *Ecological Forest Management Handbook*. CRC Press.
4. Larocque, G.R., A. Komarov, O. Chertov, V. Shanin, J. Liu, J. Bhatti, W. Wang, C. Peng, H.H. Shugart, **W. Xi,** J.A. Holm. 2016. Process-based models: a synthesis of models and applications to address environmental and management issues. Pages 223-266 in Larocque (ed.) *Ecological Forest Management Handbook*. CRC Press.
5. Matthew J. Duveneck, **W. Xi**, Robert M. Scheller. 2015. Chapter 7: Understanding Model Outputs. The Landis-II Foundation. (3rd Edition) *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises*. CreateSpace.
6. Brian Sturtevant, Eric Gustafson, Robert Scheller, Melissa Lucash, David J. Mladenoff, **W. Xi**. 2015. Chapter 11. Introduction to Disturbance. The Landis-II Foundation. (3rd Edition) *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises.* CreateSpace.
7. Robert Scheller, Eric Gustafson, Brian Miranda, Melissa Lucash, Brian Sturtevant, **W. Xi**. 2015. Chapter 14: Final Synthesis: Putting It All Together! The Landis-II Foundation. (3rd Edition) *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises*. CreateSpace.
8. Janowiak, MK., L.R. Iverson,; D.J. Mladenoff, E. Peters, K. Wythers, **W. Xi**, L. Brandt, R. Butler, Patricia R. Butler, Stephen D. Handler, P. Danielle Shannon, Chris Swanston, Linda R. Parker, Amy J. Amman, Brian Bogaczyk, Christine Handler, Ellen Lesch, Peter B. Reich, Stephen Matthews, Matthew Peters, Anantha Prasad, Sami Khanal, Feng Liu, Tara Bal, Dustin Bronson, Andrew Burton, Jim Ferris, Jon Fosgitt, Shawn Hagan, Erin Johnston, Evan Kane, Colleen Matula, Ryan O'Connor, Dale Higgins, Matt St. Pierre, Jad Daley, Mae Davenport, Marla R. Emery, David Fehringer, Christopher L. Hoving, Gary Johnson, David Neitzel, Michael Notaro, Adena Rissman, Chadwick Rittenhouse, and Robert Ziel. 2014. *Forest ecosystem vulnerability assessment and synthesis for northern Wisconsin and western Upper Michigan: a report from the Northwoods Climate Change Response Framework project*. Gen. Tech. Rep. NRS-136. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 247 p.

9. Matthew J. Duveneck, **W. Xi**, Robert M. Scheller. 2014. Chapter 7: Understanding Model Outputs. In Robert Scheller and Melissa Lucash (eds.) 2nd Edition. *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises*. CreateSpace.
10. Brian Sturtevant, Eric Gustafson, Robert Scheller, Melissa Lucash, David J. Mladenoff, **W. Xi**.. 2014. Chapter 11. Introduction to Disturbance. In Robert Scheller and Melissa Lucash (eds.) 2nd Edition. *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises*. CreateSpace.
11. Robert Scheller, Eric Gustafson, Brian Miranda, Melissa Lucash, Brian Sturtevant, **W. Xi**. 2014. Chapter 14: Final Synthesis: Putting It All Together! In Robert Scheller and Melissa Lucash (eds.) 2nd Edition. *Forecasting Forested Landscapes: An Introduction to LANDIS-II with Exercises.* CreateSpace.
12. **Xi, W**. 2013. Ecological Modeling for Informing Forest Restoration and Management. *Forest Research: Open Access* 2:113 (Editorial).
13. Waldron, John D., **W. Xi.** 2013. Forest restoration: Simple concept, complex process. *Forest Research: Open Access* 2, doi:10.4172/2168-9776.1000e102 (Editorial).
14. **Xi, W.** (Guest Editor). 2012. Forest Restoration. *Tree and Forestry Science and Biotechnology* 6 (Special Issue 1). Global Science Books Ltd., UK. http://www.globalsciencebooks.info/Online/GSBOnline/OnlineTFSB_6_SI1.html
15. **Xi, W.**, Huaxing Bi, Binghui He. 2012. Forest restoration in China. In John Stanturf, Palle Madsen, David Lamb (eds.). *A Goal-oriented Approach to Forest Landscape Restoration*. Springer.
16. **Xi, W.**, John D. Waldron, David M. Cairns, Charles W. Lafon, Andrew G. Birt, Maria D. Tchakerian, Kier D. Klepzig, Robert N. Coulson. 2012. Restoration of southern pine forests after the southern pine beetle. In John Stanturf, Palle Madsen, David Lamb (eds.). *Forest Landscape Restoration: Integrating Natural and Social Sciences*. Springer.
17. **Xi, W.** Climate Data Re-analysis. 2012. In S. George Philander (ed.). *Encyclopedia of Global Warming and Climate Change* (2nd Edition). SAGE Publications, Inc.
18. **Xi, W.** Wisconsin. 2012. In S. George Philander (ed.). *Encyclopedia of Global Warming and Climate Change* (2nd Edition). SAGE Publications, Inc.
19. **Xi, W.** North Carolina. 2012. In S. George Philander (ed.). *Encyclopedia of Global Warming and Climate Change* (2nd Edition). SAGE Publications, Inc.
20. **Xi, W.**, Robert K. Peet. 2011. The complexity of catastrophic wind disturbance on temperate forests. Pages 503-534 in Anthony Lupo (ed.). *Recent Hurricane Research: Climate, Dynamics, and Societal Impacts*. InTech, Vienna, Austria. Available from: http://www.intechopen.com/articles/show/title/the-complexity-of-catastrophic-wind-impacts-on-temperate-forests (Accumulated download 3461 since published online: April 19, 2011).
21. Waldron, J., R. Coulson, D. Cairns, C. Lafon, M. Tchakerian, **W. Xi**, K. Klepzig, and A. Birt. 2010. Evaluating the impact of invasive species in forest landscapes: the southern pine beetle and the hemlock woolly adelgid. In: J. Pye, H. Rauscher, Y. Sands, D. Lee, J. Beaty (Tech eds.) *Advances in Threat Assessment and Their Application to Forest and Rangeland Management* Volume 2. Gen. Tech. Rep. PNW-GTR-802. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest and Southern Research Stations.
22. **Xi, W.**, Jianping Tao, Xuguang Li. 2009. The complexity of catastrophic wind impact on forest ecosystems: A synthesis. (In Chinese with English Abstract). Pages 233-251 in Ming Dong, M. J.A. Werger (eds.). *A Spectrum of Ecological Studies*. Southwest University Press (in Chinese).
23. **Xi, W.**, Lei Wang, Maria D. Tchakerian, Robert N. Coulson. 2009. South pine beetle hazard in the Pisgah National Forest, North Carolina: Mapping south pine beetle hazard in the Southern Appalachian Mountains. In Peter Eredics (ed.) *Mapping Forestry*. ESRI Map Book. ESRI Press.
24. Waldron, John D., Robert N. Coulson, David M. Cairns, Charles W. Lafon, Maria D. Tchakerian, **W. Xi**, Kier D. Klepzig, Andrew G. Birt. 2008. Evaluating the impact of invasive species in forest landscapes: southern pine beetle and the hemlock woolly adelgid. *The Encyclopedia of Forest Environmental Threats*. Available from: http://www.forestencyclopedia.net/p/p3313
25. **Xi, W.**, John D. Waldron, Robert N. Coulson, Maria D. Tchakerian, David M. Cairns, Charles W. Lafon, Andrew G. Birt, Kier D. Klepzig. 2007. Landscape Modeling for Forest Restoration: Concepts and Applications. Pages 92-95 in Stanturf, John (ed.). *Proceedings of the IUFRO Conference on Forest Landscape Restoration*. Seoul, Korea 14-19 May 2007. Korea Forest Research Institute, 268pp.
26. **Xi, W.** (Co-author). 1998. Physical and socio-economic conditions in China. Pages 20-28 in *China Biodiversity: A Country Case*. Chinese Environmental Science Press. Beijing, China. Chinese Environmental Protection Agency. 476 pp.
27. **Xi, W.,** Hua Fu, Weiming Bi. 1997. Strategy of utilizing natural resources and optimal eco-economic model in Beijing suburban region. In *Proceedings of the International Symposium for Environmental Science*, Tokyo Metropolitan University Press. Tokyo, Japan.
28. **Xi, W.** (Co-author and Co-editor). 1997. Countryside development through science, technology, and education. Pages 152-166 in X. Sun (ed), *Revitalizing China's Countryside through Science, Technology & Education.* Chinese Agricultural Science Press. Beijing, China. 187 pp.

29. **Xi, W.** (Co-editor, Author of one fourth of the book). 1990. *Handbook of wild economic plants in Beijing mountainous region*, Science and Technology Literature Press. Beijing, China. 497 pp.
30. **Xi, W.**, Zhangcheng Zhong, Runcheng Bi. 1995. Study on gap dynamics in subtropical forest communities, Pages 250-257 in Y. Song, D. Hartmut, X. Wang (eds.). *Applied Vegetation Ecology, Proceedings of the 35th Annual Symposium of International Association for Vegetation Science*. East China Normal University Press. Shanghai. China.

Nonrefereed article

1. **Xi, W.**, Hong Qian. 2004. Exploring the mystery of reciprocal plant invasion between China and the United States. Newsletter of the Sino-Ecologists Association Oversea 17(3):15. This article was included Gu et al. (eds.) Green Careers. Pages 142-143 in *Ecoessays by Chinese Ecologists Oversea*. China Higher Education Press. 2008.

Invited presentations

International

1. **Xi, W.** 2018. Climate Change Impacts on Human Exposure to Environmental Pollutants: A Comprehensive Synthesis. The International Symposium on Environmental Pollutants and Health. College of Environmental Science and Engineering, Nankai University, Tianjing, China.
2. **Xi, W.** 2017. Responses of urban trees to human disturbance and emerging contaminant stress. The International Symposium on Emerging Contaminants and Environmental Nanotechnology (ISECEN). College of Environmental Science and Engineering, Nankai University, Tianjing, China.
3. Sun, H., E. Dai, Y. Li, W. **Xi***. 2017. Climate change and sustainable forestry: a regional perspective from northeast China., International Symposium on Sustainable Forest Management in the Context of Global Change (ISSFM-CGC), August 1-3, 2017 Harbin, China.
4. **Xi, W**. Landscape forest modeling under climate change. July 2015. College of Forestry, Northwest A&F University, Yangling, China.
5. **Xi, W**. Forest change under warmer climate and increasing land use: Progress in forest landscape modeling. August 2015. The Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China.
6. **Xi, W**. Forest change under warmer climate and increasing land use: Progress in forest landscape modeling. August 2014. The Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China.
7. **Xi, W**. Future scenarios of forest change under warmer climate and increasing land use in northern Wisconsin: A landscape modeling approach. August 2011. The School of Environment, Tsinghua University, Beijing, China.
8. **Xi, W**. Simulating the impacts of climate change, land use and mitigation strategies on forest biomass in northern Wisconsin. August 2011. The Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, China.
9. **Xi, W**. Future scenarios of forest change under warmer climate and increasing land use in northern Wisconsin: A landscape modeling approach. August 2011. The Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing, China.
10. **Xi, W**., Hua Fu, Weiming Bi. Strategy of utilizing natural resources and optimal eco-economic model in Beijing suburban region. The International Symposium for Environmental Science. October 1996. Tokyo, Japan.

Regional

1. **Xi, W**., John D. Waldron, Andrew G. Birt, Maria D. Tchakerian, Charles W. Lafon, David M. Cairns, Robert N. Coulson. Modeling long-term effects of altered fire regimes and restoration following southern pine beetle outbreaks. Presented at the 36th East Texas Forest Entomology Seminar. October 22-23, 2009. Nacogdoches and Lufkin, TX, USA.
2. **Xi, W**., Charles W. Lafon, David M. Cairns, Maria Tchakerian, John D. Waldron, Andrew G. Birt, Kier D. Klepzig, Robert N. Coulson. Restoration of southern Appalachian forests following infestation by the southern pine beetle: a summary of discoveries. Presented at the 35th East Texas Forest Entomology Seminar. April 3-4. Nacogdoches and Lufkin, TX, USA.
3. **Xi, W**., J. D. Waldron, Maria Tchakerian, Charles W. Lafon, David M. Cairns, Kier D. Klepzig, Robert N. Coulson. Landscape modelling for forest restoration: a case study following southern pine beetle infestation in southern Appalachians". Presented at the East Texas Forest Entomology Seminar. October 2006. Nacogdoches and Lufkin. TX, USA.
4. **Xi, W**., J. D. Waldron, Andrew G. Birt, Lei Wang, Robert N. Coulson. 2006. LANDIS as a modeling environment for predicting southern pine beetle infestations & restoration strategies: Visualization & analytical tools. Presented at the LANDIS II Developers Workshop, Madison, WI, October 30-November 1, 2006.

Presentations at conferences

International

1. David Ramirez, **W. Xi**, Kailas Malwade, Oluwatosin Oyelakin. 2016. The climate change-air pollution connection: adsorption as a mitigation strategy. International conference on climate change, Puebla, Mexico.
2. **Xi, W**., David J. Mladenoff, Robert M. Scheller, Sarah Pratt, Linda R. Parker, Chris W. Swanston. Simulating the impacts of climate change, land use and mitigation strategies on forest biomass in northern Wisconsin. August 18-23, 2011. The 8th International Association for Landscape Ecology (IALE) Congress, Beijing, China.
3. **Xi, W**., Robert K. Peet. Forest response to natural disturbance: Changes in the structure and diversity on a North Carolina Piedmont forest. 2007. Presented at the International Union of Forestry Research Organization (IUFRO) Wind and Trees Conference, Vancouver, BC, Canada.
4. **Xi, W**., John D. Waldron, Robert N. Coulson, Maria D. Tchakerian, David M. Cairns, Charles W. Lafon, Andrew G. Birt, Kier D. Klepzig. Landscape modeling for forest restoration: concepts and applications. Presented at the International Conference on Forest Landscape Restoration. May 14-19, 2007. Seoul, Republic of Korea.
5. **Xi, W**., Robert K. Peet, Dean L. Urban. 2005. A comparison of mortality risk factors associated with large, infrequent wind disturbances in Carolina Piedmont forests. Presented at the 90th Annual Meeting of the Ecological Society of America. Montréal, Canada.
6. **Xi, W**., Robert K. Peet, Dean L. Urban. 2004. Seedling establishment and growth in response to a major hurricane event in a Carolina Piedmont forest. Presented at the 47th Annual Symposium of the International Association for Vegetation Science. Kailua–Kona, Hawai'i, USA.
7. **Xi, W**., Peter S. White, Hong Qian, Zhiyu Li. 2004. Climatic and topographic influences on large-scale species invasion. Presented at the Beijing International Symposium on Biological Invasions. Beijing, China.
8. **Xi, W**., Hua Fu, Weiming Bi. Strategy of utilizing natural resources and optimal eco-economic model in Beijing suburban region. The International Symposium for Environmental Science. 1997. Tokyo, Japan.
9. **Xi, W**., Runcheng Bi, Zhangcheng Zhong. Study on gap dynamics in subtropical forest communities, China. Presented at the 35th Annual Symposium of the International Association for Vegetation Science. September, 1992. Shanghai, China.

National (* graduate or undergraduate students I advised)

10. Dewez, N.P*, **W. Xi**, S. Rideout-Hanzak, A.O. Anoruo, D.R. Duffie, M. Subedi, T. Chaudhary, S. Clarke. 2022. The Effects of an Exceptional Drought on Tree Mortality in the National Forests of East Texas. 107th Annual Meeting of the Ecological Society of America, Montreal, CA, August 14-19, 2022.
11. **Xi, W.,** Mukti Subedi, Zhiping Liu and Ming Yan 2021. Widespread increase of tree mortality triggered by an exceptional drought in east Texas. August 2-6, 2021. The 106thth Annual Meeting of the Ecological Society of America, Long Beach, CA, USA.
12. Chaudhary, Tilak *, **W. Xi**,, Sandra Rideout-Hanzak, Haibin Su and Stephen Clarke. 2021. The impacts of an exceptional drought on forest demographics and biomass in east Texas. August 2-6, 2021. The 106thth Annual Meeting of the Ecological Society of America, Long Beach, CA, USA.
13. Loverin , John*, **W. Xi**,, Haibin Su and Jianwei Zhang. 2021. Assessing forest resilience: The effects of wildfire and fuel-reduction on forest stability in northern California. August 2-6, 2021. The 106thth Annual Meeting of the Ecological Society of America, Long Beach, CA, USA.
14. **W. Xi**, Mukti Subedi, Ming Yan, Chris Edgar, Sandra Rideout-Hanzak, Stephen Clarke, Assessing impacts of drought on forests in east Texas: An analysis on tree mortality using FIA data. February 25-27th, 2020, USDA Forest Service Forest Health Monitoring Workshop, Raleigh, North Carolina, USA.
15. Mukti Subed*i, **W. Xi**, Chris Edgar, and Sandra Rideout-Hanzak. 2016. Evaluating extreme drought-induced tree mortality and biomass loss in east Texas using Forest Inventory and Analysis (FIA) data. August 9-14, 2015. The 100th Annual Meeting of the Ecological Society of America, Baltimore, Maryland, USA.
16. PuiYu, Ling and Caren Dymond, **W. Xi**. 2015. Impact of forest harvest regimes on the tradeoff between roundwood production and carbon sequestration. 2015 NASA Carbon Cycle & Ecosystems Joint Science Workshop. April 20-24, 2015, College Park, Maryland, USA.
17. Pui Yu, Ling, Caren Dymond, **W. Xi**, and Jason Rodigue. 2015. Quantifying forest ecosystem services tradeoff—coupled ecological and economic models. American Geophysical Union Fall Meeting, San Francisco, December 2015, USA.
18. Wu, X. Ben, Stephanie Knight,Rick Hammer, Matthew Simmons, **W. Xi**, Aubree Webb, Melisa Ziegler, Jane Schielack. Virtual authentic ecological inquiry – transferability and influence of institutional contexts. August 10-15, 2014. The Annual Meeting of the Ecological Society of America, Sacramento, CA, USA.

19. **Xi, W**., David J. Mladenoff, Feng Liu, Sami Khanal, Robert M. Scheller. A broad-scale and high resolution spatial simulation of forest composition and biomass changes under climate change: Northern Wisconsin and Upper Michigan. August 5-9, 2013. The 98th Annual Meeting of the Ecological Society of America, Minneapolis, Minnesota, USA.
20. **Xi, W**., David J. Mladenoff, Robert M. Scheller, Sarah Pratt, Linda R. Parker, Chris W. Swanston. Simulating the impacts of climate change, land use and mitigation strategies on forest biomass in northern Wisconsin. August 7-12, 2011. The 96th Annual Meeting of the Ecological Society of America, Austin, Texas, USA.
21. Waldron, J., **W. Xi**, M. Tchakerian, A. Birt, Y. Zeng, D. Cairns, C. Lafon, R. Coulson, D. Street. Modeling Hemlock Woolly Adelgid Impacts in the Southern Appalachian Mountain. Presented at the 107th Annual Meeting of the Association of American Geographers, April 12-16, 2011, Seattle, WA, USA.
22. David J. Mladenoff, Robert M. Scheller, **W. Xi**. Using LANDIS-II to model potential forest change in northern Wisconsin. Presented at the 95th Annual Meeting of the Ecological Society of America. August 1-6, 2010. Pittsburgh, PA, USA.
23. **Xi, W**., Szu-Hung Chen, Andrew G. Birt, John D. Waldron, Charles W. Lafon, David M. Cairns, Maria D. Tchakerian, Kier D. Klepzig, and Robert N. Coulson. Simulating the impacts of altered fire regimes and landscape structure on plant invasion in the southern Appalachians. Presented at the 25th US-IALE Annual Landscape Ecology Symposium. April 5-9 2010. Athens, GA, USA.
24. **Xi, W**., Szu-Hung Chen, Andrew G. Birt, John D. Waldron, Charles W. Lafon, David M. Cairns,Maria D. Tchakerian, Kier D. Klepzig, Robert N. Coulson. Simulating the interactions of forest structure, fire regime, and plant invasion in the southern Appalachians using LANDIS. Presented at the 21th USDA Interagency Research Forum on Invasive Species. January 12-15, 2010. Annapolis, MD, USA.
25. **Xi, W**., Szu-Hung Chen, J. Waldron, C. Lafon, D. Cairns, M. Tchakerian, K. Klepzig, R. Coulson. Simulating the impacts of altered fire regimes and landscape structure on the invasion of Paulownia Tomentosa in the Southern Appalachians. Presented at the 20th USDA Interagency Research Forum on Invasive Species, January 13-16, 2009, Annapolis, MD, USA.
26. **Xi, W**., John D. Waldron, Charles W. Lafon, David M. Cairns, Andrew G. Birt, Maria D. Tchakerian, Robert N. Coulson, Kier D. Klepzig. Modeling long-term effects of altered fire regimes following southern pine beetle outbreaks. Presented at the 24th US-IALE Annual Landscape Ecology Symposium. April 12-16 at Snowbird, UT, USA.
27. **Xi, W**., Charles W. Lafon, David M. Cairns, John D. Waldron, Andrew G. Birt, Maria D. Tchakerian, Robert N. Coulson, Kier D. Klepzig. Modeling effects among fire and yellow pine regeneration following southern pine beetle outbreaks in southern Appalachians. Presented at the 23rd US-IALE Annual Landscape Ecology Symposium. April 6-10 at Madison, WI, USA.
28. Waldron, John D, **W. Xi**, Charles W. Lafon, David M. Cairns, Maria D. Tchakerian, Andrew G. Birt, Robert N. Coulson Kier D. Klepzig. Modeling effects of multiple disturbance interactions on long-term forest changes in the Southern Appalachian Mountains. Presented at the 104th Annual Meeting of the Association of American Geographers, April 15-19, Boston, MA. USA.
29. **Xi, W**., Charles W. Lafon, David M. Cairns, John D. Waldron, Maria D. Tchakerian, Kier D. Klepzig, Robert N. Coulson. Simulating impacts of invasive plants in southern Appalachian landscapes using LANDIS. Presented at the 19th USDA Interagency Research Forum on Invasive Species. January 8-11, Annapolis, Maryland, USA.
30. Birt, Andrew G., Richard M. Feldmana, M.Valdez-Vivaz, Charles W. Lafon, David M. Cairns, **W. Xi**, Maria D. Tchakerian, Robert N.Coulson. A description of a weather generator (TAM-WG) for ecological modeling. Presented at the 23rd US-IALE Annual Landscape Ecology Symposium. April 6-10 at Madison, WI, USA.
31. Birt, Andrew G., Robert N. Coulson, Maria D. Tchakerian, **W. Xi**, Richard M. Feldman, Charles W. Lafon, David M. Cairns. Population dynamics and contagion of southern pine beetle infestations. Presented at the Annual Meeting of the Entomological Society of America. San Diego, California, USA.
32. **Xi, W**., John D. Waldron, David M. Cairns, Charles W. Lafon, Robert N. Coulson, Maria D. Tchakerian, Lei Wang, Andrew G. Birt, Kier D. Klepzig. Modeling ecological restoration effects on yellow pine forests following Southern Pine Beetle infestations in the southern Appalachian Mountains. Presented at the Annual Ecological Society of America/The Society for Ecological Restoration Joint Meeting, San Jose, California, USA.
33. **Xi, W**., Lei Wang, Andrew G. Birt, Robert N. Coulson, Maria D. Tchakerian, David M. Cairns, Charles W. Lafon, John D. Waldron, Kier D. Klepzig. An integrated approach to map forest conditions in Southern Appalachians. Presented at the Annual Meeting of US-IALE, Tucson, Arizona, USA.
34. Waldron, John D., **W. Xi**, Charles W. Lafon, David M. Cairns, Maria D. Tchakerian, Robert N. Coulson, Kier D. Klepzig. Predicting impacts of hemlock woolly adelgid on forest composition in the southern Appalachian

Mountains, USA. Presented at the 2007 Meeting of the Association of American Geographers, San Francisco, CA, USA.

35. Waldron, J., R. Coulson, D. Cairns, C. Lafon, M. Tchakerian, **W. Xi**, A. Birt. Evaluating the Impact of Invasive Species in Forest Landscapes: the southern pine beetle and the hemlock woolly adelgid. Presented at the conference of Advances in threat assessment and their application to forest and rangeland management, July 18-20, 2006. Boulder, CO, USA.
36. **Xi, W**., Robert K. Peet, Dean L. Urban. 2003. Hurricane disturbances, tree species diversity and succession in North Carolina Piedmont forests. Presented at the 88th Annual Meeting of the Ecological Society of America. Savannah, Georgia, USA.
37. **Xi, W**., Robert K. Peet, Dean L. Urban. Impact of a major canopy disturbance on the long-term dynamics of North Carolina Piedmont forests. Presented at the 87th Annual Meeting of the Ecological Society of America. Tucson, Arizona, USA.

Regional

38. **Xi, W**., John D. Waldron, David M. Cairns, Charles W. Lafon, Robert N. Coulson, Maria D. Tchakerian, Lei Wang, Andrew G. Birt, Kier D. Klepzig. Landscape modeling for forest restoration following insect outbreaks. Presented at the 50th Southern Forest Insect Work Conference. July 23-26, 2007. Jekyll Island, GA, USA.
39. **Xi, W**., Robert K. Peet, Dean L. Urban. Impacts of Hurricane Fran on the structure of a North Carolina Piedmont forest. Presented at the 63rd Annual Meeting of the Association of Southern Biologists. April 2002. Boone, NC, USA.

Local (*graduate or undergraduate students I advised)

40. Zhou, Ruiren*, Alexander Rahmlow*, **W. Xi.** Statistical estimation of tree cover and ecosystem service in Corpus Christi using i-Tree Canopy™. Poster presented at Javelina Research Symposium, Kingsville, Texas, 2016.
41. Rahmlow, Alexander*, **W. Xi,** Ambrose Anoruo**.** An urban street tree inventory in a Gulf Coast city: Corpus Christi, Texas, Poster presented at Texas A&M University System 12th Annual Pathways Student Research Symposium, Corpus Christi, Texas, 2015 (Master's Life Science First Place; Overall Distinguished Award)
42. Mukti Subedi*, **W. Xi**, Chris Edgar, and Sandra Rideout-Hanzak. 2016. Evaluating extreme drought-induced tree mortality and biomass loss in east Texas using Forest Inventory and Analysis (FIA) data. Poster presented at Texas A&M University System 12th Annual Pathways Student Research Symposium, Corpus Christi, Texas, 2015.
43. Mukti R. Subedi* and **W. Xi.** Spatial patterns and temporal variability of drought in east Texas, USA. Javelina Research Symposium Poster, Kingsville, Texas, 2015.
44. Lopez, Ramon* and **W. Xi.** A sustainable rare and endangered plant habitat for campus sustainability. Poster presented at Javelina Research Symposium, Kingsville, Texas, 2015.
45. Boppana, Sadguni* and **W. Xi.** Health of scrub typhus diseases and its distribution in India. Poster presentation at Javelina Research Symposium, Kingsville, Texas, 2015.
46. Lijun Dai*, **W. Xi.** Using LANDIS-II to simulate forest dynamics under climate change in the Changbai Mountains. Poster presented at Texas A&M University System 11th Annual Pathways Student Research Symposium, November 8th, Kingsville, Texas, 2013.
47. Lijun Dai*, **W. Xi,** Weihong Cui. Using high resolution AIRS to assess variations of mid-troposphere CO_2 and CH_4 concentrations in China. Poster presented at the 5th Javelina Research Symposium Poster, Kingsville, Texas, 2013.

RESEARCH AND SCHOLARLY ACTIVITIES

SUMMARY

1. Served or serves as the PI (Principal Investigator) or Co-PI of 8 research projects totaling **~$548, 720**.
2. Sponsors include USDA Forest Service, Hong Kong K.C. Wong Education Foundation, CITGO Petroleum Corporation, and numerous university internal competitive grants
3. Established collaborative research projects with 30+ domestic and international research institutions
4. Led multidisciplinary geo-spatial and ecological modeling initiatives involving multiple colleges, universities, agencies and partners
5. Research interests and activities include biogeography and biodiversity, forest landscape ecology, natural resource and ecosystem management, climate change, environmental biology, environment modeling and geospatial analysis, applied GIS, remote sensing and ecoinformatics

RESEARCH COLLABORATIONS (Selected)

Collaborated in research, publications, and proposal development with following universities and research institutes:

1. University of Wisconsin-Madison, USA
2. Texas A&M University, USA
3. University of North Carolina at Chapel Hill, USA
4. Duke University, USA
5. University of Virginia, USA
6. Lawrence Berkeley National Lab, USA
7. U.S. Department of Agriculture, Forest Service, USA
8. Texas A&M Forest Service, USA
9. Portland State University, USA
10. University of Minnesota, USA
11. Louisiana State University, USA
12. University of Missouri-Columbia, USA
13. U.S. Geological Survey, USA
14. University of Missouri-St Louis, USA
15. Illinois State Museum, USA
16. University of Minnesota, USA
17. Beijing University, China
18. Northwest A&F University, China
19. Beijing Forestry University, China
20. Southwest University, China
21. Capital Normal University, China
22. Shanxi Normal University, China
23. Institute of Applied Ecology, Chinese Academy of Sciences, China
24. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, China
25. Institute of Urban Environment, Chinese Academy of Sciences, China
26. Institute of Soil and Water Conservation, Chinese Academy of Sciences, China
27. Institute of Botany, Chinese Academy of Sciences, China
28. Canadian Forest Service, Canada
29. University of Quebec at Montreal, Canada
30. University of British Columbia - Okanagan, Canada
31. University of Bari, Italy
32. Wageningen University, The Netherlands

PROFESSIONAL GROWTH AND SERVICE ACTIVITIES (Selected)

Professional Development

1. Certificate of Blackboard software courses by Texas A&M University-Kingsville iTech Services, 2014, 2015
2. Certificate of Professional Development in Instructional Technology, Texas A&M University-Kingsville, 2015
3. Certificate of Professional Development in Distance Education, Texas A&M University-Kingsville, 2019
4. Certificate of Effective Teaching Practices, Association of College and University Educators (ACUE), 2021

Professional affiliations

1. The Scientific Research Society (Sigma Xi), Full member
2. The Ecological Society of America (ESA)
3. The International Association for Vegetation Science (IAVS)

Leadership roles at international conferences

1. Co-Chair, "The International Symposium on Sustainable Forest Management in the Context of Global Change (ISSFM-CGC)", August, 2017, Harbin, China.
2. Symposium Co-Chair, "Forest ecosystem models as decision support systems for ecological forest management", The International Society for Ecological Modelling Global Conference, May 2016, Baltimore, MD, USA.
3. Symposium-Chair, the US-IALE Annual Landscape Ecology Meeting. April 2009. Snowbird, UT, USA.
4. Symposium-Chair, the Ecological Society of America and The Society for Ecological Restoration International Joint Annual Meeting, August 2007, San Jose, California, USA.

Editorships

1. Associate Editor-in-Chief: Chinese Agricultural Science Bulletin, 2009-2014
2. Associate Editor-in-Chief: Transactions of Chinese Society of Agricultural Engineering 2012-2021

3. Associate Editor: Journal of Forestry Research, 2009-Present
4. Associate Editor: The Forestry Chronicle, 2017-Present
5. Associate Editor: aBIOTECH, 2018-Present
6. Editorial Board member: International Journal of Agriculture and Biology 2008-2020
7. Editorial Board member: Acta Ecologica Sinica, 2010-Present
8. Editorial Board member: Journal of Integrative Agriculture, 2022-Present
9. Guest Editor: Tree and Forestry Science and Biotechnology (Global Science Books, Ltd. UK), 2010

Reviewer for the following journals

1. Acta Ecologica Sinica
2. Acta Oecologica
3. Annals of Forest Science
4. Applied Vegetation Science
5. Arid Land Research and Management
6. Biodiversity Science
7. Canadian Journal of Forest Research
8. Chinese Agricultural Science Bulletin
9. Chinese Journal of Plant Ecology
10. Community Ecology
11. Ecological Research
12. Environmental Management
13. Environmental Modelling & Software
14. Environmental Science and Pollution Research
15. Forest Ecology and Management
16. Forest Research: Open Access
17. Forestry Chronicle
18. Global Change Biology
19. International Journal of Agriculture and Biology
20. International Journal of Forestry Research
21. International Journal of Wildland Fire
22. Journal of Ecology
23. Journal of Environmental Management
24. Journal of Forestry Research
25. Journal of Integrative Agriculture
26. Journal of Mountain Science
27. Journal of Plant Ecology
28. Journal of Vegetation Science
29. Plant Ecology
30. PLOS ONE
31. Polish Journal of Environmental Studies
32. Revista Biologia Tropical
33. Restoration Ecology
34. Scandinavian Journal of Forest Research
35. Tree and Forestry Science and Biotechnology
36. Ecosphere
37. Ecological Process
38. Frontiers in Environmental Science and Conservation

Reviewer of book chapters for publisher

1. Higher Education Press, China

Proposal Development Training

1. NSF Proposal Development Training/Writing Workshop, 2016-2020

Professional societal activities

1. Judge, Annual South Texas Student Success Conference, Kingsville, Texas, 2014-2019
2. Judge, Texas A&M System Annual Pathways Student Research Symposium, Kingsville, Texas, 2014-2019

University committees

1. Member, President's Sustainability Task Force for Texas A&M University-Kingsville, 2013-2017
2. Member, Advisory Board for Texas A&M University-Kingsville Center for Teaching Effectiveness, 2014-2016
3. Member, Environmental Management System Committee for Texas A&M University-Kingsville, 2014-Present
4. Member, TAMUK-EPA Steering Committee, 2015-Present
5. Member, TAMUK Graduate Council, 2022- Present
6. Member, TAMUK Graduate Curriculum Committee, 2022-Present

Department committees

1. Chair, Department of Graduate Committee, 2017-2018
2. Chair, Department of Tenure and Promotion Committee, 2020
3. Chair, Department Faculty Search Committee, 2022
4. Department Graduate Coordinator 2017-2018
5. Member, Department Faculty Search Committee, 2014-Present (4 faculty search)
6. Member, Department Graduate Study Research Committee, 2014-Present
7. Member, Department Scholarship Committee, 2014-Present
8. Member, Department Curriculum Committee, 2021-Present

TAMUK Herbarium curator

1. Served as curator of vascular plants, reorganize the herbarium to make it accessible for future plant related student activities, faculty teaching and research. It took lots of work inputs.
2. Provide species data service to public and researchers.
3. Supervised 2 graduate and 6 undergraduate students to digitize the plant species in the herbarium.
4. Restored/maintained herbarium website which has been discontinued for more than 10 years. The new website is more dynamic and currently included online database of plants in Texas with varied search functions: http://plantsearch.tamuk.edu/

Volunteers

1. Present in the UNIV. courses, 2018
2. Present at University New Faculty Investment Program, 2018
3. Provide advice and guide to new faculty members, 2021--Present

OTHER PROFESSIONAL ACTIVITIES (Selected)

GIS training

1. Certificate of Advanced GIS Training**,** University of North Carolina at Chapel Hill, 2004

Software development

1. **Team leader** and developer for developing a widely used visualization and analytical software LANDISVIEW: A widely used visualization and analytical software to visualize and animate Geographical Information System format maps and images (C/C++ and other developing tools).
2. This tool has been used by over 110 universities and government agencies from 35 countries: (https://drxilab.netlify.com/landisview)

Computing skills (Selected)

1. Experienced with Google Earth, GPS, and Programming languages: C/C++
2. Statistics packages: SAS, S-plus, R, CANOCO, PC-ORD, and SPSS
3. GIS and Remote Sensing software: ESRI ArcGIS, ArcInfo, ERDAS Imagine, and ENVI
4. Databases: Access, dBase, Foxpro, FileMakerPro, MySQL, Oracle 8i/9i
5. Web applications: HTML, PHP, Dreamweaver, FrontPage, and Photoshop, Data Server
6. Ecological models: LINKAGES, SORTIE, PnET, LANDIS-II implication and development

Language proficiency

1. English (Fluent)
2. Chinese (Fluent)