

JUN YANG

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RESEARCH INTERESTS

Structure and functions of urban ecosystems in the context of global environmental change

- Impacts of urbanization on biodiversity at multiple scales
- Urban ecosystem services and human wellbeing
- Applications of remote sensing

EDUCATION

09/1999-12/2004	Ph.D. in Environmental Science, Policy, and Management University of California at Berkeley, Berkeley, USA
09/1996-07/1999	M.Agri. in Ornamental Plants Beijing Forestry University, Beijing, China
09/1990-07/1994	B.Agri. in Forest Protection Beijing Forestry University, Beijing, China

ACADEMIC POSITIONS

Present Position

01/2013- Associate Professor
Department of Earth System Science
Tsinghua University, Beijing, China

Previous Positions

09/2009-11/2012	Professor College of Forestry Beijing Forestry University, Beijing, China
09/2005-05/2009	Tenure-track Assistant Professor Department of Landscape Architecture and Horticulture Temple University, Philadelphia, USA
07/1994-07/1996	Assistant Researcher Institute of Medicinal Plant Chinese Academy of Medical Science, Beijing, China

Visiting Positions

- 09/2017-02/2018 Visiting Associate Professor
Cornell Laboratory of Ornithology
Cornell University, USA
- 01/2005-03/2005 Visiting Postdoctoral Fellow
Professor William Burch's Laboratory
Yale School of Forestry & Environmental Studies

Administrative Positions

- 07/2011-11/2012 Coordinator
Coordination Office of Forest College Deans Meeting
Mechanism in Asia-Pacific Region
Beijing Forestry University
- 09/2009-11/2012 Director
Research Center for Urban Forestry
Beijing Forestry University

AWARDS AND HONORS

- 2011 Australian Leadership Award Scholarship, Australian National University, Australia
- 2001 Xi-Sigma-Pi, Forestry Honor Society, California Chapter, USA

GRANTS

At Tsinghua University

- 2018-2020 Grant for Center for Healthy Cities
Delos, USA, co-investigator, 1 million CNY
- 2017-2018 Developing Tree Species Identification Apps Based on Mobile and Cloud Platforms
Microsoft Research Asia, PI, 150,000 CNY
- 2016-2019 A Study on the Scale-dependence Effect of the Pattern and Driving Mechanism of Biotic Homogenization of Urban Plants
National Natural Science Foundation of China, PI, 751,200 CNY
- 2015-2019 Demonstration and Research on Techniques for Constructing Eco-economic Type of Forests to Prevent schistosomiasis
State Forestry Administration, Subproject PI, 200,000 CNY
- 2015-2017 Classification of Landsat Images for Beijing between 1985-2015
Institute of Remote Sensing and Digital Earth, CAS, PI, 150,000 CNY
- 2015-2015 Monitoring and assessing the application of growth regulator

- and mycorrhizal treatment on native species in Tibet
Beijing Forestry University, PI, 100,000 CNY
- 2014-2017 Urban Vegetation and Thermal Patterns Following City Growth:
a Cross-Continental Comparison
Tsinghua University, PI, 120,000 CNY
- 2013-2016 The Platform for Retrieving and Processing Features and
Parameters Oriented for Global Change Studies
Ministry of Science and Technology of China, PI (48%, CNY 1.40
million), 2.91 million CNY
- 2013-2015 Finding the Right Green Receipt for Curing the PM_{2.5} problem in
Beijing
National Geographic Air and Water Protection Fund, PI, 30,400
USD
- 2013-2014 Assessing and Monitoring of Health Function of Urban Forests in
Hangzhou
Chinese Academy of Forestry, PI, 50,000 CNY
- At Beijing Forestry University
- 2011-2014 Adaptation of Integrated Valuation of Ecosystem Services and
Tradeoffs (InVEST) Model
State Forestry Administration, 500, 000 CNY
- 2011-2013 Monitoring and Assessing the Health Functions of Urban Forests
State Forestry Administration, 390,000 CNY
- 2011-2012 Carbon Sequestration by Forests in Low Mountain Regions of
Beijing
Beijing Municipal Bureau of Landscape and Forestry, 125,000
CNY
- 2011-2012 Monitoring Network of Ecological Functions of Urban Forests in
Hangzhou
Chinese Academy of Forestry Science, 200,000 CNY
- 2011-2012 CO₂ sequestration by Forests in Mentougou District, Beijing
Beijing Forestry University, 400,000 CNY
- 2010-2012 Assessing Indicators and Methods for Surveying Ecological
Conditions of Forests in the National Forest Inventory
Academy of Forest Inventory and Planning, 100,000 CNY
- 2010-2012 The Potential of Urban Forests in Reducing Greenhouse Gas
Emissions in Beijing
Ministry of Education of China, 30,000 CNY
- 2010-2012 CO₂ Sequestration by Urban Forests in China
State Key Laboratory of Remote Sensing Science, CAS, 150,000
CNY

- 2007-2009 Assessing Effects of Ecological Restoration Along the Qinghai-Tibet Railway
Chinese Academy of Forestry, 200,000 CNY
- At Temple University
- 2007 Tree Vitalize Grant
Department of Conservation and Natural Resources, Pennsylvania, 13,210 USD
- 2006 Effectiveness of Landscaping on Vacant Lots to Reduce Stormwater Runoff
Pennsylvania Horticultural Society, 4,500 USD
- 2004-2005 The Feasibility of Using Heavily Pruned Large Seedlings as Street Tree Planting Material
John Z. Duling Grant, Tree Trust Fund, 7,000 USD
- At University of California, Berkeley
- 2003-2004 Forest Cover Change in the Northern Border of Lao PDR
Pacific Rim Research Grant, University of California, Co-PI, 21,000 USD

PUBLICATIONS

Peer Reviewed Journal Articles (# of SCI/Total)

*Corresponding author

2018 (6/7)

1. Huang, C., **Yang, J***, Jiang, P. 2018. Assessing impacts of urban form on landscape structure of urban green spaces in China using Landsat images based on Google Earth Engine. *Remote Sensing*, 10: 1569.
2. Gong, P*, **Yang, J**, Bing, X, Zhang, Y. 2018. Theories and practices in developing healthy cities in China. *Science Bulletin*, 63: 979-980. (In Chinese)
3. **Yang, J**, et al [Tsinghua-Lancet Commission]. 2018. Tsinghua-Lancet Commission on Healthy Cities in China: unlocking the power of cities for a healthy China. *The Lancet*, 391: 2140-2184.
4. La Sorte, F*, Lepczyk, C., Aronson, M.F.J., Goddard, M. A. Hedblom, M., Katti, M., MacGregor-Fors, I., Mörtberg, U., Nilon, C.H., Warren, P. S., Williams, N.S.G., **Yang, J**. 2018. The phylogenetic and functional diversity of regional breeding bird assemblages is reduced and constricted through urbanization. *Diversity and Distributions*, 24: 928-938.
5. Yan, P., **Yang, J***. 2018. Performances of urban tree species under disturbances in China. *Forests*, 9: 50.
6. Dai, G., **Yang, J***, Lu, S., Huang, C., Jin, J., Jiang, P., Yan, P. 2018. The potential impact of invasive woody oil plants on protected areas in China under future

- climate conditions. *Scientific Report*, 8: 1041.
7. Jiang, P., **Yang, J***, Huang, C., Liu, H. 2018. The contribution of socioeconomic factors to PM_{2.5} pollution in urban China. *Environmental Pollution*, 233: 977-985.
2017 (8/8)
 8. Huang, C., **Yang, J***, Lu, H., Huang, H., Yu, L. 2017. Green spaces as an indicator of urban health: evaluating its changes in 28 mega-cities. *Remote Sensing*, 9: 1266.
 9. Yan, P., **Yang, J***. 2017. Species diversity of urban forests in China. *Urban Forestry & Urban Greening*, 28: 160-166.
 10. **Yang, J***, Yan, P., He, R., S, X. 2017. Exploring land-use legacy effects on taxonomic and functional diversity of woody plants in a rapidly urbanizing landscape. *Landscape and Urban Planning*, 162: 92-103.
 11. Dai, G., **Yang, J***, Huang, C., Sun, C., Jia, L., Ma, L. 2017. The effects of climate change on the development of tree plantations for biodiesel production in China. *Forests*, 8: 207.
 12. Li, C., [and 20 others, including **Yang, J.**]. 2017. The first all-season sample set for mapping global land cover with Landsat-8 data. *Science Bulletin*, 62: 508-515.
 13. Huang, H., Chen, Y., Clinton, N., Wang, J., Wang, X., Liu, C., Gong, P., **Yang, J.**, Bai, Y., Zheng, Y., Zhu, Z. 2017 Mapping major land cover dynamics in Beijing using all Landsat images in Google Earth Engine. *Remote Sensing of Environment*, 129: 189-199.
 14. Song, Q., Lu, H., Liu, J., **Yang, J.**, Yang, G., Yang, Q. 2017. Accessing the impacts of bamboo expansion on NPP and N cycle in evergreen broadleaved forest in subtropical China. *Scientific Reports*, 7: 40383.
 15. **Yang, J.**, Wu, T., Gong, P*. 2017. Implementation of China's new urbanization strategy requires new thinking. *Science Bulletin*, 62: 81-82.
2016 (8/12)
 16. **Yang, J***, Yan, P., Li, X. 2016. Urban biodiversity in China: Who are winners? Who are losers? *Science Bulletin*, 61: 1631-1633.
 17. Nie C., **Yang, J***, Huang, C. 2016. Assessing the habitat quality of aquatic environments in urban Beijing. *Procedia Environmental Sciences*, 36: 162-168.
 18. Watts, N, et al [The Lancet Commission on Health and Climate Change, including **Yang, J.**]. 2016. The Lancet countdown: tracking progress on health and climate change. *The Lancet*, 369: 1151-1164.
 19. Xu, B., **Yang, J.**, Zhang, Y., Gong, P.* 2016. Healthy cities in China: a Lancet commission. *The Lancet*, 388: 1863-1864.
 20. Li, X., Yu, L., Xu, Y., **Yang, J.**, Gong, P*. 2016. Ten years after Hurricane Katrina: monitoring recovery in New Orleans and the surrounding areas using remote sensing, *Science Bulletin*, 61: 1460-1470.
 21. He, R., **Yang, J***, Song, X. 2016. Quantifying the impact of different ways to delimit study areas on the assessment of species diversity of an urban forest, *Forests*, 7:

- 42.
22. Hu, T., **Yang, J***, Li, X., Gong, P. 2016. Mapping urban land uses by using Landsat images and point of interest data. *Remote sensing*, 8: 151.
23. Li, M., Li, C., Jiang, H., Fang, C., **Yang, J.**, Zhu, Z., Shi, L., Liu, S., Gong, P*. 2016. Tracking bamboo dynamics in Zhejiang, China, using time-series of Landsat data from 1990-2014. *International Journal of Remote Sensing*, 37: 1714-1729.
24. Wang, X., Huang, H., Gong, P*, Biging, G., Xin, Q., Chen, Y., **Yang, J.**, Liu, C. 2016. Quantifying multi-decadal change of planted forest cover using airborne LiDAR and landsat imagery, *Remote Sensing*, 8: 62.
25. Guo, F., Chen, J., **Yang, J***, Meng, Y., Gong, Y. 2016. Parameter sensitivity analysis of SWMM model for simulation of grass swales. *China Water & Wastewater*, 32: 131-134. (In Chinese, English Abstract)
26. Zhang, W., Ma, L., **Yang, J***. 2016. Analysis of the use of ecosystem service concept in forest-based tourism overseas. *World Forestry Research*, 29: 7-13. (In Chinese, English Abstract)
27. Liang, S., [and 19 others, including **Yang, J.**]. 2016. Production of the global climate data records and applications for climate change studies. *Journal of Remote Sensing*, 20: 1491-1499. (In Chinese, English Abstract)
- 2015 (6/10)**
28. **Yang, J***, La Sorte, F.A., Pysek, P, Yan, P., Nowak, D, McBride, J. 2015. The compositional similarity of urban forests among the world's cities is scale dependent. *Global Ecology and Biogeography*, 24: 1413-1423.
29. Watts, N*, et al [The Lancet Commission on Health and Climate Change, including **Yang, J**]. 2015. Health and climate change: policy responses to protect public health. *The Lancet*, 386: 1861-1914. (I am the co-leading author of the section 3)
30. Watts, N*, et al [The Lancet Commission on Health and Climate Change, including **Yang, J**]. 2015. Health and climate change- Political strategies for the protection of public health. *Umweltmedizin in Forschung und Praxis*, 20: 167-169.
31. Zhang, W., **Yang, J***, Ma, L., Huang, C. 2015. Factors affecting the use of urban green spaces for physical activities: Views of young urban residents in Beijing. *Urban Forestry & Urban Greening*, 14: 851-857.
32. **Yang, J***, Dai, G., Wang, S. 2015. China's national monitoring program on ecological functions of forests: An analysis of the protocol and initial results. *Forests*, 6: 809-826.
33. **Yang, J***, Chang, Y., Yan, P. 2015. Ranking the suitability of common urban tree species for controlling PM2.5 pollution. *Atmospheric Pollution Research*, 6: 267-277.
34. Li, S., **Yang, J***, Ma, L., Jia, L., Li, R., Qin, Y. 2015. Variations of PM2.5 concentrations inside the greenbelts along two urban traffic arteries in Beijing. *Journal of Northwest Forestry University*, 30: 245-252. (In Chinese, English)

Abstract)

35. Guo, F., Chen, J., **Yang, J***, Meng, Y., Gong, Y. 2015. Regulatory effect of grassed swales on road surface runoff in Beijing City. *Bulletin of Soil and Water Conservation*, 35: 176-181. (In Chinese, English Abstract)
36. Yao, N., Ma, L., **Yang, J.**, Jia, L., Duan, J., Huang. 2015. Changes of ecological spaces in Beijing's plain areas between 1982 and 2013. *Chinese Journal of Ecology*, 34: 1427-1434. (In Chinese, English Abstract)
37. Chang, Y., Yan, P., **Yang, J***. 2015. Suggestions on tree species selection for urban greening in Beijing to control PM_{2.5} pollution. *Chinese Landscape Architecture*, 31: 69-73. (In Chinese, English Abstract)

2014 (3/7)

38. **Yang, J***, Huang, C., Zhang, Z., Wang, L. 2014. The temporal trend of urban green coverage in major Chinese cities between 1990 and 2010. *Urban Forestry & Urban Greening*, 1: 19-27.
39. Zhang, W., **Yang, J***. 2014. Development of outdoor recreation in Beijing, China between 1990 and 2010. *Cities*, 37: 57-65.
40. Li, C., Wang, J., Hu, L., Yu, L., Clinton, N., Huang, H., **Yang, J.**, Gong, P*. 2014. A circa 2010 thirty meter resolution forest map for China. *Remote Sensing*, 6: 5325-5343
41. Zhang, Z., Ye, B*, **Yang, J.**, He, Q., Dong, J. 2014. Research progress in studies of health functions of urban forests. *World Forestry Research*, 27: 26-33. (In Chinese, English Abstract)
42. Zhang, Z., Ye, B*, **Yang, J.**, Chen, Q., He, Q., Dong, J. 2014. Monitoring of dynamic changes of ecological health functions of urban forests in Hangzhou. *Journal of Northwest Forestry University*, 30: 31-36. (In Chinese, English Abstract)
43. Huang, C., **Yang, J***, Zhang, W. 2014. The application of forest inventory data in an ecosystem service evaluation model: InVEST. *Forest Resources Management*, (5): 126-131. (In Chinese, English Abstract)
44. Yao, N., Ma, L*, **Yang, J.**, Jia, L., Duan, J. 2014. Application of 3S technology in urban forestry. *World Forestry Research*, 27: 23-28. (In Chinese, English Abstract)

2013 (3/9)

45. **Yang, J.**, Gong, P*, Fu, R., Zhang, M., Chen, J., Liang, S., Xu, B., Shi, J., Dickson, R. 2013. The role of satellite remote sensing in climate change studies. *Nature Climate Change*, 3: 875-883.
46. **Yang, J***, Dai, G., Ma, L., Jia, L., Wu, J. 2013. Forest-based bioenergy in China: Status, opportunities, and challenges. *Renewable and Sustainable Energy Reviews*, 18: 478-485.
47. Wang, L*, Silvan-Cardenas, J.L., **Yang, J.**, Frazier, A.E. 2013. Invasive saltcedar (*Tamarisk* spp.) distribution mapping using multiresolution remote sensing imagery. *The Professional Geographer*, 65: 1-15.

48. Zhang, Y., Duo, Z., **Yang, J.**, Hu, Y., Zhang, Z., Ye, B*. 2013. Community structure and species diversity of urban green space in Hangzhou, China. *Journal of Northeast Forestry University*, 41: 25-30. (In Chinese, English Abstract)
49. Huang, C., **Yang, J***, Zhang, W. 2013. Development of ecosystem services evaluation models: research progress. *Chinese Journal of Ecology*, 32: 1-9(In Chinese, English Abstract)
50. Liu, S., Jia, L., **Yang, J.**, Xin, J. 2013. Estimation of carbon storage of regional poplar plantations based on Landsat thematic mapper image in Heze of Shandong Province, Eastern China. *Journal of Beijing Forestry University*, 35: 36-41. (In Chinese, English Abstract)
51. Zhang, Z., **Yang, J***, Li, X., Zhang, W., Huang, C. 2013. Current status of evaluations on ecological benefits of urban forest: surveying on urban forestry administrative authorities. *Journal of Beijing Forestry University (Social Science)*, 12: 36-40. (In Chinese, English Abstract)
52. Zhao, J., **Yang, J***, Lai, N., Yuan, C., Tang, S., Zhang, Z. 2013. Relationship between vigor of trees and concentrations of nutrients in soils and plant tissues of a veteran *Platycladus orientalis* tree stand. *Agricultural Science Bulletin*, 29: 9-13 (In Chinese, English Abstract)
53. Bao, F., Qin, Y., Li, R., Zhou, J., **Yang, J***. 2013. Analysis of the Eco-health function of five typical urban green species in Beijing. *Agricultural Science Bulletin*, 29: 26-35. (In Chinese, English Abstract)

2012 (4/8)

54. **Yang, J***, Zhou, J., Ke, Y., Xiao, J. 2012. Assessing the structure and stability of street trees in Lhasa, *Urban Forestry & Urban Greening*, 11: 423-438.
55. Niu, Z., [and 30 others, including **Yang, J.**]. 2012. Mapping wetland changes in China between 1978 and 2008. *China Science Bulletin*, 57: 2813-2823.
56. **Yang, J***. 2012. Urban Forestry in challenging environments. *Urban Forestry & Urban Greening*, 11: 103-104.
57. Huang, C., Zhang, Z., Zhang, W., **Yang, J***. 2012. A review of overseas remote sensing monitoring methods for aboveground forest carbon sink. *World Forestry Research*, 25: 20-26. (In Chinese, English Abstract)
58. Zhang, Z., **Yang, J***. 2012. The historical change of planting design in traditional Chinese landscape and gardening. *Modern Landscape Architecture*, 6: 8-11. (In Chinese, English Abstract)
59. Hu, Y., **Yang, J***. 2012. Research progress in sanitarian function of urban forest. *Journal of Chinese Urban Forestry*, 10: 18-20. (In Chinese, English Abstract)
60. Hu, Y., Ma, L., **Yang, J.**, Chen, M., Wang, N., Guo H*. 2012. Integration of space and time, Different composition but same configuration—on the relationships of literature and culture between Chinese ancient landscape and music. *Beijing Lanscape*, 28: 30-33.

61. **Yang, J***, Zhang, M, Lei, G. 2012. Biases in “Protection efficacy of national wetland reserves in China”, *Chinese Science Bulletin*, 57: 1367-1370. (In Chinese, English Abstract)

2011 (2/7)

62. Zhou, J*, Wei, Y., **Yang, J.**, et al. 2011. Carbon budget and its response to environmental factors in young and mature poplar plantations along the middle and lower reaches of the Yangtze River, China. *Journal of Food, Agriculture & Environment*, 9: 818-825.
63. Li, G., Liu, Y*, Zhu Y., **Yang, J.**, Sun, H., Jia, Z., Ma, Lu. 2011. Influence of initial age and size on the field performance of *Larix olgensis* seedlings. *New Forests*, 42: 215-226.
64. Yu, Z., Ma, E., **Yang, J.** 2011. ITS-nrDNA sequence study of important species in genus *Cytospora*. *Journal of Food, Agriculture & Environment*, 9: 557-562.
65. Hu ,Y., Qin, Y., Li R., Zhou, J., Bao, F. **Yang, J***. 2011. Study on the health function of three typical urban greenspaces in Beijing. *Ecology and Environmental Sciences*, 20: 1872-1878. (In Chinese, English Abstract)
66. Zhang, W., Zhao, J., Huang, H., Lai, N., Tang, S., **Yang J***. 2011. Study on stability of individual veteran trees with data collected by ground-based laser radars. *Journal of Southwest Forestry University*, 31: 36-39. (In Chinese, English Abstract)
67. Lai, N., Yuan, C., Tang, S., **Yang, J.**, Zhao, J*.et al. 2011. Application of ground-penetrating radar to detect of root system distribution of a veteran tree. *Journal of Northeast Forestry University*. 39: 124-126. (In Chinese, English Abstract)
68. Yang, J.Y., **Yang, J.**, Ma, L*, Jia, Z. 2011. Comparison and analysis of evaluation system of urban greening in China. *Urban Environment & Urban Ecology*, 24: 13-16. (In Chinese, English Abstract)

2010 (1/1)

69. **Yang, J***, Gong, P., Zhou, J., Huang H., Wang L. 2010. Detection of the urban heat island in Beijing using HJ-1B satellite imagery. *Science China-Earth Sciences*, 53(suppl.1): 67-73.

2009 (2/2)

70. **Yang, J***. 2009. Assessing the potential impact of climate change on urban trees: a case study in Philadelphia. *Journal of Forestry*, 107: 364-372.
71. **Yang, J***, Zhao, L. S and McBride, J. 2009. Can you see green? Assessing the visibility of urban forests in cities. *Landscape and Urban Planning*, 91: 97-104.

2008 (4/5)

72. Yang, C., **Yang, J***, Lou, X., Peng, G. 2008. The use of mobile phones in an emergency reporting system for infectious disease surveillance after the Sichuan earthquake in China. *WHO Bulletin*, 87: 619-623.
73. **Yang, J***, Yu, Q., Peng, G. 2008. Quantifying air pollution removal by green roofs in Chicago, *Atmospheric Environment*, 42: 7266-7273.

74. Zhou, J., **Yang, J***, Peng, G. 2008. Constructing a green railway on the Tibet Plateau: Evaluating the effectiveness of mitigation measures. *Transportation Research Part D: Transport and Environment*, 13: 369-376.
75. Yu, Q., Gong, P*, Tian, Y.Q., Pu, R., **Yang, J.** 2008. Factors affecting spatial variation of classification uncertainty in an image object-based vegetation mapping. *Photogrammetric Engineering & Remote Sensing*. 74: 1007-1008.
76. Zhou, J*, **Yang, J.**, Dong, L., Zhang, X., Zou, L. 2008. An analysis of vegetation cover and species diversity of roadside vegetation in southern section of Tanggula Mountains along the Qinghai-Tibet Railway. *Journal of Beijing Forestry University*, 30: 24-30. (In Chinese, English Abstract)
2007 (1)
77. **Yang, J***, Zhou, J. 2007. The failure and success of greenbelt program in Beijing. *Urban Forestry & Urban Greening*, 6: 287-296.
2005 (1)
78. **Yang, J***, McBride, J., Zhou, J., Sun, Z. 2005. The urban forest in Beijing and its role in air pollution reduction. *Urban Forestry & Urban Greening*, 3: 65-78.
2004 (2)
79. **Yang, J***, McBride, J. 2004. A unique technique for street tree planting in Beijing. *Arboricultural Journal*, 27: 1-10.
80. Xiao, J., Ma, L*, Wang, X., Xu, J., **Yang, J.** 2004. Economic benefit dynamics of carbon sequestration by forest trees in Miyun watershed. *Journal of Beijing Forestry University*, 26: 20-24. (In Chinese, English Abstract)
2003 (1)
81. Wu, Z*, McBride, J., Nowak, D., **Yang, J.**, Cheng, S. 2003. Effects of urban forest on Air pollution in Hefei City. *Journal of Chinese Urban Forestry*, 1: 39-43. (In Chinese, English Abstract)
1998 (1)
82. Cheng, H., Chen, J., **Yang, J.** 1998. A study on the application of entomopathogenic nematodes against ten-spotted Lema (*Lema decempunctata* Scopoli). *Chinese Traditional and Herbal Drugs*, 29: 121-123. (In Chinese, English Abstract)

Non-refereed articles

83. Yang, J. 2016. An examination of China's New Urbanization Strategy. *Urbanization and Global Environmental Change Viewpoints*.
<http://ugecviewpoints.wordpress.com/2016/01/19/an-examination-of-chinas-new-urbanization-strategy/>. Invited paper.
84. **Yang, J***. 2015. Find the right green receipt for urban diseases. *Shanghai Landscaping and City Appearance*, 81: 63-65. (In Chinese) Invited journal paper
85. **Yang, J***. 2014. Planting forests across Beijing could help combat pollution. *Conversation*. <http://theconversation.com/planting-forests-across-beijing-could->

[help-combat-pollution-24078](#). Invited paper.

86. **Yang, J*** and Myers, M. 2007. Study of stormwater runoff reduction by greening vacant lots in North Philadelphia. In Proceeding of 2007 Pennsylvania Stormwater Management Symposium, October 17-18. Philadelphia, Pennsylvania.

Books and Book Chapters

87. **Yang, J***. Zhao, Y., Wang, J. 2017. Chapter 28 Key technology in obtaining and processing parameters. In *Production and Utilization of Remote Sensing Products for Global Change*, eds. Liang et al., Scientific Press, Beijing, China. (In Chinese)
88. Luo, Y., [and 16 others, include **Yang, J.**]. 2017. A study of global climate change impacts on China under different targets of temperature rise. In *Earliest Peaking the Carbon Emission of China*, eds. Group of Pathways to Reach Earliest Peaking the Carbon Emission of China. China Economic Publishing House, Beijing, China. (In Chinese)
89. Jiang, Z., [and 24 others, include **Yang, J.**]. 2014. *Vegetation and Ecological Restoration Along the Qingzang Railway*. Chinese Forestry Publishing House, Beijing, China. (In Chinese)
90. **Yang, J***. 2012. Section 7 Carbon forests. In *Silviculture, 3rd edition*, eds. Shen G, Chinese Forestry Publishing House, Beijing, China.(In Chinese)
91. **Yang, J***. 2012. *Urban Forestry: Planning and Management*. Chinese Forestry Publishing House, Beijing, China. (In Chinese)
92. **Yang, J***., Zhou, J. 2009. Comparison of vegetation cover in Beijing and Shanghai: A remote sensing approach. In *Comparative Ecology of Cities and Towns*, eds. McDonnell M. J., Amy, H., Breuste, J. Cambridge University Press. UK
93. **Yang, J***., Zhou, J., Gong, P. 2008. Determining spatial and temporal changes in green-space distribution in Beijing using remote sensing. In *Ecology and Management of Urban Forests: An International Perspective*, eds. Margaret, M. C., Song, Y. C., and Wu, J. G. Springer-Verlag, USA.
94. Cheng, H*., **Yang, J.** 1998. Pests and diseases of medicinal fungi. In *Chinese Medicinal Mycology*, eds. Xu, J. Peking University Medical Press, China. (In Chinese)

INVITED TALKS

1. "How unique are urban birds?" Plenary talk. The Sixth Landscape Sustainability Science Forum, June 8-9, 2018, Beijing, China.
2. "Species selection for greening Xiong'an with an international view". Plenary talk. Xiongan Ecological Construction Forum, Mar 31-April 1, 2018, Xiong'an, China.
3. "Urban trees in China: what species should (should not) be planted". Invited talk. Department of Plant Science and Landscape Architecture's Plant Science Lecture

- Series, University of Maryland. October 19, 2017, College Park, USA.
4. "Future urban expansion and implications for China's natural reserves". Invited talk. Department of Nature Resources Seminar Series in Cornell University. September 20, 2017, Ithaca, USA.
 5. "Exploring the sampling design in urban biodiversity studies". Plenary talk. The 6th Urban Ecology Forum. June 12-13, Beijing, China.
 6. "Diversity of urban trees in China and the lessons for urban greening". Plenary talk. The 12th New Century Beijing Ecology Forum: urban ecology and livable cities. June 8, 2017, Beijing, China.
 7. "Diversity of urban trees in global cities". Plenary talk. The 9th International Symposium on Modern Ecology and the 7th International Young Ecologist Forum. May 15-17, 2017, Shanghai, China.
 8. "Urban biodiversity in China: who are winners and losers?" Invited talk. Sino-German Symposium on Nature-based Solutions for Urban Development, Resilience and Eco-cities, July 5, 2015, Shanghai, China.
 9. "Robust analysis of urban heat islands". Invited talk. Workshop on urban climate: from science to solutions. Organized by Yale University and Tsinghua University, October 20, 2015, Beijing, China.
 10. "Find the right green receipt for curing the urban problems". Plenary talk. The first international workshop for urban forest ecosystem services and management. May 24-26, 2015, Shanghai, China.
 11. "The rise and fall of the greening trend in 665 China's cities". Invited talk. UGEC regional workshop on China's industrial transformation, urbanization, and environmental sustainability. November 23, 2014, Beijing, China
 12. "New technologies in veteran tree care". Plenary talk. Annual Meeting of Chinese Association of Parks. November 9, 2014, Beijing, China.
 13. "The current status and needs for forest-based bioenergy in China". Canadian Government Natural Sciences Engineering Research Council (NSERC) Bioconversion Network: Pretreatment Workshop, June 4-6, 2012 Vancouver, Canada.
 14. "Integration of ecological construction with plant pathology". Plenary talk. Annual Meeting of Beijing Society of Plant Pathology, October 13, 2012. Beijing, China.
 15. "Advancements in urban forestry". Keynote speech. Annual Meeting of Beijing Forestry Practitioners, October 22, 2012, Beijing, China
 16. "Health functions of urban forests". Keynote speech. Annual Meeting of Hangzhou Society of Forestry, November 28, 2011, Hangzhou, China.
 17. "Application of remote sensing in quantifying carbon sequestration of urban greenspaces". Plenary talk. Beijing Forestry Forum & Low-carbon Economy and Carbon Forest International Forum, September 27-28, 2010, Beijing, China.

CONFERENCE TALKS

1. "Surveying urban biodiversity: Tree inventory and identification based on mobile and cloud platforms". Annual Conference of Ecological Society of China, May 3-6, 2018, Nanjing, China
2. "The global pattern of availability and accessibility of urban green spaces". The 8th East Asian Federation of Ecological Societies International Congress, April 21-23, 2018, Nagoya, Japan.
3. "Linking urban green infrastructure with human health: a quantitative study". Urban Transitions 2016: Towards a better urban future in an interconnected age, September 5-9, 2016, Shanghai, China.
4. "Spatiotemporal dynamics of urban water bodies in Beijing and the impacts on ecosystem services". Annual Conference of Ecological Society of China, August 25-27, 2016, Lanzhou, China.
5. "Urban biodiversity in China: who are winners and losers". The Second International Conference of Society for Urban Ecology, July 8-10, 2016, Shanghai, China.
6. "Are there distinct urban ecosystem services". Asian Ecosystem Service Partnership Conference, May 30-June 3, 2016, Ansan, Korea.
7. "Health benefits for urban forests in Hangzhou, China: Findings from three-year continuous monitoring". The International Association for Landscape Ecology, July 4-10, 2015, Portland, USA.
8. "From construction to sustainable use: Thoughts on constructing green infrastructure in China". Annual Conference of Ecological Society of China, September 23-25, 2015, Chengdu, China.
9. "Build the linkages among urbanization, ecosystem services, and human wellbeing". The Second International Conference on Urbanization and Global Environmental Change. November 6-8, 2014. Taipei, Taiwan Province, China.
10. "Diversity of urban tree species over the globe and their links to ecosystem services". IUFRO 2014 World Congress. October 6-11, 2014. Salt Lake City, USA.
11. "Evaluating the impact of a large-scale urban greening program on PM2.5 pollution in Beijing". November 18-20, 2013, Urban Pollution Conference Asian Edition, Beijing, China.
12. "Spatial patterns of urban ecosystem services". Annual Conference of Ecological Society of China, October 17-19, 2013, Nanchang, China.
13. "Prospect of forest-based bioenergy in China". Annual Conference of Silviculture, October 9-12, 2010. Ya'an, China
14. "Urban forest management in Beijing under the context of climate change: a study of potential impact and adaptation measures". International Conference of Landscape Ecology and Forest Management: Challenges and Solutions. September

- 16-22, 2008. Chengdu, China.
15. "Using remote sensing and GIS in urban gradient analysis: Is the true trend revealed?" Annual Conference of Association of American Geographers, April 15-19 2008, Boston, USA.
 16. "The impact of Qinghai-Tibet railway on roadside environment on the Tibet Plateau". Global Temple Conference. November 13, 2007. Philadelphia, USA.
 17. "Constructing greenbelt to contain urban sprawl: Its success and failure in Beijing, China". Conference of Emerging Issue Along Urban-Rural Interfaces: Linking Science and Society, March 13-16, 2005, Atlanta, USA.
 18. "A remote sensing approach to study the urban heat island and vegetation cover in Beijing, China". International Association for Landscape Ecology World Congress, July 13-17, 2003, Darwin, Australia.
 19. "Air pollution reduction through urban forest program in Chinese cities". International Urban Forest and Construction of Eco- City Symposium, September 16-22, 2002, Shanghai, China.

TEACHING

At Tsinghua University

- | | |
|-----------------|--|
| Fall, 2015-2018 | Ecological Data Analysis, graduate level, 2 credits |
| Fall, 2016 | Introduction to Global Change, undergraduate level, 3 credits
(30% of credit hours) |

At Beijing Forestry University

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|-------------------|--|
| Fall, 2010 | English for Forestry Major, undergraduate level, 2 credits |
| Spring, 2011-2012 | Forestry in Human Settlement, graduate level, taught in English,
2 credits |
| Fall, 2010-2012 | Advanced Topics in Silviculture, graduate level, 4 credits, (10% of
credit hours) |

At Temple University

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|-------------------|---|
| Fall, 2005-2008 | Applied Plant Physiology, undergraduate level, 3 credits
Greenhouse Management, undergraduate level, 3 credits
Honor Study in Horticulture, undergraduate level, 1 credit |
| Spring, 2006-2009 | Plant Physiology, undergraduate level, 4 credits
Applied Plant Pathology, undergraduate level, 3 credits |
| Spring, 2009 | Soils, undergraduate level, 3 credits |

MENTOURING

Graduated Students

At Tsinghua University

- **Chong Nie** (2016) *Spatio-temporal changes of surface water bodies in urban Beijing and the ecological effects in the past decade*. Master. Currently Employed: Beijing Water Company.

At Beijing Forestry University

- **Pengbo Yan** (2018) *A study on the current status and the potential improvement of urban tree diversity in China*. Ph.D. Currently employed: Guilin Tourism University.
- **Guanghui Dai** (2018) *The potential distribution of seven woody oil plants in China under climate change*. Ph.D. Currently employed: Yunnan University.
- **Wenjuan Zhang** (2016) *Supply and perception of recreation service from urban forest areas in Beijing*. Ph.D. Co-advised with Professor Ma Lvyi. Currently employed: Jiangxi Normal University.
- **Rongxiao He** (2016) *Impacts of urbanization on plant diversity*. Ph.D. Co-advised with Professor Song Xiqiang. Currently employed: Hainan University
- **Yiwen Guan** (2016) *Employment measure research in forest cultivation industry in China*. Master. Currently employed: State Forestry Administration of China.
- **Suli Li** (2015) *The assessment of three kinds of configuration mode of urban forest's impact to PM_{2.5} in Beijing*. Master. Currently employed: Zhong Gong Educational Tutoring Institution
- **Yamin Chang** (2015) *Tree species' suitability analysis on PM_{2.5} pollution control and removal effect estimation in Beijing*. Master. Currently employed:
- **Zhiyong Zhang** (2014) *Monitoring dynamic changes of ecological health functions of typical urban forests in Hangzhou*. Master. Currently employed: Research Institute of Forestry Policy and Information, Chinese Academy of Forestry.
- **Conghong Huang** (2014) *Ecosystem services evaluation based InVEST model: a case study of Baoxing county, Sichuan and Mentougou district, Beijing*. Master. Currently employed: PhD candidate in Tsinghua University.
- **Feng Guo** (2014) *The simulation study on transport and infiltration of road surface runoff passing grass swale*. Master. Currently employed: Qinghua Holding Settlements Environment Institute.
- **Fengyu Bao** (2013) *Preliminary study on ecological health functions of the typical urban green spaces and green ways in Beijing*. Master. Currently employed: Tsinghua Holdings Human Settlements Group.
- **Juan Zhao** (2013) *The feasibility study of the relationship between vigor and plant nutrition of veteran *Platycladus orientalis* trees*. Master. Currently employed: Dingbian Forestry Bureau.

Current Students

- **Xiangyu Luo**, Ph.D. student. Projected graduation date: 2022.
- **Jingyi Yang**, Ph.D. student. Projected graduation date: 2020.
- **Jing Jin**, Ph.D. candidate. *Analysis of the impacts of urbanization on global distributions of tree species using open source data*. Projected graduation date: 2020.
- **Siran Lu**, Ph.D. candidate. *Influences of urban areas on the spread of invasive species: using *Ambrosia artemisiifolia* in East China as an example*. Projected graduation date: 2019.
- **Conghong Huang**, Ph.D. candidate. *Availability and accessibility of urban green spaces in global cities*. Projected graduation date: 2019.
- **Danqi Xin**, Master student. Projected graduation date: 2020.
- **Peng Jiang**, Master student. *Social-ecological model for simulating the dynamics of urban ecosystem services*. Projected graduation date: 2019.
- **Huakui Liu**, Master student. *Impact Assessment of the afforestation project on urban climate environment in Beijing based on WRF-UCM model*. Projected graduation date: 2018

UNIVERSITY SERVICES

At Tsinghua University

- Task Group of Undergraduate Recruitment and Education, Department of Earth System Science, 2018-
- Task Group of Curriculum of Ecology Program, Department of Earth System Science, 2013, 2018
- Task Group responsible for the self-appraisal of Ph.D and Master programs in Ecology major, 2018
- Task Group responsible for preparing Ecology major for the Fourth National Assessment of Disciplines conducted by Ministry of Education of China, 2016

At Beijing Forestry University

- In charge of international cooperation for “985” Project in National Key Discipline from 2011 to 2012
- Member of the team responsible for establishing the National Energy R&D Center for Non-food Biomass in Beijing Forestry University, 2010-2011

At Temple University

- Committee of International Relationship, Faculty Senate, 2007-2009
- Committee of Technology, Department of Landscape Architecture and Horticulture, 2005-2009

PROFESSIONAL ACTIVITIES

Editorial Work

2017-	Associate Editor: <i>Urban Forestry & Urban Greening</i>
2016-	Editorial board member: <i>Agricultural and Forest Meteorology</i>
2015-	Editorial board member: <i>Journal of Chinese Urban Forestry</i>
2010-2017	Editorial board member: <i>Urban Forestry & Urban Greening</i>

Journal Referring

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| 1. <i>Air Quality, Atmosphere and Health</i> | 2. <i>Arborist News</i> |
| 3. <i>Arboriculture & Urban Forestry</i> | 4. <i>Atmospheric Environment</i> |
| 5. <i>Agricultural and Forest Meteorology</i> | 6. <i>Atmospheric Pollution Research</i> |
| 7. <i>Bioresources</i> | 8. <i>Building and Environment</i> |
| 9. <i>Chinese Geographical Science (English edition)</i> | 10. <i>Cities & Health</i> |
| 11. <i>Ecotoxicology and Environmental Safety</i> | 12. <i>Ecography</i> |
| 13. <i>Ecology and Environment (Chinese)</i> | 14. <i>Environmental Management</i> |
| 15. <i>Environmental Pollution</i> | 16. <i>Forestry: An International Journal of Forestry Research</i> |
| 17. <i>Frontiers of Environmental Science & Engineering in China (English edition)</i> | 18. <i>International Journal of Digital Earth</i> |
| 19. <i>International Journal of Remote Sensing</i> | 20. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> |
| 21. <i>Journal of Forestry</i> | 22. <i>Journal of Clean Production</i> |
| 23. <i>Journal of Environmental Management</i> | 24. <i>Journal of Remote Sensing (Chinese)</i> |
| 25. <i>Journal of Urban Regional Planning (Chinese)</i> | 26. <i>Landscape Ecology</i> |
| 27. <i>Landscape and Urban Planning</i> | 28. <i>PloS One</i> |
| 29. <i>Renewable & Sustainable Energy Reviews</i> | 30. <i>Resource, Conservation & Recycling</i> |
| 31. <i>Science of the Total Environment</i> | 32. <i>Scientific Reports</i> |
| 33. <i>The Condor: Ornithological Applications</i> | 34. <i>Urban Ecosystems</i> |
| 35. <i>Urban Forestry & Urban Greenings</i> | |

Grant Referring

Beijing Natural Science Foundation
 Heilongjiang Province Natural Science Foundation
 Hunan Province Natural Science Foundation
 Tree Fund, International Society of Arboriculture

Conference Organization

1. Session organizer, Session 16 “Urban biodiversity: from science to practices”. The 13th National Conference for Biodiversity Science and Conservation, August 15-17, 2018, Hohhot, China
2. Session organizer, Session 11 “Methods and technologies in ecological restoration and ecological security of urban agglomerations”. Annual Conference of Ecological Society of China, May 3-6, 2018, Nanjing, China.
3. Session organizer, Session B10 “Urban ecosystem services for sustainable urban development”. The 9th ESP World Conference, December 11-15, 2017, Shenzhen, China.
4. Session organizer, Session T03-1 “Urban Ecosystem Services, Ecological Infrastructure and Ecological Management”. INTECOL2017, August 21-25, 2017, Beijing, China.
5. Session organizer, Session 6 “Urban biodiversity: understand the patterns and processes at multiple scales”. The Second International Conference of Society for Urban Ecology, July 8-10, 2016, Shanghai, China.
6. Session organizer, Session B7 “Urban ecosystem services: evaluation, engineering and management”. The Asian Conference of Ecosystem Services Partnership, May 30-June 3, 2016, Ansan, Korea.
7. Session organizer, Session 17 “Ecosystem services in support of livable cities”. The Second International Conference on Urbanization and Global Environmental Change, November 6-8, 2014. Taipei, China.
8. Chair, Organizing Committee, International Conference on Urban Forestry in Challenging Environments, August 29-September 1, 2010, Beijing, China.
9. Organizer, First Forest College Deans Meeting in Asia- Pacific Region, June 21-23, 2010, Beijing, China.

Professional Affiliation

- Member, Steering committee of Ecological Society of Beijing, (2017-)
- Core team member, Urban Ecosystem Management Thematic Group, Ecosystem Management Commission, IUCN, (2017-)
- Co-chair, China National Network, Ecosystem Service Partnerships, (2015-)
- Member, Steering committee of China Chapter, International Society of Urban Ecology, (2015-)
- Member, Standing committee of Urban Ecology Group, Ecological Society of China, (2012-), elected as deputy director in 2018
- Member, International Association of Urban Climate, 2005-
- Member, Standing committee for Research and Education, International Society of Arboriculture, (term, 2010-2013)