**Dr. Yanni Cao**

College of Public Health,

The Ohio State University

Address: Cunz Hall 410, 1841 Neil Ave, Columbus, OH, 43210, USA

Email: cao.1637@osu.edu

Google Scholar: <https://scholar.google.com/citations?hl=en&user=lSIGV_sAAAAJ>

**EDUCATION**

|  |  |
| --- | --- |
| 2015-2021 | **Ph.D., Human Geography**, College of Resources and Environment, University of Chinese Academy of Sciences, Beijing  **Dissertation:** The Impact of Urbanization in China upon its Ecosystem Pattern and Ecosystem Services.  **Advisors:** Lufeng Zhang & Zhiyun Ouyang |
| 2012-2014 | **M.Ed., Subject Teaching (Geography)**, College of Geography, Faculty of Geographical Science, Beijing Normal University, Beijing  **Thesis:** Analysis of the Journal of Geography from 1990 to 2012  **Advisor:** Dongying Wei |
| 2008-2012 | **B.S., Geographic Science**, College of Geography and Environmental Science, Northwest Normal University, Lanzhou  B.A., English (minor degree), College of Foreign Languages & Literature, Northwest Normal University, Lanzhou |

**ACADEMIC APPOINTMENTS**

|  |  |
| --- | --- |
| 2024.9- | **Postdoctoral researcher**, College of Public Health, The Ohio State University |
| 2023.5-2024.5 | **Postdoctoral researcher**, Department of Geography, The University of Hong Kong, Hong Kong |
| 2021.6-2023.5 | **Postdoctoral researcher & Special Research Assistant**,State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing |
| 2017-2018 | **Teaching Assistant**,University of Chinese Academy of Sciences, College of Resources and Environment, Beijing |

**TEACHING WORK**

|  |  |
| --- | --- |
| 2023.09-2023.12 | The University of Hong Kong, Hong Kong, Department of Geography, Hong Kong  Autumn Semester: *Remote Sensing* by Dr. Hongsheng Zhang  **Participate in courseware production for 3 lessons** |
| 2017-2018 | Teaching Assistant, University of Chinese Academy of Sciences, College of Resources and Environment, Beijing  Autumn Semester: *Appreciation of Chinese Residential Architecture Art* by Dr. Yan Wu  **Teaching assistant**  Spring Semester: *Analysis of Ecological Cities and Green Buildings* by Dr. Dawei Wang  **Teaching assistant** |

**RESEARCH INTERESTS**

Environmental Health • Ecosystem pattern • Ecosystem service • GIS • Landscape ecology • Land-use change • Remote sensing • Social-ecological systems • ecosystem assets • Urbanization Economic • Efficiency of urbanization • Relationship between urbanization and ecosystem patterns/ assets/ services • Sustainability science

**PROJECTS AND FUNDING**

|  |  |
| --- | --- |
| 2022-2023 | *Research on the path of Beijing-Tianjin-Hebei Region coordinated development based on GDP-GEP coupling coordination.*  China Postdoctoral Science Foundation (2022M723314), 80,000 RMB. (Host) |
| 2022.05-2022.10 | *Research report on the ecological environment of mega urban agglomerations in eastern China.*  Series of Research Reports in the Field of Resources and Environment of the Chinese Academy of Sciences. (Participate) |
| 2021-2022 | *Qiqihar Ecological Product Value Accounting and Realization Mechanism Technical Consultation.* (Participate) |
| 2021.05-2021.12 | *Research on the design, path, and policy measures of ecological product value realization mechanism based on industrial chain, financial chain, and data chain collaboration.*  Key research subject of National High-end Think Tanks. (Participate) |
| 2018.1-2022.12 | *Assessment of ecological carrying capacity and construction of ecological security pattern.*  Leading Project of Chinese Academy of Sciences (XDA19050504), 11,873,700 RMB. (Participate) |

|  |  |
| --- | --- |
| 2016.07-2020.12 | *Theory, technical method, and application of gross ecosystem product and ecological benefit accounting.*  National Key Research and Development Project of the Ministry of Science and Technology (2016YFC0503402), 2,000,000 RMB. (Participate) |
| 2016.01-2020.12 | *Coupling mechanism and regulation method of man and nature in complex urban ecosystem.*  Key Project of National Natural Science Foundation (71533005), 2,720,000 RMB. (Participate) |
| 2017.01-2018.12 | *Assessment of national ecological environment change (2010-2015).*  Major Special Project of the Ministry of Ecology and Environment and the Chinese Academy of Sciences (KFJ-STS-ZDTP-010), 1,600,000 RMB. (Participate) |

**JOURNAL ARTICLES**

1. Tang L, Lan T, Xing X, Xie T, Li W, Fang C, **Cao Y**, Xu Y, Chen D, Wang L, Wu Z, Xu Z, Zhou W. Past achivements and future strategies of eco-environmental construction in mega urban agglomerations in eastern China. *Bulletin of Chinese Academy of Sciences*, 2023, 38(3): 394-406. doi:10.16418/j.issn.1000-3045.20230120003. (in Chinese)
2. **Cao Y**, Kong L, Ouyang Z. Characteristics and Driving Mechanism of Regional Ecosystem Assets Change in the Process of Rapid Urbanization—A Case Study of the Beijing–Tianjin–Hebei Urban Agglomeration. *Remote Sensing*. 2022;14(22):5747. doi:10.3390/rs14225747
3. **Cao Y**, Wu T, Kong L, Wang X, Zhang L, Ouyang Z. The drivers and spatial distribution of economic efficiency in China’s cities. *Journal of Geographical Sciences.* 2022;32(8):1427-1450. doi:10.1007/s11442-022-2004-7
4. Zhang X, **Cao Y**, Fu X, Zhu T, Wu G. Green transformation of textile and garment industrial zones in China based on the “no waste” concept. *Acta Ecologica Sinica*. 2021;41(22):8860-8869.(in Chinese)
5. **Cao Y**, Kong L, Zhang L, Ouyang Z. The balance between economic development and ecosystem service value in the process of land urbanization: A case study of China’s land urbanization from 2000 to 2015. *Land Use Policy*. 2021;108:105536. doi:10.1016/j.landusepol.2021.105536 (ESI Top 0.1%\_2022 November/December)
6. **Cao Y**, Kong L, Zhang L, Ouyang Z. Spatial characteristics of ecological degradation and restoration in China from 2000 to 2015 using remote sensing. *Restoration Ecology*. 2020;28(6):1419-1430. doi:10.1111/rec.13226
7. **Cao Y**. The Historical Evolution, Conservation, and Renewal Status Quo and Suggestions of the White Pagoda Temple Historical and Cultural Block in Xicheng District, Beijing. *Beijing Planning Review*. 2020;(3):131-138. (in Chinese)
8. **Cao Y**, Shen A. Restoration and Reuse of Zhizhu Temple and the Inspiration to the Conservation of Architectural Heritage. *Heritage Architecture*. 2020;(1):111-118. doi:10.19673/j.cnki.ha.2020.01.012 (in Chinese)
9. **Cao Y**. Introduction to Environmental Education in Joshua Tree National Park. *Geography Teaching*. 2014;(18):49-51. (in Chinese)
10. **Cao Y**, Wei D, Wang M. The Course and Trend of International Geography Education Viewed from the American *Journal of Geography*. *Teaching Reference of Middle School Geography*. 2014;(15):66-67. (in Chinese)

**REPORT & MONOGRAPH**

1. **Cao Y.** Ecosystem services and socioeconomic coordinated sustainable development: A case study of the Beijing-Tianjin-Hebei urban agglomeration. Postdoctoral report. Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences, Beijing. 2021. (in Chinese)
2. **Cao Y.** (Contributing Author and One of 37 Editorial Board Members). Research Report on the Ecological Environment of Mega-City Clusters in Eastern China: A Series of Research Reports on Resources and Environment by the Chinese Academy of Sciences. Edited by Tang L. and Zhou W. With Lan T. as Associate Editor. Beijing: Science Press, 2024. (in Chinese)

**RESEARCH TRAINING**

|  |  |
| --- | --- |
| 2023.06 | *Wuhan University's 5th Quantitative Remote Sensing Summer School and the 2nd International Quantitative Remote Sensing Summer School*  Wuhan University, University of Maryland, and The University of Hong Kong, online |
| 2022.11 | *The 6th National Geospatial Big Data and Cloud Computing Frontier Conference and Centralized Learning.*  Beijing Huanyu Yiyan Technology Co., Ltd, Beijing |
| 2021.03 | I*nVEST (Integrated Valuation of Ecosystem Services and Tradeoffs) Training*.  Natural Capital Project Team, Ecological Society of China & State Key Laboratory of Urban and Regional Ecology, Beijing |
| 2020.01 | *IUEMS (Intelligent Urban Ecosystem Management System) Training.*  State Key Laboratory of Urban and Regional Ecology, Beijing |
| 2018.12 | *Application Training of Mixed Effect Model and Structural Equation Model.*  Shuang Zhang & Yuxin Zhang, Beijing Upclouddata Technology, Beijing |
| 2018.11 | *Analysis of Ecological Data and Practical Application of R Language.*  Jiangshan Lai, Chuanyang Information Technology (Shanghai) Co., Ltd, Beijing |
| 2013.08 | *Summer Course for Postgraduates of “Ecological Civilization and Environmental Management.”*  Peking University, Beijing |
| 2012-2013 | *Leadership Training for Global Community Sustainable Development.*  Stephanie B. Tansey, Beijing Normal University, Beijing |

**CONFERENCE**

|  |  |
| --- | --- |
| 2024.04 | American Association of Geographers 2024 Annual Meeting, Hawaiian  Participation |
| 2023.12 | The Second Remote Sensing Forum and Second GLASS Products User Conference, Hong Kong  Participation |
| 2023.10 | The 1st International Conference on Realizing the Value of Ecosystem Goods and Services, Beijing  Participation |
| 2023.08 | The 1st China Ecosystem Remote Sensing Academic Symposium, Shenzhen  Participation |
| 2022.08 | International Congress of Ecology “Frontiers in Ecology: Science & Society,” online.  Poster: *The balance between economic development and ecosystem service value in the process of land urbanization: A case study of China* |
| 2022.08 | The 21st China Ecology Conference, Guiyang  Presentation: *The drivers and spatial distribution of economic efficiency in China’s cities* |
| 2021.10 | The 20th China Ecology Conference, Shanghai  Presentation: *The balance between economic development and ecosystem service value in the process of land urbanization: A case study of China’s land urbanization from 2000 to 2015* |
| 2019.12 | The 13th Beijing Geography Postgraduate Academic Forum “Inheritance and Development: Geography Students Create a Future,” Beijing Union University, Beijing  Participation |
| 2019.12 | The Third Youth Forum on Human and Economic Geography  Participation |
| 2019.01 | The 9th National Symposium of Young Ecological Workers, Xiamen  Presentation: *Impact of urbanization on ecosystem pattern* |
| 2018.12 | The Second International Conference on Urban Ecology (SURE-China), Shanghai  Presentation: *Impact of urbanization on ecosystem pattern and services* |
| 2017.12 | The 9th International Conference on Ecosystem Services, Shenzhen  Presentation: *The impact of regional urbanization on ecosystem services* |
| 2017.10 | Beijing Graduate Ecology Forum, Beijing Forestry University (branch venue), Beijing  Presentation: *The impact of regional urbanization on ecosystem services* |
| 2017.08 | The 12th International Congress of Ecology: Ecology and Civilization in a Changing World, Beijing  Participation |

**VOLUNTEER SERVICE**

|  |  |
| --- | --- |
| 2023.12 | The Second Remote Sensing Forum and Second GLASS Products User Conference  Conference volunteer service |
| 2023.06 | Wuhan University 5th Quantitative Remote Sensing Summer School  Online conference hosting work |

**AWARDS**

|  |  |
| --- | --- |
| 2017 | National Academic Scholarship (RMB 13,000) |
| 2015 | National Academic Scholarship (RMB 13,000) |
| 2014.04 | Excellent Intern of Graduate School of Beijing Normal University |
| 2013.04 | The work “*Mysteries of the Universe*” was selected as the Excellent Courseware of Popular Knowledge of Land Resources and Earth Science, Ministry of Natural Resources |
| 2009.12 | School-level academic research grant of Northwest Normal University (RMB 1200) |
| 2009-2010 | Foreign Language Omnipotent Award, College of Geography and Environmental Science, Northwest Normal University (RMB 200) |
| 2009-2010 | Learning Excellence Award, College of Geography and Environmental Science, Northwest Normal University (RMB 500) |
| 2008-2009 | Learning Excellence Award, College of Geography and Environmental Science, Northwest Normal University (RMB 500) |

**PROFESSIONAL MEMBERSHIPS**

Member, American Association of Geographers

Member, American Geophysical Union

Member, Ecological Society of China

Member, Geographical Society of China

**COORDINATING EDITOR**

Restoration Ecology

**REVIEWER**

Acta ecologica Sinica;

Ecological frontiers;

Ecological indicators；

Forests;

Journal of infrastructure, policy and development;

Land use policy;

Land;

Remote sensing letters;

Remote sensing;

Sustainability;

Sustainable futures;

Sustainable social development;

Urban science;

Current Research in Environmental Sustainability