

Curriculum Vitae

ALEXANDER BUYANTUEV

University at Albany
Geography, Planning, and Sustainability
Arts and Sciences 226
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8/18/2025

EDUCATION

- 2008** **PhD** (Plant Biology), Arizona State University, Tempe, AZ.
Dissertation: *Effects of urbanization on landscape pattern and ecosystem function in the Phoenix metropolitan region: a multiscale study*. Doctoral Mentor, Jianguo Wu, PhD
- 2002** **MS** (Renewable Natural Resources), University of Arizona, Tucson, AZ.
Thesis: *Developing a GIS-based multi-criteria decision support system for prospecting limestone resources in the western United States*.
- 1996** **PhD** (Physical Geography), Russian Academy of Sciences, Irkutsk, Russia
Dissertation: *Geosystems and geoecological problems of the Selenga River mountain basins in Transbaikalia (in Russian)*. Doctoral Mentors, Valerian Snytko, PhD, and Alexander Batuev, PhD

EDUCATIONAL EMPLOYMENT

- 2019 - present **Associate Professor**, University at Albany
- 2015-present **Guest Professor**, Center for Human-Environment System Sustainability (CHESS), Beijing Normal University, China
- 2013-2018 **Assistant Professor**, University at Albany
- 2013 **Postdoctoral Researcher**, University of California – Riverside
- 2009-2012 **Endowed Professor**, Inner Mongolia University, Hohhot, China
- 2003-2009 **Research Associate**, Global Institute of Sustainability, Arizona State University, Tempe, AZ
- 2004 **Teaching Assistant**, School of Life Sciences, Arizona State University, Tempe, AZ,
- 2000-2002 **Research Assistant**, United States Geological Survey, Tucson, AZ, 2000-2002
- 1996-2000 **Research Scientist**, Institute of Geography, Russian Academy of Sciences, Siberian Branch, Irkutsk, Russia, 1996-2000

PUBLICATIONS

Books and maps

- Plastinin, L., A. R. Batuyev, L. M. Korytny, V. A. Snytko, A. **Buyantuyev** et al. 1999. Land Use and Land Cover Map of the Republic of Buryatia. 1:1000000, Irkutsk (in Russian) (20% effort)
- Bazarov, P. S., A. **Buyantuyev**, I. V. Bychkov, and et al. 1999. New information technology and ecological information in the Lake Baikal region: suggestions for collecting, processing and disseminating of ecological information. Irkutsk, 56 p (in Russian) (30% effort)
- Batuyev, A. R., A. **Buyantuyev**, and V. A. Snytko. 2000. Geosystems and geoecological mapping of Selenga river basin in Baikal watershed. Siberian Branch of Russian Academy of Science Press, Novosibirsk, 164 p (in Russian) (60% effort)
- Szczypek, T., S. Wika, V. A. Snytko, and A. **Buyantuyev**. 2000. Geosystems of wind blown sands of Chikoi-Selenga watershed in Western Transbaikalia. Institute of Geography, SB RAS, Irkutsk, 71 p (in Russian) (20% effort)

Book chapters

- Ruddell, D. M., S. L. Harlan, S. Grossman-Clarke, and A. **Buyantuyev**. 2010. Risk and Exposure to Extreme Heat in Microclimates of Phoenix, AZ. Pages 179-202 in P. S. Showalter and Y. Lu, editors. Geospatial Techniques in Urban Hazard and Disaster Analysis. Springer, New York (20% effort)
- Wu, J., A. **Buyantuyev**, G. D. Jenerette, J. Litteral, K. Neil, and W. Shen. 2011. Quantifying Spatiotemporal Patterns and Ecological Effects of Urbanization: A Multiscale Landscape Approach. Pages 35-53 in M. Richter and U. Weiland, editors. Applied Urban Ecology: A Global Framework. Wiley-Blackwell, Oxford. (20% effort)

Peer-reviewed Articles

1996-2001

- Buyantuyev**, A. and V. A. Snytko. 1996. Air photo interpretation of anthropogenic transformations of geosystems in Gusinoozerskaya Basin in Zabaikalye. *Shaping of Geographical Environment and Nature Protection in Industrialized and Urban Areas*. Katowice-Sosnowiec: University of Silesia **22**: 32-39 (in Polish) (90% effort)
- Buyantuyev**, A., A. R. Batuyev, and V. A. Snytko. 1997. Mapping of geosystems and ecological situations. Pages 101-107 (in Russian) in *Cartography on the border of millennia: Papers of the Russian National Conference on Cartography (Moscow, October 7-10, 1997)*. Institute of Geography, Moscow, Russia. (in Russian) (90% effort)
- Batuyev, A. R., A. **Buyantuyev**, L. M. Korytny et al. 1998. Nature Use Mapping of the Republic of Buryatia. *Geography and Natural Resources* **3**: 23-29 (in Russian) (40% effort)
- Buyantuyev**, A. and V. A. Snytko. 1998a. Air Photo Interpretation in the Study of Changes in Basin Ecosystems in Transbaykalia. *GIScience and Remote Sensing* **35**: 292-299 (90% effort)
- Buyantuyev**, A. and V. A. Snytko. 1998b. Dynamics of valley geosystems in the Selenga River Basin in Zabaikalye. *Geography and Natural Resources* **1**: 54-61 (in Russian) (90% effort)
- Buyantuyev**, A. and V. A. Snytko. 1998c. Landscape diversity of the Selenga river basin in Transbaikalia. *Annals of Buryat State University* **3**:127-132 (in Russian) (90% effort)
- Buyantuyev**, A., V. A. Snytko, T. Szczypek, and S. Wika. 2001. Landscapes of aeolian sands in Transbaikalye: a case study of Nomokhonovo area in the Selenga-Chikoy rivers interfluve. *Acta Geographica ac Geologica et Meteorologica Debrecina* **35**: 27-34 (in Polish) (60% effort)

2007

- Buyantuyev**, A. and J. Wu. 2007. Effects of thematic resolution on landscape pattern analysis. *Landscape Ecology* **22**: 7-13 (70% effort)
- Buyantuyev**, A., J. Wu, and C. Gries. 2007. Estimating vegetation cover in an urban environment based on Landsat ETM+ imagery: A case study in Phoenix, USA. *International Journal of Remote Sensing* **28**: 269 – 291 (70% effort)
- Bai, Y., J. Wu, Q. Pan, J. Huang, Q. Wang, F. Li, A. **Buyantuyev**, and X. Han. 2007. Positive linear relationship between productivity and diversity: evidence from the Eurasian Steppe. *Journal of Applied Ecology* **44**: 1023-1034 (10% effort)

2008

- Kaye, J. P., A. Majumdar, C. Gries, A. **Buyantuyev**, N. B. Grimm, D. Hope, G. D. Jenerette, W. Zhu, and L. Baker. 2008. Hierarchical Bayesian scaling of soil properties across urban, agricultural, and desert ecosystems. *Ecological Applications* **18**: 132-145 (20% effort)

2009

- Buyantuyev**, A. and J. Wu. 2009. Urbanization alters spatiotemporal patterns of ecosystem primary production: A case study of the Phoenix metropolitan region, USA. *Journal of Arid Environments* **73**: 512-520 (70% effort)

2010

- Buyantuyev**, A., J. Wu, and C. Gries. 2010. Multiscale analysis of the urbanization pattern of the Phoenix metropolitan landscape of USA: time, space and thematic resolution. *Landscape and Urban Planning* **94**:206-217 (70% effort)
- Buyantuyev**, A. and J. Wu. 2010. Urban heat islands and landscape heterogeneity: linking spatiotemporal variations in surface temperatures to land-cover and socioeconomic patterns. *Landscape Ecology* **25**:17-33 (70% effort)
- Myint, S. W., A. Brazel, G. S. Okin, and A. **Buyantuyev**. 2010. Combined effects of impervious surface and vegetation cover on the urban heat island effect in a rapidly expanding desert city. *GIScience and Remote Sensing* **47**:301-320 (40% effort)

2011

- Wu, J., G. D. Jenerette, A. **Buyantuyev**, and C. L. Redman. 2011. Quantifying spatiotemporal patterns of urbanization: The case of the two fastest growing metropolitan regions in the United States. *Ecological Complexity* **8**:1-8 (20% effort)
- Zhang*, Q., J. Niu, A. **Buyantuyev**, J. Zhang, Y. Ding, and J. Dong. 2011. Productivity–species richness relationship changes from unimodal to positive linear with increasing spatial scale in the Inner Mongolia steppe. *Ecological Research* **26**:649-658 (30% effort)
- Zhang* Q., J. Niu, A. **Buyantuyev**, F. Han, J. Dong, Y. Zhang, S. Kang, and Y. Yang. 2011. Vegetation differentiation and soil effect at different slope locations—a case study of *Stipa breviflora* grassland in Inner Mongolia, China. *Chinese Journal of Plant Ecology* **35**(11): 1167-1181 (in Chinese) (20% effort)

2012

- Zhang* Q., J. Niu, A. **Buyantuyev**, Y. Ding, S. Kang, F. Wang, Y. Zhang, and Y. Hand. 2012. Ecological analysis and classification of *Stipa breviflora* communities in the Inner Mongolia region: the role of environmental factors. *Acta Prataculturae Sinica* **21**(1): 83-92. doi: 10.3724/SP.J.1105.2012.11070 (in Chinese) (20% effort)
- Buyantuyev**, A. and J. Wu. 2012. Urbanization diversifies land surface phenologies in arid environments: interactions among vegetation, climatic variation, and land use patterns in Phoenix metropolitan region, Arizona USA. *Landscape and Urban Planning* **105**: 149-159 (70% effort)
- Zhang* Q., J. Niu, S.B. Wu, A. **Buyantuyev**, and J. Dong. 2012. Impact of climatic factors on genetic diversity of *Stipa breviflora* populations in Inner Mongolia. *Genetics and Molecular Research* **11**(3): 2081-2093. doi:10.4238/2012.August.6.12 (20% effort)

Buyantuyev, A., P. Xu, J. Wu, S. Piao, and D. Wang. 2012. A space-for-time substitution approach to studying historical phenological changes in urban environment. *PLoS ONE* **7**(12): e51260. doi:10.1371/journal.pone.0051260 (80% effort)

2013

Zhang, C., Wu, J., Grimm, N., McHale, M., and **Buyantuyev, A.** 2013. A Hierarchical Patch Ecosystem Model for Urban Landscapes: Model Development and Evaluation. *Ecological Modelling* **250**: 81-100 (10% effort)

Jenerette, G. D., Miller, G., **Buyantuev, A.** Pataki, D.E., Gillespie, T.W., and S. Pincetl. 2013. Urban vegetation and income segregation in drylands: a synthesis of seven metropolitan regions in the southwestern United States. *Environmental Research Letters* **8**: 044001 (20% effort)

Zhang*, J., Niu, J., Bao, T., **Buyantuyev, A.**, Zhang, Q., Dong, J., and X. Zhang. 2013. Human induced dryland degradation in Ordos Plateau, China, revealed by multilevel statistical modeling of normalized difference vegetation index and rainfall time-series. *Journal of Arid Land* **6**: 219-229 (10% effort)

2014

Stephens, S. L., Burrows, N., **Buyantuyev, A.**, R. Gray, W., Keane, R.E., Kubian, R., Liu, S., Seijo, F., Shu, L., Tolhurst, K.G., and J. W. van Wagtendonk. 2014. Temperate and boreal forest mega-fires: characteristics and challenges. *Frontiers in Ecology and the Environment* **12**:115-122 (20% effort)

Zhang*, J., Niu, J., **Buyantuev, A.**, and J. Wu. 2014. A multilevel analysis of the impact of land use policy on land-cover change and local land use decisions. *Journal of Arid Environments* **108**:19-28 (10% effort)

Mao, Q., Huang, G., **Buyantuev, A.**, Ma, K., and Z. Sun. 2014. Spatial heterogeneity of urban soils: the case of the Beijing metropolitan region, China. *Ecological Processes* **3**: 2-23 (10% effort)

Zhang*, Q., Wu, J., **Buyantuev, A.**, Niu, J., Zhou, Y., Ding, Y., Kang, S., and W. Ma. 2014. Plant species diversity is correlated with climatic factors differently at the community and the functional group levels: A case study of desert steppe in Inner Mongolia, China *Plant Biosystems - An International Journal Dealing with all Aspects of Plant Biology* **150**: 121-123 (10% effort)

Xu* P., Niu J., **Buyantuyev A.** & Dong J. 2014. Variable effects of land use/cover patterns on plant spring phenology in Hohhot, Inner Mongolia. *Acta Ecologica Sinica*, **34**: 5944-5952 (in Chinese) (60% effort)

2015

Han, F., Zhang, Q., **Buyantuev, A.**, Niu, J., Liu, P., Li, X., Kang, S., Chang, C. and Y. Li. 2015. Effects of climate change on phenology and primary productivity in the desert steppe of Inner Mongolia. *Journal of Arid Land* **7**: 251-263 (10% effort)

2016

Jenerette D.G., Harlan S., **Buyantuev, A.**, Stefanov W., Declet-Barreto J., Ruddell B., Myint S.W., Kaplan S. & Li X. 2016. Micro-scale urban surface temperatures are related to land-cover features and residential heat related health impacts in Phoenix, AZ USA. *Landscape Ecology* **31**: 745-760 (40% effort)

Declet-Barreto, J., K. Knowlton, D. G. Jenerette, and A. **Buyantuev.** 2016. Effects of urban vegetation on mitigating exposure of vulnerable populations to excessive heat in Cleveland, Ohio. *Weather, Climate, and Society* **8**: 507-524 (30% effort)

Han F., Kang S., **Buyantuev A.**, Zhang Q., Niu J., Yu D., Ding Y., Liu P. & Ma W. 2016. Effects of climate change on primary production in the Inner Mongolia Plateau, China. *International Journal of Remote Sensing* **37**: 5551-5564 (20% effort)

Zhang* X., Niu J., **Buyantuev A.**, Zhang Q., Dong J., Kang S. & Zhang J. 2016. Understanding Grassland Degradation and Restoration from the Perspective of Ecosystem Services: A Case Study of the Xilin River Basin in Inner Mongolia, China. *Sustainability* **8**: 594 (10 % effort)

2017

Gervais* N., **Buyantuev A.**, & Gao Feng. 2017. Modeling the Effects of the Urban Built-up Environment on Plant Phenology Using Fused Satellite Data. *Remote Sensing* **9**:99 (50 % effort)

Zhang Q., **Buyantuev A.**, Li F., Lin J., Niu J., Ding Y., Kang S. & Ma W. 2017. Functional dominance rather than taxonomic diversity and functional diversity mainly affects community above-ground biomass in the Inner Mongolia grassland. *Ecology and Evolution* doi:10.1002/ece3.2778 (10 % effort)

Lapenis A.G., Lawrence G.B., **Buyantuev A.**, Jiang S., Sullivan T.J., McDonnell T.C. & Bailey S. 2017. A Newly Identified Role of the Deciduous Forest Floor in the Timing of Green-Up. *Journal of Geophysical Research: Biogeosciences* **122**: 2876-2891 (30 % effort)

2018

Liu Q., Zhao Y., Zhang X., **Buyantuev A.**, Niu J. & Wang X. 2018. Spatiotemporal Patterns of Desertification Dynamics and Desertification Effects on Ecosystem Services in the Mu Us Desert in China. *Sustainability* **10**: 589 (20 % effort)

Luan X.-L., **Buyantuev A.**, Baur A.H., Kleinschmit B., Wang H., Wei S., Liu M. & Xu C. 2018. Linking greenhouse gas emissions to urban landscape structure: The relevance of spatial and thematic resolutions of land use/cover data. *Landscape Ecology* 2778 (30 % effort)

Liu Q., **Buyantuev A.**, Wu J., Niu J. & Zhang Q. 2018. Intensive land-use drives regional- scale homogenization of plant communities. *Science of the Total Environment* (10 % effort)

2019

Frazier AE, Bryan BA, **Buyantuev A** et al. 2019. Ecological civilization: perspectives from landscape ecology and landscape sustainability science. *Landscape Ecology* 34(1): 1-8 (20 % effort)

Zhang Z, Wang B, **Buyantuev A** et al. 2019. Urban agglomeration of Kunming and Yuxi cities in Yunnan, China: the relative importance of government policy drivers and environmental constraints. *Landscape Ecology* (10 % effort)

Zhang J, Li X, **Buyantuev A**, Bao T, Zhang X. 2019. How Do Trade-Offs and Synergies between Ecosystem Services Change in the Long Period? The Case Study of Uxin, Inner Mongolia, China. *Sustainability* 11(21):6041 (10 % effort)

2020

Zhang Q, **Buyantuev A**, Fang X et al. 2020. Ecology and sustainability of the Inner Mongolian Grassland: Looking back and moving forward. *Landscape Ecology* 35(11):2413-2432 (10 % effort)

Yan Y, Zhang Q, **Buyantuev A**, Liu Q, Niu J. 2020. Plant functional β diversity is an important mediator of effects of aridity on soil multifunctionality. *Science of The Total Environment* 726:138529 (10 % effort)

2021

Natole Jr M, Ying Y, **Buyantuev A**, Stessin M, Buyantuev V, Lapenis A. 2021. Patterns of Mega-Forest Fires in East Siberia will become Less Predictable with Climate Warming. *Environmental Advances*:100041 (40 % effort)

2023

Roggio, A., Cho, B., Luna-Reyes, L., Evans, J.R., Rich, E., **Buyantuev, A.**, 2023. An Investigation of Food System Localization Efforts in New York Municipalities: *Projects, Practices and Policies*. (10 % effort, not peer-reviewed)

2024

Luna-Reyes, L., Roggio, A., **Buyantuev, A.**, Evans, J.R., Rich, E., 2024. An Investigation of Food System Localization Efforts in New York Municipalities: *Projects, Practices and Policies, Survey Report*. (10 % effort, not peer-reviewed)

Wu, J., **Buyantuev, A.**, Fernandez, I., Gilman, J., Jenerette, G.D., Wang, X., 2024. Forty milestones in landscape ecology: commemorating the 40th anniversary of the Allerton Park workshop. *Landscape Ecology* 39, 216 (20 % effort)

2025

Arenberg, M., **Buyantuev A**, and A. Roggio. 2025. Successful Governance? Evaluating the state of phosphorus management in the United States: A case study of the Hudson-Hoosic, New York watershed community. *Ecology and Society*, In Review (35 % effort)

OTHER SCHOLARLY ACTIVITY

Consultant for the project “Estimation of Effects of Urban Heat Island Mitigation Policies on Extreme Heat Vulnerability in Cleveland, Ohio” by the Natural Resources Defense Council, New York, NY (2014)

FUNDED RESEARCH

Federal:

Funded

- “Acquisition of a small Unmanned Aircraft System (UAS) for natural and urban ecosystem studies and risk disaster management” - the National Science Foundation MRI program award (2015 - 2018). My role is the PI (\$147,983).
- 2023 USDA Forest Service Urban and Community Forestry - Inflation Reduction Act Notice of Funding Opportunity Grant Program (2023-2028). My role is the Co-PI (\$5,000,000)

Not funded

- “GP-IMPACT: GIS Internship Incubator: Expanding Opportunities for Undergraduate Experiential Learning”. My role is the Co-PI (submitted), the National Science Foundation’s Improving Undergraduate STEM Education: Pathways into Geoscience program (IUSE: GEOPATHS) (\$345,182). Submitted 10/12/2016
- “NRT IGE: Bridging STEM and Social Sciences in the nexus of geospatial analytics and real world problem solving”. My role is the PI, the National Science Foundation Research Traineeship (NRT) Program (IGE track). My role is the Co-PI (\$490,240). Submitted 02/07/2017
- “NSF DISES: Understanding the dynamics of conservation agriculture in local food systems and its impacts on the environment, local markets and community resilience during and after COVID”. My role is the Co-PI (\$1,272,517.00). Submitted 11/11/2020
- “NSF SoO: Governing local food systems: understanding history, actor agency and the potential for transformation”. My role is the Co-PI (\$735,666). Submitted 2/1/2022
- “NSF SAI-P: Food systems in transition: Designing and developing infrastructure to serve multiple scales, shifting diets and a changing climate”. My role is the Co-PI (\$150,000). Submitted 5/4/2022
- “NSF DISES: Understanding the impact of conservation agriculture on social, environmental and economic aspects of local food production systems”. My role is the Co-PI (\$1,457,149). Submitted 11/15/2022
- “NSF SAI: Food systems infrastructure in transition: Using modeling and mapping to identify opportunities and challenges to developing more resilient local food systems”. My role is the Co-PI (\$745,470). Submitted 3/15/2023
- “NSF: Leveraging photovoice and geospatial artificial intelligence to better understand environmental service workers' perceptions and their impact on key hospital performance indicators”. My role is the Co-PI (\$). Submitted August 2024
- “NSF SAI: Food Systems Infrastructure in Transition: Using Stakeholder Inquiry, Spatial Analysis, and Simulation to Identify Opportunities and Challenges to More Resilient Food Systems”. My role is the Co-PI (\$728,978). Submitted 4/17/2025

University at Albany:

Funded

- FRAP B proposal “Hyperspectral, thermal, and LiDAR imaging with unmanned aircrafts for studies of vegetation phenology and archaeological mapping” awarded for the period of May 1, 2018 to April 30, 2020. My role is the PI (\$3,981).
- FRAP A proposal “Bridging forest phenology at the individual, community, and landscape scales in the urban-rural interface of Albany County using spaceborne and UAV-acquired near surface imagery” awarded for the period of May 1, 2015 to April 20, 2017. My role is the PI (\$9,824).
- FRAP B proposal “A data request for local food systems research: economic conditions of a local food system before and during COVID-19” awarded for the period May 1, 2021 to April 30, 2022. My role is the PI (\$3,150).

- Creating Highly Engaging Education Resources (CHEER) proposal “Geospatial Applications of Drones: the acquisition of small toy aircrafts in support of the AGOG 307 course” awarded in February 2018. My role is the PI (\$244.04).

Not funded

- Presidential Innovation Fund for Research and Scholarship (PIFRS) proposal “Joint Research Program Between Wuhan University and University at Albany (UAlbany)”. My role is the Co-PI (\$34,000). Submitted 09/08/2016

Other sources:

Funded

- “An Investigation of Food System Localization Efforts in New York Municipalities: Projects, Practices and Policies” – New York Health Foundation (2022). My role is the Co-PI (\$150,000)
- “Monumentality and the Las Mercedes Chiefdom, Costa Rica: An Application of Drone-Mounted Remote Sensing” – National Geographic Society (2017-2018). My role is the Co-PI (\$14,213).
- “Effects of rapid urbanization on ecosystem processes: a case study in the Hohhot-Baotou region of Inner Mongolia” - Natural Science Foundation of China (2010-2012). My role is the PI (320,000 Chinese Yuan)

Not funded

- “Response of Ecologically Stressed Spruce to Climate Warming: Northeastern Perspective” - Northeastern States Research Cooperative (NSRC). My role is the Co-PI (\$69,634). 2014
- “Sensitivity of Barbuda’s natural ecosystems to a category 5 hurricane: assessing the aftermath of the disaster and establishing a benchmark for future studies” – National Geographic Society. My role is the Co-PI (\$29,725). Submitted 10/03/2017

HONORS AND AWARDS

- Outstanding Paper in Landscape Ecology annual award (2017)
- Tony Gonzales Excellence in GIS scholarship, Arizona Geographic Information Council (2007)
- Edmund S. Muskie Graduate Fellowship (2000-2002)
- Russian Foundation for Basic Research, Russian Academy of Sciences, Travel grant for attending an international conference (1996)
- The Young Scientist Scholarship from the Russian Academy of Science (1997)
- Student participant in the Tahoe-Baikal Institute (TBI), a US-Russian Summer Environmental Exchange Program (1991)
- Irkutsk State University, Geography Department Award for excellence in scholarship (1988-1993)

AWARD RECEIVED BY STUDENTS

- 2017-18 Distinguished Dissertation and MFA Project Award to PhD student Norman Gervais (2018)
- Best Paper Award in the Honors Student Paper Competition organized by the Cartography specialty Group of the American Association of Geographers. Award to Master student Andrew Kim (2018)

CONFERENCE PRESENTATIONS

Jenerette, D.G., Buyantuev, A., Harlan, S., Grossman-Clarke, S., Ruddell, B.L., & Myint, S.W. (2013). Urban surface temperature vulnerability assessments. American Geophysical Union, Fall Meeting 2013. San Francisco, CA. Paper presented and Proceedings published.

Lapenis, A., Lawrence, G. & Buyantuev, A. (2015). Climate warming shifts carbon allocation from stemwood to roots in calcium-depleted spruce forests. European Geophysical Union, General Assembly. Vienna, Austria. Paper presented

- Buyantuev, A., Niu, J. & Jiang, S. (2016). Satellite time-series analyses of dryland landscape change: a case of urbanizing Inner Mongolia in China. US Chapter of the International Association for Landscape Ecology, Annual Meeting. Asheville, NC. Paper presented and Abstracts published
- Lapenis, A., Buyantuev, A., Jiang, S., Lawrence, G., Sullivan, T., McDonnell, T. & Bailey, S. (2016). Spring phenology - a newly identified ecophysiological role of the deciduous forest floor. American Geophysical Union, Annual Meeting. San Francisco, CA. Paper presented
- Buyantuev, A., Lapenis, A., Jiang, S., Robinson, G., Gaffey, C., & Orton, M. (2017). Reconciliation of plant phenology across scales: understanding the relations between tree physiology dynamics, tree canopy phenology and satellite-observed landscape phenology. American Association of Geographers, Annual Meeting. Boston, MA. Paper presented
- Gervais N., Buyantuev A., & Feng, G. (2017). Using Fused Satellite Data to Monitor the Effects of the Heterogeneous Urban Built-up Environment on Plant Phenology. American Association of Geographers, Annual Meeting. Boston, MA. Paper presented
- Buyantuev A. (2018). Reconciling approaches in studying vegetation phenology across scales: combining near-surface observations with dense time-series of satellite data. The 6th Annual International Forum on Landscape Sustainability Science. Beijing, China. Talk presentation
- Lapenis, A., Buyantuev, A., Jiang, S., Sullivan, T., McDonnell, T. & Bailey, S. (2018). A newly identified role of the deciduous forest floor in the timing of green-up. Barcelona, Spain. Talk presentation
- Buyantuev A. (2019). The use of unmanned aircrafts, web-cameras, satellites, and individual tree measurements in understanding and modeling forest phenology across scales. US Chapter of the International Association for Landscape Ecology, Annual Meeting. Fort Collins, CO. Paper presented
- Buyantuev A., Arenberg, M., and Roggio, A. (2024). Evaluating the state of phosphorus management: the Upstate New York case study. International Association of Landscape Ecology – North America (IALE-NA), Annual Meeting. Oklahoma City, OK. Paper presented
- Wu, J., Buyantuev, A., Fernandez, I., Gilman, J., Jenerette, D., and Wang, X. (2025). 86 milestones in landscape ecology. International Association of Landscape Ecology – North America (IALE-NA), Annual Meeting. Raleigh, NC. Paper presented

OTHER PRESENTATIONS (e.g., lectures at other institutions)

- Guest lecture in the Anthropology Department, February 2018
- Guest lecture in the Informatics Department, December 2014
- Two guest lectures in the Department of Atmospheric Sciences' course on Meteorological Remote Sensing, March 2015
- Guest lecture in the Department of Geography and Planning's Introductory Urban Geography class, May 2015
- Guest lecture in the Informatics Department, October 2015
- Co-authored the invited talk by Andrei Lapenas "Relationships between NDVI and soil in the Adirondacks" presented during the Ninth Annual Workshop of the Northeastern Soil Monitoring Cooperative, United States Geological Survey in Troy, NY. March 2015
- Co-authored the invited talk by Andrei Lapenas "Forest Floor Links Climate Warming to Plant Phenology" presented during the Tenth Annual Workshop of the Northeastern Soil Monitoring Cooperative, United States Geological Survey in Troy, NY. March 2016
- Invited talk in the Huyck Preserve and Biological Station, Rensselaerville, NY. August 2015

TEACHING

Courses taught:

- AGOG 484/584 – Remote Sensing I – Fall 2013, Fall 2014, Fall 2015, Fall 2016, Fall 2017, Fall 2018, Fall 2019, Fall 2020, Fall 2021, Fall 2022, Fall 2023
- AGOG 485/585/ APLN 533 – Remote Sensing II – Spring 2014, Fall 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019, Spring 2020, Spring 2021, Spring 2022, Spring 2023, Spring 2024
- AGOG 406/530, AGOG 424/524 – Landscape Ecology – Spring 2014, Spring 2015, Spring 2016, Fall 2017, Spring 2019, Spring 2020, Spring 2021, Fall 2022, Fall 2023, Fall 2024
- AGOG 101 – Introduction to Physical Environment – Fall 2019, Fall 2020
- AGOG 406/530, AGOG 307/530 – Geospatial Applications of Drones – Fall 2015, Fall 2016, Spring 2017, Spring 2018, Spring 2024

Independent study and Master's Thesis:

- 1 MA student supervised in Spring 2014
- 1 MA student and 1 PhD student supervised in Fall 2014
- 2 MA and 1 PhD students supervised in Spring 2015
- Visiting student individual academic training (Summer Internship) supported by the Brazilian Scientific Mobility Program, Summer 2015
- 1 PhD student supervised in Fall 2015, Fall 2016, Fall 2017, Spring 2018
- 2 PhD students supervised in Spring 2016
- 1 MS student supervised in Fall 2019, Spring 2020, Fall 2020, Spring 2021

PhD Dissertations:

PhD Dissertation in Information Science, Committee Chair (Department of Information Science).

Dissertation by Norman Gervais: "Fusing Satellite Data to Monitor the Effects of Urban Areas on Plant Phenology" (2018)

PhD Dissertation in Ecology and Evolutionary Biology, Committee member (Department of Biological Sciences). Dissertation by Spencer A. Bruce: "The Population Genetics of New York's Wild Brook Trout (*Salvelinus fontinalis*): Elucidating the Impact of Environmental Variation on Genetic Diversity and Hatchery Hybridization in the Face of a Changing Climate" (2018)

PhD Dissertation in Ecology and Evolutionary Biology, Committee member (Department of Biological Sciences). Dissertation by Yen-Hua Huang: "Effects of Environmental Fluctuations and Herbivore Ecology on Anthrax Dynamics in Southern Africa" (2022). Finished and defended in the University of Wisconsin-Madison.

PhD Dissertation in Information Science, Committee member (Department of Information Science).

Dissertation by Yutian Feng: "Spatial analysis of housing vacancy: time lag, spillover effects, and spatial heterogeneity" (2022)

PhD Dissertation in Information Science, Committee member (Department of Information Science).

Dissertation by Mohammed Alazawi: "Addressing the scale issues in spatial-temporal analysis of crime: an integrative framework and empirical findings" (2022)

Master's and Undergraduate Theses:

MA in Geography Thesis Committee member. Thesis by Michael Antidormi: "Monitoring Soil Response to Decreasing Acidic Deposition in a Western Adirondack Tributary over a 16 Year Period" (defended August 2015)

MA in Geography Thesis Committee member. Thesis by Yutian Feng: "Identifying spatial process of vacant housing in Buffalo core urban area" (defended May 2016)

MA in Geography Thesis Committee member. Thesis by Jiayan Zhao: "Supporting Spatial Orientation: Using resizable icons to visualize distant landmarks on mobile phones" (defended May 2016)

MA in Geography Thesis Committee member. Thesis by Nafin Harun: “Spatial Analysis of Newborn Hearing Screening in New York State” (defended August 2016)

MA in Geography Thesis Committee member. Thesis by Clare Gaffey: “Comparison of Remote Sensing Methods for Depicting Phenology of White Spruce (*Picea glauca*) and Other Coniferous Species” (defended August 2018)

MS in Biodiversity, Conservation and Policy Thesis Committee chair. Thesis by Chris Plummer: “Monitoring white-tailed deer abundance and habitat selection in the Albany Pine Bush Preserve using unmanned aerial systems” (defended April 2021)

MS in Biodiversity, Conservation and Policy Thesis Committee chair. Thesis by Izaac Cooper: “Evaluation of aquatic plant survey methods for efficacy in invasive species detection” (defended October 2022)

MA in Geography Thesis Committee member. Thesis by Cait Denny: “Toward a seed commons: Practicing commons for future economies (defended November 2023)

MS in Biodiversity, Conservation and Policy Thesis Committee chair. Thesis by Kyaw Khaung Thant Zin: “Identifying the impacts of land use land cover changes on ecosystem services from a geospatial perspective in Albany County” (defended May 2025)

Undergraduate Honors Thesis, Chair. Thesis by Madison Corbeil: “The Legacy of the Historic Canal System in Central New York: Evaluation of Cultural Ecosystem Services in the Lower Mohawk River, NY” (2018)

SERVICE

Department:

- Department Chair (Fall 2025 – Fall 2028)
- Director, MS in Geographic Information Science (2025 -)
- Director, Graduate Certificate in Geospatial AI and Big Data Analytics (2025 -)
- Director, Sustainability Minor (2024 -)
- Interim Department Chair (Fall 2024)
- Faculty Search Committee Chair for Lecturer position (2024)
- Faculty Search Committee Chair for Lecturer position (2022-2023)
- Faculty Search Committee member (2013-2014 and 2019-2020)
- Promotion case committee Chair for one faculty (2021)
- Director, MA in Geography (2018 – 2025)
- Promotion case committee member for two faculty (2015)
- Administrative Assistant search committee (Summer-Fall 2015)
- Department representative at the Undergraduate Research Information Session and Forum (March 2016)
- Interim Director of the Undergraduate Geography Program, advised 21 Bachelor students (Spring 2016)
- Advising students in the Undergraduate GIS Certificate Program (Spring 2017)

College (CAS):

- Councilor and Member of the Academic Support Committee, College of Arts and Sciences Faculty Council, University at Albany (2014-2016)
- Paul C. Lemon Thesis Award Committee, Department of Biology, University at Albany, Committee Member (Fall 2014)
- Participant of the Retreat for Biodiversity, Conservation and Policy Program, Department of Biological Sciences. Contributed to discussion of current state and future directions of the program (May 2015)
- Councilor and Member of the Academic Support Committee, College of Arts and Sciences Faculty Council, University at Albany (2023-2025)

University:

- Undergraduate Graduation Ceremony, May 2014
- Candle Lightning Ceremony, September 2014
- Graduate Graduation Ceremony, May 2015
- Graduate Graduation Ceremony, May 2016
- Graduate Graduation Ceremony, May 2017
- Graduate Graduation Ceremony, May 2018
- Doctoral Hooding Ceremony (hooding faculty), May 2018
- Food for Finals, Celebrity (faculty) food server, December 2015
- Served as judge for the 2015 ACTR High-School Level Olympiada of Spoken Russian organized by the Slavic and Eurasian Studies Program, UAlbany, April 2015
- Member of the Committee on Academic Freedom, Freedom of Expression, & Community Responsibility (CAFFECOR), 2016-2018
- UAlbany Endpoint Computing Task Force, Committee Member, January 2018
- Member of the University Life Committee, 2019-2021
- Hosted The Girls Inc. Eureka! STEM program in my lab in July 2022 and July 2023

Editorial Board Member, *Landscape Ecology*, an international journal. Responsible for up to 8 manuscripts a year (October 2017 - present)

Guest Editor, *Urban Science*, an open-source peer-reviewed online journal. Responsible for the special issue on Urban Landscape Degradation (October 2017 – July 2018)

Co-Organizer of two sessions on “Phenological Responses to Climate Change, American Association of Geographers, 2017 Annual Meeting. Boston, MA (April 2017)

Grant Proposal Reviewer for the Research Programme for Earth Observation "STEREO: Support to the exploitation and research of earth observation data", Belgian Science Policy Office (Fall 2014)

Ad Hoc Grant Proposal Reviewer for the National Science Foundation’s Engineering Research Centers Program (Spring 2015)

Ad Hoc Grant Proposal Reviewer for the National Science Foundation’s Major Research Instrumentation Program (Spring 2016)

Journal manuscript reviewer: *Landscape Ecology (ad hoc)*, *Landscape and Urban Planning (ad hoc)*, *Urban Ecosystems (ad hoc)*, *Ecological Applications*, *Photogrammetric Engineering and Remote Sensing*, *Remote Sensing of Environment*, *Environmental Monitoring and Assessment*, *Journal of Arid Environment*, *Annals of the Association of American Geographers*, *Journal of Urban Planning and Development*

PROFESSIONAL AFFILIATIONS

- Long Term Ecological Research network (LTER)
- American Association of Geographers (AAG)
- Ecological Society of America (ESA)
- US Chapter of the International Association for Landscape Ecology (US-IALE)
- Sigma Xi