
CURRICULUM VITAE

RESEARCH INTERESTS

Integrated modeling and quantitative spatial analyses of human-environment, socio-ecological systems and natural resource management; land systems science, remote sensing, rural lands and livelihoods

EDUCATION

2015 – University of Florida – Gainesville, Florida

Ph.D. in Geography, minor in land change modeling

Committee: Dr. Jane Southworth (advisor), Dr. Greg Kiker, Dr. Timothy Fik, Dr. Robert Fletcher

Dissertation: *Methodologies of Scale and Studies of Interacting Forest and Land System Dynamics*

2009 – University of Florida – Gainesville, Florida

M.S. in Geography, minor in natural resource management modeling

Committee: Dr. Jane Southworth (advisor), Dr. Greg Kiker, Dr. Timothy Fik

Thesis: *Defining Differences in Remote Sensing Data Sources: Linking Landsat and ASTER Data for Longitudinal Research*

1998 – University of Chicago – Chicago, Illinois

B.A. in Biology with Honors, specializing in Ecology and Evolution; Dean's List

Concentration GPA 3.9/4.0; cumulative GPA 3.6/4.0

1994 – Pocatello High School – Pocatello, Idaho

ACADEMIC APPOINTMENTS

2014 – Assistant Professor, University of Louisville, Department of Geography and Geosciences –

Louisville, Kentucky

Appointed at rank of Lecturer, Fall 2014, elevated to Assistant Professor, Fall 2015. Mandatory tenure decision in 2019-2020.

TEACHING

2014- – Assistant Professor, University of Louisville, Department of Geography and Geosciences –

Louisville, Kentucky

- GEOG 540-01, Geography and Human-Environment Interactions (3 semesters)
- GEOS 200-03, The Global Environment (3 semesters)
- GEOG 365-01, Biogeography (2 semesters)
- GEOG 556-01, Advanced Remote Sensing (1 semester)
- GEOG 390-01, Introduction to Programming for GIS (1 semesters)
- GEOG 685-01, Graduate Introduction to Programming and Geoprocessing Using R (2 semesters)

2013 – Adjunct Appointment, Department of Geography, University of Florida – Gainesville, Florida

- GEO6938/4938 Programming for GIS and Spatial Data Analysis, Python and ArcGIS

2006, 2008, 2011 – Graduate Teaching Assistantships, University of Florida – Gainesville, Florida

- GEO6938/4938 Introduction to Programming and Geoprocessing Using R
- GEO6938/4938 Programming Python for GIS and Remote Sensing
- GEO5134/4938 Remote Sensing of the Environment (TA and lab instructor)

FUNDED RESEARCH GRANTS

- 2015 – National Science Foundation Geography and Spatial Science (GSS).** PI: Andrea Gaughan, Co-I: Lin Cassidy, Narcisa G. Pricope, Forrest R. Stevens, and Joel Hartter. Change and Adaptation in Southern Africa: Climate and Land System Dynamics of the Kavango-Zambezi Transfrontier Conservation Area. (\$325,000 for June 2016 – May 2019, NSF Geospatial Sciences Program, Award #1560700)
- 2015 – Bill and Melinda Gates Foundation.** Global Population Mapping for 2000-2020. PI: Andrew J. Tatem, University of Southampton, WorldPop. UofL Sub-award PIs: Forrest R. Stevens, Andrea Gaughan. (Total: \$1,831,442; UofL Sub-Award: \$401,689)
- 2015 – World Bank.** Research funding for producing Argentina population maps. Co-Is: Andrea Gaughan, Forrest R. Stevens. (\$10,873)
- 2015 – Microsoft Azure Research Award.** Cloud-based, supercomputing research resources. PI: Forrest R. Stevens. (\$20,000)
- 2014-2017 – USDA AFRI Agricultural and Natural Resources Science for Climate Variability and Change.** PI: Joel Hartter, University of Colorado, Boulder. Co-Is: Mark Ducey, Larry Hamilton, Michael Palace, Forrest R. Stevens. (\$900,000)
- 2014 – Google Faculty Research Award.** Research funding to support Google Compute Engine and Earth Engine integration for gridded population mapping. Co-Is: Forrest R. Stevens, Andrea Gaughan. (\$50,000)
- 2010-2014 – USDA CSREES Disaster Resilience for Rural Communities.** Communities and Forests in Oregon (CAFOR). Coauthor and non-PI consultant (\$399,868)
- 2010-2011 – NSF I-Cubed Program Interdisciplinary Research Project Award.** Linking Social and Land Change Networks: A Mixed Methods Approach in a Water Limited Landscape. PI (\$2,433)
- 2009-2012 – NASA Land-Cover/Land-Use Change Program, Earth Systems Program Grant.** Understanding and predicting the impact of climate variability and climate change on land use and land cover change via socio-economic institutions in Southern Africa. Coauthor and non-PI researcher (\$870,000)
- 2008 – Mazamas Foundation Graduate Research Grant.** Sensing Change: Analyzing Land Cover Changes in Wallowa County, Oregon. PI (\$1,500)

PENDING AND UNFUNDED RESEARCH GRANT APPLICATIONS

- 2016 – NASA ROSES.** PI: Son Nghiem, California Institute of Technology. UofL Sub-award Co-Is: Andrea Gaughan, Forrest R. Stevens. South Asian Rural-Urban Transformation and Impacts in a Changing Climate. (\$157,794 for September 2016 – August 2019)
- 2014 – National Science Foundation Geography and Spatial Science (GSS).** PI: Andrea Gaughan, Co-I: Narcisa G. Pricope, Forrest R. Stevens, and Joel Hartter. Change and Adaptation in Southern Africa: Climate and Land Systems Dynamics of the Kavango-Zambezi Transfrontier Conservation Area. (\$399,127 for May 2015 – April 2018)
- 2013 – NSF Dynamics of Coupled Natural and Human Systems (CNH).** PI: Russel G. Congalton. Coauthor and post-doc research associate
- 2013 – NSF Geography and Spatial Sciences Grants (GSS),** coauthor and non-PI consultant
- 2012 – NSF Dynamics of Coupled Natural and Human Systems (CNH),** coauthor and post-doc research associate
- 2012 – NSF Geography and Spatial Sciences Grants (GSS),** coauthor and non-PI consultant
- 2012 – Land-Cover/Land-Use Change for Early Career Scientists (LCLUC),** NASA Science Mission Directorate, Earth Science Division, coauthor and non-PI consultant
- 2012 – National Center for Ecological Analysis and Synthesis Working Group Grant,** NCEAS, UC Santa Barbara, PI
- 2010 – NASA Carbon Cycle Science,** NASA Science Mission Directorate, Earth Science, coauthor and non-PI consultant (\$889,656.00 budgeted)
- 2009 – NSF BCS Geography and Regional Science Grants,** coauthor and non-PI consultant (\$339,270 budgeted)
- 2009 – CFERP Community and Forest Pre-Dissertation Fellowship Program,** Community Forestry & Environmental Research Partnerships (\$2,000 budgeted)

- Boag, A., Hamilton, L. C., Hartter, J., **Stevens, F. R.**, Palace, M. W., Ducey, M. J. (2016). Shifting environmental concern in rural eastern Oregon: The role of demographic and place-based factors. *Population and Environment* (Online Early Access). doi:10.1007/s11111-016-0261-z
- Hamilton, L.C., Hartter, J., Keim, B.D., Boag, A.E., Palace, M.W., **Stevens, F.R.** & Ducey, M. J. (2016). Wildfire, climate, and perceptions in northeast Oregon. *Regional Environmental Change* (Online Early Access). doi: 10.1007/s10113-015-0914-y
- Fischer, A. P., Spies, T. A., Steelman, T. A., Moseley, C., Johnson, B. R., Bailey, J. D., Ager, A. A., Bourgeron, P., Charnley, S., Collins, B. M., Kline, J. D., Leahy, J. E., Littell, J. S., Millington, J. D. A., Nielsen-Pincus, M., Olsen, C. S., Paveglio, T. B., Roos, C. I., Steen-Adams, M. M., **Stevens, F. R.**, Vukomanovic, J., White, E. M., David, M. J. S. (2016). Wildfire risk as a socio-ecological pathology. *Frontiers in Ecology and the Environment* 14(5):276-284. doi:10.1002/fee.1283.
- Gaughan, A. E., **Stevens, F. R.**, Huang, Z., Nieves, J., Sorichetta, A., Shengjie, L., Xinyue, Y., Linard, C., Hornby, G., Hay, S. I., Hongjie, Y., Tatem, A. J. (2016) Spatiotemporal patterns of population in mainland China, 1990 to 2010. *Scientific Data* 3:160005. doi:10.1038/sdata.2016.5.
- Sorichetta, A., Hornby, G. M., **Stevens, F. R.**, Gaughan, A. E., Linard, C., & Tatem, A. J. (2015). High-resolution gridded population datasets for Latin America and the Caribbean in 2010, 2015, and 2020. *Scientific Data*, 2(150045). doi:10.1038/sdata.2015.45
- Schneider, A., Mertes, C. M., Tatem, A. J., Tan, B., Sulla-Menashe, D., Graves, S. J., Patel, N. N., Horton, J. A., Gaughan, A. E., Rollo, J. T., Schelly, I. H., **Stevens, F. R.**, Dastur, A. (2015). A new urban landscape in East–Southeast Asia, 2000–2010. *Environmental Research Letters*, 10(3), 034002. doi:10.1088/1748-9326/10/3/034002
- Stevens, F. R.**, Gaughan, A. E., Linard, C., & Tatem, A. J. (2015). Disaggregating Census Data for Population Mapping Using Random Forests with Remotely-Sensed and Ancillary Data. *PLOS ONE*, 10(2), e0107042. doi:10.1371/journal.pone.0107042
- Hartter, J., **Stevens, F. R.**, Hamilton, L. C., Congalton, R. G., Ducey, M. J., & Oester, P. T. (2015). Modelling Associations between Public Understanding, Engagement and Forest Conditions in the Inland Northwest, USA. *PLOS ONE*, 10(2), e0117975. doi:10.1371/journal.pone.0117975
- Hall, J., Staub, C., Marsik, M., **Stevens, F. R.**, Binford, M. (2015) Scaling categorical spatial data for earth systems models. *Global Change Biology*, 21: 1–3. doi: 10.1111/gcb.12708.
- Patel, N., Angiuli, E., Gamba, P., Gaughan, A., Lisini, G., **Stevens, F. R.**, Tatem, A. J., Trianni, F. (2015). Multitemporal settlement and population mapping from Landsat using Google Earth Engine. *International Journal of Applied Earth Observation and Geoinformation* 03/2015; 35(Part B):199–208.
- Deville, P., Linard, C., Martin, S., Gilbert, M., **Stevens, F. R.**, Gaughan, A. E., Blondel, V. D., Tatem, A. J.. (2014) Dynamic population mapping using mobile phone data. *Proceedings of the National Academy of Sciences of the United States of America*, Early Access, October, 27, 2014. doi:www.pnas.org/cgi/doi/10.1073/pnas.1408439111
- Gaughan, A. E., **Stevens, F. R.**, Linard, C., Patel, N. N., & Tatem, A. J. (2014). Exploring nationally and regionally defined models for large area population mapping. *International Journal of Digital Earth*, (October), 1–18. doi:10.1080/17538947.2014.965761
- Staub, C. G., **Stevens, F. R.**, Waylen, P. R. (2014). The geography of rainfall in Mauritius: Modelling the relationship between annual and monthly rainfall and geomorphic factors. *Applied Geography*. 01/2014; 54:222–234.
- Hamilton, L. C., Hartter, J., Safford, T. G., & **Stevens, F. R.** (2013). Rural Environmental Concern: Effects of Position, Partisanship, and Place. *Rural Sociology*, 79(2), 257–281. doi:10.1111/ruso.12023
- Tatem, A. J., Gaughan, A. E., **Stevens, F. R.**, Patel, N. N., Jia, P., Pandey, A., & Linard, C. (2013). Quantifying the effects of using detailed spatial demographic data on health metrics: a systematic analysis for the AfriPop, AsiaPop, and AmeriPop projects. *The Lancet*, 381, S142. doi:10.1016/S0140-6736(13)61396-3
- Staub, C. G., Binford, M. W., & **Stevens, F. R.** (2013). Elephant herbivory in Majete Wildlife Reserve, Malawi. *African Journal of Ecology*, 51(4), 536–543. doi:10.1111/aje.12064
- Gaughan, A. E., **Stevens, F. R.**, Linard, C., Jia, P., & Tatem, A. J. (2013). High Resolution Population Distribution Maps for Southeast Asia in 2010 and 2015. (F. Pappalardo, Ed.) *PLOS ONE*, 8(2), e55882. doi:10.1371/journal.pone.0055882
- Gaughan, A. E., **Stevens, F. R.**, Gibbes, C., Southworth, J., & Binford, M. (2012). Linking vegetation response to seasonal precipitation in the Okavango-Kwando-Zambezi catchment of southern Africa. *International Journal of Remote Sensing* 33(21):6783-6804.
- Southworth, J., Marsik, M., Qiu, Y., Perz, S., Cumming, G., **Stevens, F. R.**, Rocha, K., Duchelle, A., & Barnes, F. R. Stevens, CV

- G. (2011). Roads as drivers of change: Trajectories across the tri-national frontier in MAP. *Remote Sensing* 3(5):1047-1066.
- Marsik, M., **Stevens, F. R.**, & Southworth, J. (2011). Patterns and rates of land cover change in Pando, northern Bolivia from 1986 to 2005. *Progress in Physical Geography*:1-22.
- Pfister, C. A., & **Stevens, F. R.** (2003). Individual variation and environmental stochasticity: Implications for matrix model predictions. *Ecology* 84 (no. 2):496-510.
- Pfister, C. A., & **Stevens, F. R.** (2002). The genesis of size variability in plants and animals. *Ecology* 83 (no. 1):59-72.

MANUSCRIPTS IN-PRESS, UNDER REVIEW

- Patel, N. N., **Stevens, F. R.**, Huang, Z., Gaughan, A. E., Elyazar, I., Tatem, A. J. (2016, In-Press). Improving Large Area Population Mapping Using Geotweet Densities. *Transaction in GIS, Early Access*. doi:10.1111/tgis.12214.
- Harterter, J., **Stevens, F. R.**, Ducey, M. J., Christofferson, N., Hamilton, L. C., & Congalton, R. (2016, Under-Review). Conservation, Conflict, and Consensus: Alternative Futures in the American West. to *Society & Natural Resources*, December 2015.

NON-REFEREED ARTICLES

- Boag, A. E., Harterter, J., Hamilton, L. C., **Stevens, F. R.**, Ducey, M. J., Palace, M. W., Christofferson, N. D., Oester, P. T. (2015). *Forest Views - Shifting Attitudes Toward the Environment in Northeast Oregon*. Durham, NH: Carsey Institute, University of New Hampshire.
- Harterter, J., **Stevens, F. R.**, Hamilton, L. C., Oester, P. T., Congalton, R. G., Ducey, M. J., & Crowley, M. (2014). *Forest management and wildfire risk in Inland Northwest*. Durham, NH: Carsey Institute, University of New Hampshire.
- Harterter J., Hamilton, L. C., **Stevens, F. R.**, Congalton, R. G., & Ducey, M. (2012). Research Uncovers Social Attitudes Toward Changing Forests. *Quarterly Connection*. Fall 2012. Wallowa Resources. Enterprise, OR.
- Hamilton L. C., Harterter, J., **Stevens, F. R.**, Congalton, R. G., & Ducey, M. (2012). *Forest views: Northeast Oregon survey looks at community and environment*. Carsey Institute, University of New Hampshire. Durham, NH.
- Gaughan, A. E., **Stevens, F. R.**, Gibbes, C., Southworth, J., Keys, E., Child, B., Waylen, P., Kiker, G., Muñoz-Carpena, R., & Binford, M. W. (2009). Climate, land-use/land-cover change and institutional response: A multi-scalar approach to human-environment interactions in southern Africa. *Newsletter of the Global Land Project International Project Office No. 5*, pp. 5-7.

ADVISING

Graduate Students Advised

- Nieves, Jeremiah. M.S. (2016, co-advised with Gaughan, A. E.) University of Louisville. *Global Population Distributions and the Environment: Discerning Observed Global and Regional Patterns*
- Peters, Faye. M.S. (2016) University of Louisville. *Analyzing the Extent and Intensity Relationship of Kudzu (Pueraria montana) Infestations with Vegetation Indices*.
- Jensen, Brock. M.S. (Anticipated 2016) University of Louisville. *A Microclimatic Look at Ixodes Scapularis: Distribution Projection Based on Non-Random Sampling*.
- King, Adam. M.S. (Anticipated 2017) University of Louisville. *Mobility and Climate-Induced Population Movement in Bangladesh From Mobile Phone Records*.
- Reed, Philip. M.S. (Anticipated 2018) University of Louisville. *TBA*.

Graduate Student Committees

- Caixeta, Fernando. M.S. (2016) University of Louisville. *A Spectral Mixture Analysis of Land Cover Change in the Zambezi Region, Namibia*.
- Neha Angal. M.A. (2016) University of Louisville. *Effect of migration, carrying capacity, and fecundity on the formation of clinal patterns during range expansions*.
- Perkins, James. M.S. (Anticipated 2017) University of New Hampshire. *Analysis of Forest Biometrics Using Drone-Acquired Imagery*.
- Weaver, Ariel. M.S. (Anticipated 2018, Fulbright Research Namibia) University of Louisville. *An Object-*

Undergraduate Theses and Independent Studies Advised

- Thomas Jeffords, 2014-2015 (senior thesis)
Morgan Kee, 2014-2015 (senior thesis)
Yi Ling Chan, 2014-2015 (senior honor's thesis committee, reader)
Michael Shaw, 2015-2016 (senior thesis)
Nicholas Nuss, 2015-2016 (senior thesis)
Laura Krauser, 2015-2016 (senior honor's thesis committee, reader, Fulbright Study Finalist)

CONTRIBUTED PRESENTATIONS AT CONFERENCES

- Stevens, F. R.**, Gaughan, A. E., Tatem, A. J., Linard, C., Sorichetta, A., Hornby, G. M., & Nieves, J. (2016). Mapping Population Change Through Time – Methodological Advances for WorldPop Temporal Data. American Association of Geographers Annual Meeting, March 29-April 2. San Francisco, CA.
- Perkins, J., Palace, M. W., **Stevens, F. R.**, Ducey, M. J. (2016). Estimation of Forest Biometrics Using Unmanned Aerial Systems. American Association of Geographers Annual Meeting, March 29-April 2. San Francisco, CA.
- Stevens, F. R.**, Gaughan, A. E., Nieves, J., Patel, N. N., Linard, C., & Tatem, A. J. (2015). Expanding WorldPop methods, data availability, and applications. Kentucky Association of Mapping Professionals Summer Quarterly Meeting, August 6. Louisville, KY.
- Gaughan, A. E., Nieves, J., **Stevens, F. R.** (2015). WorldPop Global Population and Urban Extent Mapping Using Google Compute Engine. Kentucky EPSCor Conference, May 22. Lexington, KY.
- Gaughan, A. E., **Stevens, F. R.**, Nieves, J., Sorichetta, A., Tatem, A. J., Shengjie, L., Huang, Z. & Linard, C. (2015). Spatiotemporal patterns of Mainland China's population 1990 to 2010. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Stevens, F. R.**, Gaughan, A. E., Nieves, J., Hornby, G., Sorichetta, A., & Tatem, A. J. (2015). The Challenges of Mapping the Denominator – the Past, Present and Future of the WorldPop Project. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Nieves, J., **Stevens, F. R.**, Gaughan, A. E., Patel, N. N., Linard, C., & Tatem, A. J. (2015). The Value of Urban Extents in High Resolution Population Mapping. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Stevens, F. R.**, Hartter, J., Hamilton, L., Ducey, M., & Congalton, R. (2014). Changing Communities and Forests of the Inland Northwest: Perceptions and Realities. American Association of Geographers Annual Meeting, April 8-12. Tampa, FL.
- Gaughan, A. E., Tatem, A. J., Linard, C., **Stevens, F. R.**, & Patel, N. (2014). Detailed Spatial Demographic Data in Land Change Systems. American Association of Geographers Annual Meeting, April 8-12. Tampa, FL.
- Patel, N. N., Gamba, P., Tatem, A. J., **Stevens, F. R.**, & Gaughan, A. E. (2014). The role of High Resolution Population Mapping in Validating Extraction of Urban Settlements from the Google Earth Engine. American Association of Geographers Annual Meeting, April 8-12. Tampa, FL.
- Tatem, A. J., Gaughan, A. E., **Stevens, F. R.**, Patel, N. N., Jia, P., Pandey, A., & Linard, C. (2013). Quantifying the effects of using detailed spatial demographic data on health metrics: a systematic analysis for the AfriPop, AsiaPop, and AmeriPop projects. Global Health Metrics and Evaluation Conference, June 17-19. Seattle, WA.
- Stevens, F. R.**, Gaughan, A. E., Tatem, A. J., & Linard, C. (2013). Refining area-to-grid population assignment using ancillary data and nonparametric, ensemble models. Association of American Geographers Annual Meeting, April 9-14. Los Angeles, CA.
- Gaughan, A. E., Tatem, A. J., Linard, C., **Stevens, F. R.**, & Jia P. (2013). High-resolution population mapping – Southeast Asia. Association of American Geographers Annual Meeting, April 9-14. Los Angeles, CA.
- Gaughan, A. E., Tatem, A. J., Linard, C., **Stevens, F. R.**, & Jia P. (2012). Mapping AsiaPop. Southeastern Division of the Association of American Geographers Annual Meeting, November 20. Asheville, NC.
- Podkul, T. E., & **Stevens, F. R.** (2012). Geospatial influences of control and access to water resources in Peru: A study in the geography of social networks. The Society for Applied Anthropology Annual Meeting, March 27-31. Baltimore, MD.
- Stevens, F. R.**, & Podkul, T. E. (2012). Spatializing Social and Resource Management Networks: A Case Study of Irrigation and Crops in the Cotahausi River Canyon, Peru. Association of American Geographers Annual Meeting, February 24-28. New York City, NY.

- Stevens, F. R.**, Bohrmann, T., Hein, A., Brooks, M., Lucchetti, J., Christman, M., Osenberg, C., Bolker, B. & Swain, H. (2011). Predicting Ponds, Pines and Savanna: A Recursive Time Series Modeling Approach for Messy Data. Association of American Geographers Annual Meeting, April 12-16. Seattle, WA.
- Bohrmann, T., Hein, A., **Stevens, F. R.**, Brooks, M., Lucchetti, J., Christman, M., Osenberg, C., Bolker, B. & Swain, H. (2011). Predicting a New Time Series Using Multiple Partially Observed Time Series. Statistics Meeting, March 12. Miami, FL.
- Stevens, F. R.**, Hartter, J., Boston, K., Christofferson, N., & Survis, P. (2010). Shocks to the System: A Case Study of Changing Forests in Wallowa County, Oregon with Implications for Working and Managed Landscapes. Global Land Project Open Science Meeting, October 17-19. Phoenix, AZ.
- Stevens, F. R.**, Hartter, J., Christofferson, N., Survis, P., & Boston, K. (2010). Mixed Methods for Monitoring Forest Health in Wallowa County, Oregon. Association of American Geographers Annual Meeting, April 13-18. Washington, D.C.
- Gaughan, A. E., **Stevens, F. R.**, & Gibbes, C. (2010). Linking climate to landscape: Investigating the response of vegetation to precipitation variability in a semi-arid catchment of southern Africa. Association of American Geographers Annual Meeting, April 13-18. Washington, D.C.
- Stevens, F. R.**, Hartter, J., & Boston, K. (2009). Sensing Change: Analyzing Land Cover and Forest Dynamics in Wallowa County, Oregon. Association of American Geographers Annual Meeting, March 22-27. Las Vegas, NV.
- Southworth, J., **Stevens, F. R.**, Qiu, Y., Marsik, M., Perz, S., & Rocha, K. (2009). Land Cover Change Patterns and Processes: Linking to Infrastructure Change and Resilience in Social-Ecological Systems, the Case of Southwestern Amazonia. Association of American Geographers Annual Meeting, March 22-27. Las Vegas, NV.
- Harterter, J., **Stevens, F. R.**, & Boston, K. (2009). Impacts of Landscape Change on Forest-Dependent Communities in Wallowa County, Oregon. Association of American Geographers Annual Meeting, March 22-27. Las Vegas, NV.
- Stevens, F. R.** (2008). Defining Differences in Remote Sensing Data Sources: Linking Landsat and ASTER Data for Longitudinal Research. Association of American Geographers Annual Meeting, April 15-19. Boston, MA.
- Marsik, M., **Stevens, F. R.**, Rocha, K., Southworth, J., Barra, F., Brown, F., & Perz, S. (2007). Road Expansion and Land Cover Change from 1986 to 2006 in Southwestern Amazonia. Florida Society of Geographers Annual Meeting. Jacksonville, February 9-11. Jacksonville, FL.

CONTRIBUTED PRESENTATIONS AT INTERNATIONAL CONFERENCES

- Stevens, F. R.**, Staub, C., Hall, J., Marsik, M., Hartter, J., & Binford, M. W. (2014). Multi-scale Approaches for Detecting Trends and Breaks in Time Series of Vegetation Indices. 2nd GLP Open Science Meeting, March 19-21. Berlin, Germany.
- Linard, C., Patel, N., Stevens, F. R., Huang, Z., Gaughan, A. E., Tatem, A. J. (2014). Use of active and passive VGI data for population distribution modelling: Experience from the WorldPop project. GIScience 2014 Workshop, September 14. Vienna, Austria.
- Gaughan, A. E., Tatem, A. J., Linard, C., & **Stevens, F. R.** (2014). Detailed spatial demographic data in land change: the AfriPop, AsiaPop, and AmeriPop Projects. 2nd GLP Open Science Meeting, March 19-21. Berlin, Germany.
- Brooks, M., Bohrmann, T., **Stevens, F.**, Hein, A., Christman, M., Osenberg, C., & Bolker, B. (2013). Predicting Temporally Autocorrelated Pond Depths with Irregular Time Series Data / Prédire une profondeur de bassin avec autocorrélation temporelle à l'aide de données chronologiques Irrégulières. Statistical Society of Canada Annual Meeting, May 26-29. University of Alberta, Edmonton, Alberta, Canada.
- Stevens, F. R.** (2007). Rayas y Brechas en los Datos: Valorando Imágenes de ASTER como una Alternativa a Landsat para la Región MAP. Primer Mini Map – Sensoramiento Remoto, July 6-9. Universidad Amazônica de Pando, Cobija, Pando, Bolivia.
- Marsik, M., Rocha, K., Southworth, J., **Stevens, F. R.**, & Hoyos, N. (2007). Uso de Imágenes Landsat: Experiencias de la UF en la Región MAP. Primer Mini Map – Sensoramiento Remoto, July 6-9. Universidad Amazônica de Pando, Cobija, Pando, Bolivia.

INVITED PRESENTATIONS AND LECTURES

- Stevens, F. R.**, Gaughan, A. E., Palace, M., Perkins, J., Ducey, M., & Hartter, J. (2016). Low Altitude Remote

- Sensing and the Environmental Applications of UAS. Earth STEM Day Symposium, April 22. Kentucky State University, Frankfort, KY.
- Stevens, F. R.,** Hartter, J., Hamilton, L., Ducey, M., Congalton, R., & Palace, M. (2015). Seeing the Forest for the Trees – Multiscale Analyses of Changing Forests and Communities. Department of Geography and Geosciences Colloquium Series, November 6. University of Louisville, Louisville, KY.
- Stevens, F. R.,** Gaughan, A. E. (2015). Environmental Applications of UAS. Experimental Aviation Association Monthly Meeting, September 9. Louisville, KY.
- Stevens, F. R.,** Hartter, J., Hamilton, L., Ducey, M., Congalton, R., & Palace, M. (2014). Changing Communities and Forests of the Inland Northwest: Perceptions and Realities. Coupled Human and Natural Systems in Fire-Prone Landscapes: Interconnections and Research Needs Workshop, August 4-7. Bend, OR.
- Harterter, J., **Stevens, F. R.,** Hamilton, L., Ducey, M., & Congalton, R. (2014). Wildfire and Working Landscapes in the Interior Northwest. Department of Geography Colloquium Series, April 24. University of Florida, Gainesville, FL.
- Stevens, F. R.,** Gaughan, A. E., Tatem, A. J., & Linard, C. (2013). Area-to-grid population assignment using ancillary data and random forest models. Annual IGERT Symposium, April 25. University of Florida, Gainesville, FL.
- Stevens, F. R.** (2013). Sensing Change: Methodologies of Scale and a Case Study of Land Management in Wallowa County, Oregon. Department of Geography Colloquium Series, February 28. University of Florida, Gainesville, FL.
- Stevens, F. R.,** Hartter, J., Christofferson, N., Boston, K., & Survis, P. (2011). Changing Forests in Wallowa County, Oregon with Implications for Communities and Managed Landscapes. Wallowa County Natural Resources Advisory Committee, June 28. Enterprise, OR.
- Stevens, F. R.** (2011). A Case Study of Changing Forests in Wallowa County, Oregon with Implications for Working and Managed Landscapes. Department of Geography Colloquium Series, March 24. University of Florida, Gainesville, FL.
- Stevens, F. R.** (2010). Public and Private Partnerships: Monitoring and Modeling Forest Health in Wallowa County, Oregon. Annual IGERT Symposium, May 3. University of Florida, Gainesville, FL.
- Stevens, F. R.** (2009). Measuring and Monitoring for REDD: A Remote Sensing Tutorial. UF GEO 3930 Introduction to Climate Change, November 20. University of Florida, Gainesville, FL.
- Harterter, J., **Stevens, F.R.,** & Boston, K. (2009). Analyzing Landscape Change, Forest Dynamics, and the Impacts of Change on Forest Dependent Communities. Forest Carbon Science and Management Workshop, November 17-18. Portsmouth, NH.
- Stevens, F. R.** (2009). An Introduction to Models With Applications to Global Climate Change. Presented to the UF GEO 3930 Introduction to Climate Change, February 2. University of Florida, Gainesville, FL.
- Stevens, F. R.** (2008). Uncertainty and Unpredictability: Introduction to Deterministic Models and Their Applications to Global Climate Change. Presented to the UF GEO 3930 Introduction to Climate Change, November 7. University of Florida, Gainesville, FL.
- Stevens, F. R.** (2008). Linking Landsat and ASTER Data for Longitudinal Research. Department of Geography Colloquium Series, March 5. University of Florida, Gainesville, FL.

CONTRIBUTED POSTERS AT CONFERENCES

- Biddle, DJ, **Stevens, F. R.,** & Gaughan, A. E. (2015). Mapping Debris-Covered Glaciers in the Cordillera Blanca, Peru: An Object-based Image Analysis Approach. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Sandifer, J., Gaughan, A. E., & **Stevens, F. R.** (2015). Remotely-Sensed Heat: Variation and Change in Surface Urban Heat Islands in the Temperate Eco-Region of the United States. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Nieves, J., Gaughan, A.E., & **Stevens, F. R.** (2015). WorldPop Global Population and Urban Extents Using Google Compute Engine. American Association of Geographers Annual Meeting, April 21-25. Chicago, IL.
- Linard, C., Deville, P., Martin, S., **Stevens, F. R.,** Gaughan, A. E., Gilbert, M., & Blondel, V., Tatem, A. J. (2014). Dynamic population mapping using mobile phone data. 2nd GLP Open Science Meeting, March 19-21. Berlin, Germany.
- Harterter, J., Ducey, M. J., Hamilton, L. C., Palace, M. W., **Stevens, F. R.,** Christofferson, N., & Oester, P. (2014). Climate Change Adaptation in Working Landscapes of the Intermountain Northwest. USDA NIFA Agricultural Science for Climate Variability and Change Project Directors Meeting, January 6-9.

- Gainesville, FL.
- Gelcer, E., **Stevens, F. R.**, Montone, V., & Fraisse, C. W. (2013). Agroclimatic zoning in Mozambique to reduce risks of tomato production. Agricultural and Biological Engineering Research Symposium, October 23. Gainesville, FL.
- Bohrmann, T., Brooks, M., Hein, A., Luchetti, J., **Stevens, F. R.**, Bolker, B., Christman, M., & Osenberg, C. (2010). Modeling ephemeral pond dynamics on the Lake Wales Ridge, Florida. UF Water Institute Symposium, February 23-25. Gainesville, FL.
- Gaughan, A., **Stevens, F. R.**, & Gibbes, C. (2010). Responses of vegetation to precipitation variability in a semi-arid catchment of southern Africa. UF Water Institute Symposium, February 23-25. Gainesville, FL.
- Gibbes, C., Gaughan, A., & **Stevens, F. R.** (2010). Modeling vegetation responses to precipitation variability in southern Africa. Graduate Student Council Interdisciplinary Research Conference, February 3. Gainesville, FL.
- Stevens, F. R.**, Gaughan, A., & Gibbes, C. (2010). Linking climate to landscape: Investigating the response of vegetation to precipitation variability in a semi-arid catchment of southern Africa. American Meteorological Society Annual Meeting, January 17-21. Atlanta, GA.
- Marsik, M., **Stevens, F. R.**, Rocha, K., & Southworth, J. (2008). Patrones y Tasas de Deforestación en Pando, Bolivia desde 1986 a 2005. IV Reunión Nacional Sobre Investigación Forestal, September 3-5. Cobija, Pando, Bolivia.
- Marsik, M., Rocha, K., **Stevens, F. R.**, & Southworth, J. (2008). Modelos e Taxas de Desmatamento em Pando, Bolivia de 1986 a 2005. Seminário Anual de Cooperação UFAC-UF, July 7-8. Universidade Federal do Acre, Rio Branco, Acre, Brazil.
- Stevens, F. R.** (2007). Bridging the Landsat Data Gap: Evaluating ASTER as an Alternative. Association of American Geographers Annual Meeting, April 17-21. San Francisco, CA.

FELLOWSHIPS AND AWARDS

- 2005-2009, 2011, 2014 – UF Presidential Fellow**, University of Florida (\$65,800 + tuition)
- 2009-2011 – Quantitative Spatial Ecology, Evolution, and Environment (QSE³) IGERT Fellow**, National Science Foundation (Grant No. 0801544) and University of Florida (\$89,800 + tuition)
- 2007 – Excellence in Graduate Teaching Award**, University of Florida Department of Geography (\$200)
- 2006-2011 – Competitive travel grants (10) from:** College of Liberal Arts and Sciences, Graduate Student Council, Land Use and Environmental Change Institute (\$250-500)
- 1997 – Howard Hughes Undergraduate Research Fellow**, Howard Hughes Medical Institute (\$5,000)
- 1994 – National Science Scholar**, U.S. Department of Education
- 1994 – Bausch & Lomb Science Award and the Bausch & Lomb Science Scholarship**, Bausch & Lomb/University of Rochester, Rochester, New York
- 1993 – National Science Foundation Young Scholar**, NSF and the University of Texas at Austin

RESEARCH CONSULTANTSHIPS AND OTHER EXPERIENCE

- 2015- – Push-Pull Food Security Modeling and Data Analysis – Zurich, Switzerland**
Collaboration with Biovision and Push-Pull, a project of ICIPE, African Insect Science for Food and Health to produce a mapping, modeling, and analysis platform (<https://push-pull.appspot.com>)
- 2014 – Research Consultant, Post-Doc (2014), USDA AFRI Agricultural and Natural Resources Science for Climate Variability and Change, University of Colorado Boulder – Boulder, Colorado**
Dr. Joel Hartter, PI and Post-Doc Advisor
- Co-authored grant to expand ongoing research on public/private forest management and land owner mitigation strategies to climate change and variability in Oregon
 - Developing platforms and methods for aerial imagery collected by unmanned aerial systems (UAS)
 - Combining UAS imagery with participatory mapping and remotely sensed and field-collected data
- 2012- – WorldPop Modeling Research and Assistantship, University of Southampton – Southampton, UK**
Dr. Andrew Tatem
- Developing novel “random forest,” dasymetric modeling approach (<http://www.worldpop.org>)
- 2011-2014 – Coauthor and Consultant, USDA CSREES Disaster Resilience for Rural Communities Grant, University of New Hampshire – Durham, New Hampshire**
Dr. Joel Hartter, Dr. Russell Congalton (Co-PI), Dr. Lawrence Hamilton (Co-PI), Dr. Mark Ducey (Co-PI)
- Co-authored grant to expand ongoing research on public/private forest management, rural community

- change and forest fire/pest/disease risk in NE Oregon
- Coordinating field work and data analysis with graduate research assistants
- Geospatial analysis that merges mail and telephone survey results with remotely-sensed data
- Developing agent-centered, land owner and land management models for the rural Inland Northwest
- 2000- – Open source and free software development for GIS, remote sensing and modeling applications**
- refnet – Creator and maintainer spatially explicit reference and authorship analyses package for R
<http://refnet.r-forge.r-project.org/>
- MODIS – Contributing programmer for the MODIS data download and processing package for R
<http://r-forge.r-project.org/projects/modis/>
- GRASS GIS – Feature development and code debugging for GRASS GIS platform and modules
<http://grass.osgeo.org/>
- 2009-2011 – NSF IGERT Archbold Ephemeral Ponds Project, University of Florida – Gainesville, Florida**
Dr. Benjamin Bolker, Dr. Craig Osenberg (Co-PI), Dr. Mary Christman (Co-PI)
- Collaboration produced multiple-model approach for modeling ephemeral pond dynamics
- Developed alternatives to standard hydrologic models to account for irregular sampling strategies and allow for fore- and hind-casting from climatological data
- 2009-2010 – NASA Land-Cover/Land-Use Research of Southern Africa Dryland Region, Earth Systems Program Grant, University of Florida – Gainesville, Florida**
Dr. Jane Southworth, Department of Geography
- Field work and data collection in Namibia and Zambia
- MODIS satellite imagery processing and analysis
- TRMM precipitation and climate-related time series analyses
- 2007-2008 – NSF HSD MAP Amazon Roads Project, University of Florida – Gainesville, Florida**
Dr. Stephen Perz, Dr. Jane Southworth (Co-PI)
- Landsat and ASTER satellite imagery pre-processing and analysis
- Collected training samples, developed database-integrated ArcGIS data management system
- ENVI/IDL programming in addition to ERDAS Imagine processing
- International field work in Bolivia and Brazil
- 2006-2007 – Graduate Research Assistantship, University of Florida – Gainesville, Florida**
Dr. Corene Matyas
- Developed an online, Python-based application for the retrieval and pre-processing of historical NEXRAD radar data for hurricane research

OTHER WORK EXPERIENCE

- 1997-2008 – Self-Employed Web/Database, and Open Source Programmer, Systems Design**
- 1998-2003 – Data Analyst and Information Management, NWREL – Portland, Oregon**
Evaluation Program, Northwest Regional Educational Laboratory
- Created fully- and semi-automated systems for handling data collection, statistical analysis, and data presentation, using diverse technologies, many with spatial or GIS components
- 1997-1999 – Research Assistant, University of Chicago – Chicago, Illinois**
Dr. Cathy A. Pfister, Department of Ecology and Evolution
- Developed large computer simulations comparing individual-based and matrix population models
- 1997-1998 – Senior Honors Research Thesis, University of Chicago -- Chicago, Illinois**
Dr. Cathy A. Pfister (advisor), Department of Ecology and Evolution
- Wrote and funded by grant from the Howard Hughes Medical Institute Undergraduate Research Fund
- Study of trophic interactions and nutrient exchange in Olympic Peninsula estuaries, Washington
- Ten weeks of field work and 20 weeks of lab work
- 1996 – Summer Field Ecology Research Assistant, Idaho State University -- Pocatello, Idaho**
Dr. Nancy Huntly, Department of Ecology
- Captured, tagged, and observed pikas for metapopulation models on the Beartooth Plateau, Wyoming

MEDIA

- UofL Thinker Annual News Letter. (2016, June). Big Data for Big Impact.
<http://louisville.edu/artsandsciences/news/all/big-data-for-a-big-impact>
- UofL Today With Mark Hebert. (2016, May 30). Radio interview regarding WorldPop population modelling.

- <https://soundcloud.com/uofl/05-30-16-uofl-today-stevensgaughan-chlebowymcgrew-seldon>
 Science Magazine. (2015, March 6). Asia's cities swell as population surges.
<http://www.sciencemag.org/content/347/6226/1048.full>
- New Scientist. (2014, October 27). Phone call pulse shows millions hitting the beach.
<http://www.newscientist.com/article/dn26460-phone-call-pulse-shows-millions-hitting-the-beach.html#.VNfgCmjF8gW>
- Science Magazine. (2014, October 27) Taking the census, with cellphones.
<http://news.sciencemag.org/math/2014/10/taking-census-cellphones?rss=1>
- The Conversation (2013, December) Natural disasters put Haiti and Philippines on the map.
<http://theconversation.com/natural-disasters-put-haiti-and-philippines-on-the-map-20879>
- Science Daily. (2013, November 27). World Population Mapping Helps Combat Poverty, Poor Health.
<http://www.sciencedaily.com/releases/2013/11/131127110347.htm>
- Earthzine: Fostering Earth Observation and Global Awareness (2013, November 27). Igniting the Power Grid in Rwanda using NASA EOS. <http://www.earthzine.org/2013/11/17/igniting-the-power-grid-in-rwanda-using-nasa-eos/>
- Carsey Institute. (2011). Researchers to Survey Oregon Residents on Views about Community and Forest. Press Release, UNH Media Relations. September 2.
- Jayson Jacoby. (2011). Study aims to take pulse of Northeastern Oregon's land, people. Baker City Herald. June 23, 2011. Front-page story about USDA-funded research in eastern Oregon.
- Brian Addison. (2011). University studies forest, people. Wallowa County Chieftain. June 23. Front-page story about USDA-funded research in eastern Oregon.
- Bill Rautenstrauch. (2011). Study takes in-depth look at forestlands and resource-dependent communities. The Observer. June 15. Feature story about USDA-funded research in eastern Oregon.
- University of New Hampshire. (2010). UNH Received \$400K Grant to Study How Changes in Ecosystems Impact Livelihoods in Resource-Dependent Areas. Press Release, UNH Media Relations. October 14.

PROFESSIONAL MEMBERSHIP

- **Association of American Geographers (AAG)**
- **American Society for Photogrammetry and Remote Sensing (ASPRS)**
- **Kentucky Academy of Sciences (KAS)**

PROFESSIONAL SERVICE AND OTHER ACTIVITIES

University Service:

Departmental, Divisional, Program:

- Member departmental budget and building services committee (2016-2017)
- Chair of departmental promotional materials committee (2015-2016)
- Faculty adviser for Undergraduate Geography Club (2014-)
- Member of departmental graduate committee (2014-15)
- Co-coordinator for independent, weekly lab meetings with faculty and students

College (A&S):

- UofL Accolades, speaker for prospective students (2016)
- Fulbright Application Interviewer for Undergraduate Applicants (2015-2016)
- Representative (stand-in replacement) for A&S Directors of Graduate Studies (2014-15)

Service to the Profession:

- **Reviewer for *International Journal of Remote Sensing*, *American Naturalist*, *Population Health Metrics*, *Remote Sensing of Environment*, *PLOS ONE*, *Ambio***

Other Service, Professional Activities, and Collaborations:

- **University of Florida Land Use and Environmental Change Institute (LUECI)**, collaborative research
- **NSF Professional Development "I" Grant, Graduate Student Advisory Committee**, term 2010-2011
- **University of Florida, Graduate Student Council**, term 2007-2008
- **University of Florida, Geography Department Graduate Faculty Representative**, term 2007-2008
- **Graduate Student Senior Seminar Panelist**, University of Florida Department of Geography

- **Competitive Club Soccer Coach, National “D” License**, Leg-A-Z Sports Academy, Gainesville, Florida

LANGUAGES STUDIED

- **German** – intermediate knowledge
- **Spanish** – beginner knowledge