CURRICULUM VITAE

Ryan Nagelkirk
Ph.D. Student
Michigan State University · Department of Geography
673 Auditorium Rd, Room 116 · East Lansing, MI, 48824, USA
Phone: (517) 775-7800
Email: nagelki4@msu.edu

EDUCATION

Ph.D. Student	Michigan State University	*2013 – present*
B.S. Environmental Geoscience	Michigan State University	*2010 – 2012*
B.S. Kinesiology	Michigan State University	*2003 – 2007*

RESEARCH INTERESTS

Biogeography, wildlife conservation and the effects of climate change, land use / land cover change (LULC), remote sensing, individual-based movement models, integration of UAS and tracking technologies, East Africa

RESEARCH EXPERIENCE

Michigan State University Geological Sciences Department - East Lansing

Department of Geography, Ph.D. Thesis *2015 – present*

- Ph.D. thesis: Effects of climate change and LULC on wildlife habitat in Serengeti National Park

Department of Geological Sciences, Ph.D. Thesis *2013 - 2015*

- Ph.D. thesis: Integrating UAS remote sensing, precision agriculture, and crop models
- Modeled the water balance of Beijing, China under current and future climate
- Developed procedure for high resolution modeling Midwestern US crop yields

Department of Geological Sciences Hydrogeology Lab, Undergraduate *2010 – 2012*

- Modeling the effects of climate change on maize and soybean yields in the Maumee River Watershed, OH.

Sanilac County Science and Math Center: High School *1999 – 2003*

- Presented individual and group research projects at state competitions

TEACHING EXPERIENCE

Teaching Assistant, ISP 203: Global Change *Spring 2014-15*

- Created and presented lectures when instructor was absent, wrote and administered all exams, assisted with setup and maintenance of course website, recorded grades

Teaching Assistant, GLG 401: Plate Tectonics *Fall 2013-14*

- Taught weekly lab sections, helped coordinate and run field trip, updated labs, graded papers

Teaching Aid, KIN 217: Applied Human Anatomy Lab *Fall 2007*

- Aided instruction in cadaver lab, helped set up and grade exams

PRESENTATIONS

Nagelkirk, R.L., Basso, B., 2014, Modeling the impacts of climate change on Midwestern U.S. corn yields. Poster presented at Corn-based Cropping Systems Coordinated Agriculture Project annual meeting, Iowa State University, Ames, IA.

Nagelkirk, R.L., Basso, B., 2014, Predicting the Impacts of Climate Change on Maize Yields in the Midwestern United States. Oral presentation given at American Society of Agronomy, Crop Science Society of America and Soil Science Society of America annual meeting, Long Beach, CA.

Nagelkirk, R.L., Kendall, A.D., Basso, B., Hyndman, D.W., 2013, Predicting the impacts of climate change on agricultural yields and water resources. Michigan State University Environmental Science and Policy Program's Research Symposium, East Lansing, MI

Basso, B., Nagelkirk, R.L., 2013, Integrating unmanned aerial vehicles (UAV) and crop modeling for precision agriculture. Oral presentation given at Michigan Farm Bureau Annual Meeting, Grand Rapids, MI.

Nagelkirk, R.L., Basso, B., 2013, Modeling the impact of climate change on corn yield at different spatial scales. Oral presentation given at Corn-based Cropping Systems Coordinated Agriculture Project annual meeting, Purdue University, Lafayette, IN.

Nagelkirk, R.L., Kendall, A.D., Basso, B., Hyndman, D.W., 2012, Predicting the impacts of climate change on agricultural yields in the Maume River Watershed, OH. Poster presented at American Geophysical Union annual meeting, San Francisco, CA.

Nagelkirk, RL, Kendall, A.D., Basso, B., Hyndman, D.W., 2011, Predicting the impacts of climate change on agricultural yields in the Maume River Watershed. Poster presented at Michigan State University Undergraduate Research and Arts Forum, East Lansing, MI.

PUBLICATIONS

Basche, A.D., Roesch-McNally, G.E., Pease, L.A., Eidson, C.D., Lahdou, G.B., Dunbar, M.W., Frank, T.J., Frescoln, L., Gu, L., Nagelkirk, R.L., Pantoja, J., and Wilke, A.K., 2014, Challenges and opportunities in transdisciplinary science: The experience of next generation scientists in an agriculture and climate research collaboration: Journal of Soil and Water Conservation, v. 69, no. 6, p. 176A–179A, doi: 10.2489/jswc.69.6.176A.

Basso, B. and Nagelkirk, R.L., 2014, Predicting the Impact of Increasing Temperatures on Corn Yield: Resilient Agriculture, p. 10-11.

Basso, B., Nagelkirk, R. and Sartori, L., 2014, Modeling Conservation Agriculture. In Farooq, M., Siddique, K.H.M. (Eds.), *Conservation Agriculture*, p. 181-197. New York, NY: Springer.

ANTICIPATED PUBLICATIONS

2015, A comparison of modeling nitrogen emissions using the Systems Approach to Land Use Sustainability model (SALUS) and the daily Century model (DAYCENT). Necpalova, M., Basso B., Nagelkirk, R.L., Annex, R.P.

2015, A systems approach to assess changes to water availability in the Beijing region. Hyndman, D.W., Deines, J., Basso, B., McConnell, W., Vina, A., Winkler, J., Lupi, F., Luo, L., Zheng, C., Cao, G., Nagelkirk, R.L., Kendall, A.D., Yang, W., Liu, J.

2015, Predicting the impacts of climate change on agricultural yields in the Maume River Watershed. Nagelkirk, R.L., Kendall, A.D., Basso, B., Hyndman, D.W.

HONORS AND AWARDS

Lucile Drake Pringle and Gordon H. Pringle Endowed Fellowship	*2013*
Kellogg Biological Station Summer Fellowship	*2013*
Lucile Drake Pringle and Gordon H. Pringle Endowed Fellowship	*2012*
College of Natural Science Award	*2012*
UURAF Best Poster in Section Award	*2011*

ACADEMIC SOCIETIES & PROFESSIONAL MEMBERSHIPS

American Geophysical Union (AGU), Geological Society of America (GSA), American Society of Agronomy (ASA)