

RONG YU

School of Natural Resources
University of Nebraska-Lincoln
321 Hardin Hall
Lincoln, NE 68583
Office: (402)472-7841
rong.yu@unl.edu

EDUCATION

Ph.D. in Geography, University of Wisconsin-Milwaukee, 2013

Dissertation: Examining Spring and Autumn Phenology in a Temperate Deciduous Urban Woodlot
Advisor: Professor Mark D. Schwartz

M.S. in Geography, Peking University, P. R. China, 2005

Thesis: Spatial and Temporal Variation of Phenological Seasons in Deciduous Broad-leaved Forest Region of the Warm Temperate Zone in China
Advisor: Professor Xiaoqi Chen

B.S. in Geography, Lanzhou University, P. R. China, 2001

RESEARCH INTERESTS

Ecological modeling, climate change, and human impacts on the environment
Terrestrial biosphere-atmosphere interactions
Spring and autumn vegetation phenology, and land surface phenology
Ecological applications of remote sensing and GIS
Information theory and dynamical process network

PROFESSIONAL EXPERIENCE

POSTDOCTORAL ASSOCIATE

School of Natural Resources, University of Nebraska-Lincoln 03/2016 - current

INSTRUCTOR

School of Natural Resources, University of Nebraska-Lincoln 09/2016 - current

POSTDOCTORAL ASSOCIATE

Fulton Schools of Engineering, Arizona State University 01/2014 - 02/2016

GIS ASSISTANT

American Geographical Society Library, University of Wisconsin-Milwaukee 09/2012 - 05/2013

PROJECT ASSISTANT

Department of Geography, University of Wisconsin-Milwaukee 08/2007 - 05/2012

RESEARCH ASSISTANT

College of Environmental Sciences, Peking University 02/2003 - 07/2006

PEER-REVIEWED PUBLICATIONS

- Donnelly A, & **Yu R** (2017). The rise of phenology with climate change: an evaluation of IJB publications. *International Journal of Biometeorology*, 1–22. springer. DOI: 10.1007/s00484-017-1371-8.
- Donnelly A, **Yu R**, Caffarra A, Hanes J, Liang L, Desai A, Liu L, Schwartz M (2017). Interspecific and interannual variation in the duration of spring phenophases in a northern mixed forest. *Agricultural and Forest Meteorology*, 243, 55–67. DOI: 10.1016/j.agrformet.2017.05.007.
- Donnelly A, **Yu R**, Geyer H (2016). Determining if Irish Winter Migrant Waterbirds are Changing Their Duration of Stay as Temperature Warms. *Biology & Environment Proceedings of the Royal Irish Academy*, 116B(2):1. DOI: 10.3318/bioe.2016.8.
- Yu R**, Schwartz MD, Donnelly A, Liang L (2015). An Observation-based Progression Modeling Approach to Spring and Autumn Deciduous Tree Phenology. *International Journal of Biometeorology*. DOI: 10.1007/s00484-015-1031-9.
- Ruddell BL, **Yu R (co-first author)**, Kang M, Childers D (2015). Seasonally Varied Controls of Climate and Phenophase on Terrestrial Carbon Dynamics: Modeling Eco-climate System State Using Dynamical Process Networks. *Landscape Ecology*. DOI: 10.1007/S10980-015-0253-x.
- Donnelly A, Geyer H, **Yu R** (2015). Changes in the Timing of Departure and Arrival of Irish Migrant Waterbirds. *PeerJ*, 3: e726. DOI: 10.7717/peerj.726.
- Donnelly A, **Yu R**, Liu LL (2015). Trophic-level Responses differ as Climate Warms in Ireland. *International Journal of Biometeorology*, 59: 1007-1017. DOI: 10.1007/s00484-014-0914-5.
- Chen XQ, & **Yu R** (2007). Spatial and Temporal Variations of the Vegetation Growing Season in Warm-temperate Eastern China during 1982 to 1999. *Acta Geographica Sinica (in Chinese)*, 62: 41-51.
- Chen XQ, Hu B, **Yu R** (2007). Spatial Extrapolation of the Vegetation Growing Season in Temperate Eastern China. *Acta Ecologica Sinica (in Chinese)*, 27: 0065-0074.
- Chen XQ, Li HM, Hu B, **Yu R** (2007). Boden- und Satellitengestuetzte Erkennung der Phaenologischen Vegetationsperiode in der Gemaessigten Klimaregion Ostchinas. *Promet (in German)*, 33(1/2): 46-51.
- Chen XQ, Hu B, **Yu R** (2005). Spatial and Temporal Variation of Phenological Growing Season and Climate Change Impacts in Temperate Eastern China. *Global Change Biology*, 11: 1118-1130. DOI: 10.1111/j.1365-2486.2005.00974.x.
- Yu R**, Ruddell BL, Childers D, Kang M (resubmitted). Estimating Global Terrestrial Ecosystem State Transitions using FLUXNET. *Target journal: Global Change Biology*.
- Yu R**, Donnelly A, Schwartz MD, Liang L (in writing). Phenological Response to Climate Change Varies between Phenophases of Deciduous Trees. *Target journal: International Journal of Biometeorology*.
- Yu R**, Ruddell BL, Childers D (in preparation). A Global Terrestrial Eco-climate System Sensitivity Map under a Warming World. *Target journal: Agricultural and Forest Meteorology*.

COMPUTER SKILLS

Proficient: ArcGIS, ERDAS IMAGINE, MATLAB, ENVI & IDL, SPSS

Familiar: SAS (Certified Base Programmer for SAS 9), IDRISI, Photoshop

Basic: R, Python, Shell, Git, Microsoft Access, C++, CorelDRAW, Mathematica, Origin

FIELD WORK EXPERIENCE

- Spring and autumn phenological observations (4 days/week) (09/2007-05/2012)
- Deployment of temperature HOBOS and Light Sensors (09/2007-05/2012)
- Conducted the general survey and the measurement of photosynthetic rates in Nei Mongol Steppe in China (06/2005-07/2005)
- Conducted the general survey and the interview for The Ecological Planning of Nan'ao Town and Bao'an District (11/2003-12/2003)

GLOBAL/REGIONAL DATASETS WORK EXPERIENCE

Eddy covariance: FLUXNET, AmeriFlux

Remote sensing: MODIS MAIAC, MODIS BRDF-Albedo, MODIS Land Cover, GLDAS2, GMTED2010, AVHRR NDVI, Landsat TM/ETM, SPOT

Climate: NCDC Land-Based Station Data

WORKSHOPS

2016 Phenology Modeling Workshop (invited)

2015 8th Annual Flux Course

2010 3rd USA National Phenology Network Annual Research Coordination Network Meeting (invited)

2008 2nd USA National Phenology Network Annual Research Coordination Network Meeting (invited)

2007 1st USA National Phenology Network Annual Research Coordination Network Meeting (invited)

CONFERENCE PRESENTATIONS

2017 **Yu R**, Hmimina G, Huemmrich H, Billesbach D, Xu Z, and Gamon J. “Changing Phenology and Productivity in North American Arctic and Boreal Ecosystems” (poster). The FLUXNET 2017 Workshop, Berkeley, CA.

2017 **Yu R**, Hmimina G, Huemmrich H, Billesbach D, Xu Z, and Gamon J. “Corrected Vegetation Indices from MODIS MAIAC for Photosynthetic Phenology Assessment in the ABoVE Domain” (poster). ABoVE Airborne Science Planning Meeting and 3rd Science Team Meeting, Boulder, CO.

2015 **Yu R**, Ruddell BL, Childers D, and Kang M. “Climate Sensitivity of Global Terrestrial Ecosystems’ Subdaily Carbon, Water, and Energy Dynamics” (poster). 2015 AGU Fall Meeting, San Francisco, CA.

2014 **Yu R**, Ruddell BL, Kang M, and Childers D. “Quantifying Influence of Phenology on the Sensitivity of Net Ecosystem Exchange of CO₂ to Climate Forcings Using Dynamical Process Networks” (poster). Third MacroSystems Biology PI Meeting, Arlington, VA.

2014 **Yu R**, Ruddell BL, and Kang M. “Quantifying Ecosystem Sensitivity to Climate Change Using Dynamical Process Networks and Phenology”. 110th Annual Meeting of Association of American Geographers, Tampa, FL.

2013 **Yu R** and Schwartz MD. “Examining spring and autumn phenological in a temperate deciduous urban woodlot”. 109th Annual Meeting of Association of American Geographers, Los Angeles, CA.

2012 **Yu R** and Schwartz MD. “Spring and autumn phenological study in an urban woodlot – Part 2”. 108th Annual Meeting of Association of American Geographers, New York.

2011 **Yu R** and Schwartz MD. “Tracking Spring and Autumn Phenological Responses to Microclimate Variations in an Urban Setting”. 107th Annual Meeting of Association of American Geographers, Seattle, WA.

2008 **Yu R** and Schwartz MD. “Intensive Phenological Monitoring in an Urban Woodlot”. 104th Annual Meeting of Association of American Geographers, Boston, MA.

2008 **Yu R** and Schwartz MD. “A Preliminary Phenology Study in an Urban Woodlot” (poster). 93rd Ecological Society of America Annual Meeting, Milwaukee, WI.

PROFESSIONAL SOCIETIES

2008-present **Member**, Association of American Geographers

2015-present **Member**, American Geophysical Union

2008-present **Member**, USA National Phenology Network

2009-present **Member**, International Society of Biometeorology

2008 **Member**, Ecological Society of America

FELLOWSHIP, AWARDS, AND HONORS

2008, 2011-2013 **Mary Jo Read Travel Scholarship**, Dept. of Geography, University of Wisconsin – Milwaukee

2006-2007 **Mary Jo Read Fellowship**, Dept. of Geography, University of Wisconsin – Milwaukee

1998-2000 **University Excellence Scholarship**, Lanzhou University, P. R. China

1997-1998 **The Freshman Scholarship**, Lanzhou University, P. R. China