**Whalen W Dillon**

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Raleigh, NC 27695

**Education**

**North Carolina State University (**expected May 2016) PhD Forestry & Environmental Resources

Dissertation Title: Dynamics of emerging infectious disease in complex landscapes

Advisor: Dr. Ross K. Meentemeyer (rkmeent@ncsu.edu)

Research Topics*:*

* Disease ecology
* Multi-scale spatial-temporal analyses
* Species distribution modeling
* Plant pathogens and forest communities
* Invasive species impacts
* Interacting disturbances
* Sustainable management
* Applied GIS
* Landscape Ecology
* Decision support systems

**UNC-Charlotte** 2010-2013 PhD program in Geography & Urban-Regional Analysis

Transferred to NCSU to continue research with advisor

**The Evergreen State College** June 2006 Bachelors of Science in Biology

**Publications**

Serra-Diaz, J.M., J. Franklin, **W.W. Dillon**, A.D. Syphard, F.W. Davis, and R.K. Meentemeyer. (2016). California forests show early indications of both range shifts and local persistence under climate change. *Global Ecology and Biogeography.* 25:164-175. DOI: 10.1111/geb.12396

Tonini, F., **W.W. Dillon**, E.S. Money, and R. K. Meentemeyer. (2016). Spatio-temporal reconstruction of missing forest microclimate measurements. *Journal of Agricultural and Forest Meteorology.* 218-219:1-10. DOI: 10.1016/j.agrformet.2015.11.004

Haas, S.E., J.H. Cushman, **W.W. Dillon**, N.E. Rank, D.M. Rizzo, and R.K. Meentemeyer. (2016 In Press). Effects of individual, community, and landscape drivers on the dynamics of a wildland forest epidemic. *Ecology.*

Chen, G., M.R. Metz, D.M. Rizzo, **W.W. Dillon**, and R.K. Meentemeyer. 2015. Object-based assessment of burn severity in diseased forests using high-spatial and high-spectral resolution MASTER airborne imagery. *ISPRS Journal of Photogrammetry and Remote Sensing.* 102:38-47.

**Dillon, W.W.**, S.E. Haas, D.M. Rizzo, and R.K. Meentemeyer. 2014. Perspectives of spatial scale in a wildland forest epidemic. *European Journal of Plant Pathology.* 138:449-465.

**Dillon, W.W.**, R.K. Meentemeyer, J.B. Vogler, R.C. Cobb, M.R. Metz, and D.M. Rizzo. 2013. Range-wide threats to a foundation tree species from disturbance interactions. *Madroño* 60:139-150.

Cobb, R.C., D.M. Rizzo, K.J. Hayden, M. Garbelotto, J.A.N. Filipe, C.A. Gilligan, **W.W. Dillon**, R.K. Meentemeyer, Y.S. Valachovic, E. Goheen, T.J. Swiecki, E.M. Hansen, and S.J. Frankel. 2013. Biodiversity conservation in the face of dramatic forest disease: an integrated conservation strategy for tanoak (*Notholithocarpus densiflorus*) threatened by sudden oak death. *Madroño* 60:151-164.

**Oral Presentations**

**Dillon, W.W.** and R. K. Meentemeyer. 2015. Environmental influences on pathogen spillover in a multi-host forest disease. IALE World Congress, Portland, OR

**Dillon, W.W.**, S.E. Haas, D.M. Rizzo, and R. K. Meentemeyer. 2014. Perspectives of spatial scale in a wildland forest epidemic. US-IALE Annual Symposium, Anchorage, AK (Invited as part of special topics symposium: Impacts of global Change: Linking Across Scales)

**Dillon, W.W.**, R. K. Meentemeyer, J. B. Vogler, R. C. Cobb, M. R. Metz, and D. M. Rizzo. 2012. Range-wide risks to a foundation tree species from disturbance interactions. SEDAAG Annual Meeting, Asheville, NC (PhD Honors Paper)

**Dillon, W.W.**, R. K. Meentemeyer, J. B. Vogler, R. C. Cobb, M. R. Metz, and D. M. Rizzo. 2012. The geographic range of tanoak and the effects of interacting disturbances on the spatial distribution and structure of tanoak communities. Sudden Oak Death 5th Science Symposium, Petaluma, CA

**Posters**

Gaydos, D.A. **W.W. Dillon**, and R.K. Meentemeyer. 2015. Interacting effects of wildfire disturbance and forest species diversity on an invasive plant pathogen. IALE World Congress, Portland, OR

**Dillon, W.W.**, S.E. Haas, J. DiRenzo, and R.K. Meentemeyer. 2013. Tracking disease intensity in space and time: locating hot spots and identifying superspreaders in a wildland pathosystem. International Pest Risk Modelling and Mapping Workgroup VII, Raleigh, NC

**Dillon, W.W.**, J. DiRenzo, S.E. Haas, and R.K. Meentemeyer. 2013. Understanding factors influencing disease severity in a wildland pathosystem across spatial and temporal scales. US-IALE Annual Symposium, Austin, TX

Colijn, C.W., M. Cohen, S. Johnston, **W.W. Dillon**, and N.E. Rank. 2012. Factors influencing *Phytophthora ramorum* infectivity on *Umbellularia californica* and testing of a defoliation-based control method. Sudden Oak Death 5th Science Symposium, Petaluma, CA

**Dillon, W.W.** 2012. Impacts of novel disturbance interactions on the California spotted owl. US-IALE Annual Symposium, Newport, RI

**Dillon, W.W.** 2012. Multiscale analysis of disease-environment relationships in a heterogeneous landscape. 12th Annual Graduate Research Fair, UNC Charlotte, Charlotte, NC

**Dillon, W.W.** 2011. Multiscale analysis of disease-environment relationships in a heterogeneous landscape. Annual Meeting of the Southeastern Division of the Association of American Geographers, Savannah, GA (PhD. Honors Poster)

**Dillon, W.W.**, S.E. Haas, A.L. Johnson, and R.K. Meentemeyer. 2011. Multiscale analysis of disease-environment relationships in an emerging plant pathogen across a heterogeneous landscape. US-IALE Annual Symposium, Portland, OR

**Awards and Fellowships**

2015 US-IALE Student Travel Award – travel support to IALE World Congress ($500)

2014 NASA-MSU Professional Enhancement Award – travel support to US-IALE ($700)

2012 John Fraser Hart Award for Best PhD. Student Paper, SEDAAG Annual Meeting ($1000)

2012 GPSG Graduate Student Travel Award – University of North Carolina at Charlotte ($800)

2012 First Place – *Social Sciences Poster*, UNC Charlotte 12th Annual Graduate Research Fair ($500)

2011 Honorable Mention – *Graduate Student Honors Poster Competition (PhD)*, SEDAAG Annual Meeting

2011 Graduate Assistant Support Plan Fellowship (four year tuition fellowship) – University of North Carolina at Charlotte (~$14,800).

2011 GPSG Graduate Student Travel Award – University of North Carolina at Charlotte ($800)

2010 GPSG Graduate Student Travel Award – University of North Carolina at Charlotte ($800)

**Employment**

**August 2013-Present** Graduate Research Assistant |Center for Geospatial Analytics, NCSU

**August 2010-August 2013** Graduate Research Assistant |Center for Applied GIScience, UNC Charlotte

**April 2009-Present** Sudden Oak Death Field Research Coordinator | UNC Charlotte/NCSU

**November 2007-July 2008** Carpenter |Earthtone Construction, Inc., Sebastopol, CA

**July 2007-November 2007** Restoration Technician | The Center for Social and Environmental Stewardship, Windsor, CA

**March 2003-August 2006** Special Events Supervisor |The Evergreen State College, Olympia, WA

**Service**

**US-IALE Executive Committee Student Representative**,2015-2016

**Prairie Ridge Ecostation Citizen Science Walk Guide**, 2014-2015, Raleigh, NC

**GPSG Graduate Research Symposium Organizing Committee Member and Sessions Chair**, 2013, UNC Charlotte, Charlotte, NC

**Treasurer, UNC Charlotte Chapter of Gamma Theta Upsilon**, 2012-13,UNC Charlotte, Charlotte, NC

**Graduate Research Fair Session Moderator**, 2011, UNC Charlotte, Charlotte, NC

**Poverty Simulation Volunteer**, 2010, UNC Charlotte, Charlotte, NC

**Volunteer Research Assistant**, 2007-2008, Bodega Marine Laboratory – Morgan Lab, Bodega Bay, CA

**California County Planning Commissioners Conference Aide**, 2007, Santa Rosa, CA

**Coho Broodstock Program Volunteer**, 2007, Don Clausen Fish Hatchery, Geyserville, CA.

**Middle School Math and Science Tutor**, 2006-2007, Sebastopol, CA

**Professional Affiliations**

United States Regional Association of the International Association for Landscape Ecology

Ecological Society of America

International Pest Risk Research Group

**Other Interests**

Science communication

Hiking, backpacking, and camping

Cooking, baking, home brewing

Photography