# MICHELE S. BUONANDUCI

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## **EDUCATION**

2020 -	Ph.D., Quantitative Ecology and Resource Management, University of Washington
2017 - 2019	M.S., Quantitative Ecology and Resource Management, University of Washington,
	Thesis: Modeling individual lodgepole pine mortality from mountain pine beetle out-
	break in a spatially explicit framework
2008 - 2012	B.A., Environmental Science, Boston University

## ACADEMIC EXPERIENCE

2017 -	Graduate Research Assistant, Quantitative Ecology and Resource Management &
	School of Environmental and Forest Sciences, University of Washington
2010	Undergraduate Research Assistant, Department of Geography and Environment, Col-
	lege of Arts and Sciences, Boston University

## TEACHING EXPERIENCE

Winter 2021	Teaching Assistant, QSCI 381 Introduction to Probability and Statistics, Center for
	Quantitative Science, University of Washington
$Spring \ 2020$	Teaching Assistant, ESRM 315 Old-Growth Forest Ecology & Management, School
	of Environmental and Forest Sciences, University of Washington
$Spring \ 2019$	Teaching Assistant, QSCI 381 Introduction to Probability and Statistics, Center for
	Quantitative Science, University of Washington
$Winter\ 2019$	Teaching Assistant, QSCI 381 Introduction to Probability and Statistics, Center for
	Quantitative Science, University of Washington

## RESEARCH GRANTS & FELLOWSHIPS

2021 - 2022 Joint Fire Science Program Graduate Research Innovation Award: Does high-severity patch structure scale consistently with fire size across the Northwest US? (\$25K - PI).

## PROFESSIONAL EXPERIENCE

2017 - 2020	Staff Scientist Part Time as Needed, Arcadis U.S., Inc.
2015 - 2017	Staff Scientist, Arcadis U.S., Inc.
2013 - 2015	Scientist II, Arcadis U.S., Inc.
2012 - 2013	Scientist I, Arcadis U.S., Inc.

## **PUBLICATIONS**

**Buonanduci, M.S.**, J.E. Morris, M.C. Agne, and B.J. Harvey. 2020. Neighborhood context mediates probability of host tree mortality in a severe bark beetle outbreak. Ecosphere 11(8):e03236. 10.1002/ecs2.3236

Judd, N., Y. Lowney, P. Anderson, S. Baird, S.M. Bay, J. Breidt, **M. Buonanduci**, Z. Dong, D. Essig, M.R. Garry, R.C. Jim, G. Kirkwood, S. Moore, C. Niemi, R. O'Rourke, B. Ruffle, L.A. Schaider,

D.E. Vidal-Dorsch. 2015. Fish consumption as a driver of risk-management decisions and human health-based water quality criteria. Environmental Toxicology and Chemistry 34(11): 2427-2436.

Dillen, S.Y., M. Op de Beeck, K. Hufkens, **M. Buonanduci**, and N.G. Phillips. 2012. Seasonal patterns of foliar reflectance in relation to photosynthetic capacity and color index in two co-occurring tree species, *Quercus rubra* and *Betula papyrifera*. Agricultural and Forest Meteorology 160: 60-68.

## **ORAL PRESENTATIONS**

**Buonanduci, M.S.**, J.E. Morris, M.C. Agne, and B.J. Harvey. 2020. Tree neighborhood characteristics affect growth responses of host and non-host trees following a severe mountain pine beetle outbreak. Presented at the 2020 Ecological Society of America Annual Meeting, August 3-6.

**Buonanduci, M.S.**, J.E. Morris, M.C. Agne, and B.J. Harvey. 2019. Individual tree and local tree neighborhood factors affecting mountain pine beetle-induced lodgepole pine mortality. Presented at the 2019 Meeting of the U.S. Regional Association of the International Association for Landscape Ecology, Fort Collins, CO, April 7-11.

**Buonanduci, M.S.**, J.E. Morris, M.C. Agne, and B.J. Harvey. 2019. Within-stand factors affecting survival of lodgepole pine following a severe mountain pine beetle outbreak. Presented at the Sixteenth Annual University of Washington School of Environmental and Forest Sciences Graduate Student Symposium, Seattle, WA, March 1.

## POSTER PRESENTATIONS

**Buonanduci, M.**, P. Anderson, and V. Houck. 2016. Probabilistic human health water quality criteria calculator. Presented at the Thirty-seventh Annual Meeting of the Society of Environmental Toxicology and Chemistry, Orlando, FL, November 6-10.

Francisco, A., M. Buonanduci, J. Gravenmier, J. Iannuzzi, T. Negley and S. Selden. 2015. Moving beyond risk quotients: Comparing dose-response effects to reproductive natural variability. Presented at the Thirty-sixth Annual Meeting of the Society of Environmental Toxicology and Chemistry, Salt Lake City, UT, November 1-5.

**Buonanduci, M.** and P.D. Anderson. 2014. Effect of probabilistic methods on human health ambient water quality criteria. Presented at the Annual Meeting of the Society for Risk Analysis, Denver, CO, December 7-11.

**Buonanduci, M.** and N. Phillips. 2010. The effect of urbanization on vegetation function. Presented at the Thirteenth Annual Boston University Undergraduate Research Symposium, Boston, MA, October 22.

## **HONORS & AWARDS**

2019	Honorable Mention for Best Student Presentation, Annual Meeting of the U.S. Regional
	Association of the International Association for Landscape Ecology
2019	Honorable Mention, National Science Foundation Graduate Fellowship
2019	College of the Environment Student Travel Award, University of Washington
2019	Quantitative Ecology and Resource Management Student Travel Award, University of
	Washington
2012-	Phi Beta Kappa
2012	College Prize for Excellence in Geography & Environment, Boston University
2009	Prize Essay Winner, Journal of the College of Arts and Sciences Writing Program, Boston
	University
2008-09	College of Arts and Sciences College Scholar, Boston University