

Michael A. Levy

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Education

2017 PhD in Ecology: Environmental Policy and Human Ecology, University of California, Davis (expected)

2012 MS in Biology, West Virginia University

2004 BS in Chemistry, Fort Lewis College

Publications

REFEREED PUBLICATIONS

2016 Michael Levy. gwdegree: Improving interpretation of geometrically-weighted degree estimates in exponential random graph models. *The Journal of Open Source Software* 1(3).

2014 Michael Levy and Jonathan Cumming. Development of soils and communities of plants and arbuscular mycorrhizal fungi on West Virginia surface mines. *Environmental Management* 54(5): 1153-1162.

In review Marco Bastos, Carlo Piccardi, **Michael Levy**, Neil McRoberts, and Mark Lubell. Core-periphery or decentralized? How centralized networks emerge from sharing specialized agriculture information.

MANUSCRIPTS IN PREPARATION

Michael Levy and Mark Lubell. Structural signatures of cooperation, innovation, and boundary spanning in agriculture management networks.

Michael Levy, Mark Lubell, Philip Leifeld, and Skyler Cramner. Use and interpretation of geometrically weighted degree in exponential random graph models.

Michael Levy, Patrick Bitterman, Kenny Wallen, Katie Lyon, Ellen Esch, and Michael Saha. Generation of an empirically based agent population for a coupled model of fire and homeowner behavior in the wildland-urban interface.

Mark Lubell, **Michael Levy**, Aseem Prakash, and Matt Potoski. Clubs old and new: Social networks and participation in voluntary environmental programs.

POLICY AND OUTREACH PUBLICATIONS

- 2016 Michael Levy**, Neil McRoberts, and Mark Lubell. Pillars of sustainable agriculture. Policy brief for UC Division of Agriculture and Natural Resources.
- 2016 Michael Levy**, Neil McRoberts, and Mark Lubell. Mental models of sustainable agriculture. Policy brief for UC Division of Agriculture and Natural Resources.
- 2015 Michael Levy** and Matthew Hoffman. Lodi rules for sustainable winegrowing certification program, 2015 report.
- 2013 Michael Levy**. Integrating science, management, and policy for the future of water in California. *Eos*, 94(29): 256.
- 2013 Michael Levy**, Matthew Hoffman, Vicken Hillis, and Mark Lubell. Sustainability certification: Why do vineyards participate? Policy Brief for UC Davis Policy Institute for Energy, Environment and the Economy.
- 2013 Michael Levy**. Measure I is our best option for necessary water improvements. *The Davis Enterprise*, February 10, 2013: A15.
- 2010 - 2012 Michael Levy**. Weekly environmental science and policy opinion column. *The Daily Athenaeum*, 124(12) - 125(94).

Awards

- 2016** Fire on the Fringe: A coupled agent-based model of homeowner and wildfire behavior in Southern California, National Socio-Environmental Synthesis Center (SESYNC) Graduate Research Fellow, \$2,000.
- 2016** Improving statistical inference on networks, Amazon Web Services Cloud Credits for Research Grant, \$703.
- 2016** Political Networks Conference Travel Grant, \$900.
- 2015** Professors for the Future Fellowship, \$3,000.
- 2014** Sustainable Agriculture Scholarship, Annie's Homegrown, \$2,500.
- 2014** Henry A. Jastro Research Award, UC Davis College of Agricultural and Environmental Sciences, \$1,500.
- 2012** Climate Change, Water, and Society, Integrative Graduate Education Research Traineeship, National Science Foundation, \$115,000.
- 2012** Ecology Fellowship, UC Davis, \$51,000.
- 2011** Graduate Student Policy Award, Ecological Society of America.
- 2009** HERF Supplementary Fellowship, West Virginia University, \$2,000.

Presentations

PROFESSIONAL CONFERENCES

- 2016 Michael Levy.** Teaching R to 200 people in a week. International R User Conference, Stanford, CA.
- 2016 Michael Levy,** Mark Lubell, Philip Leifeld, Skyler Cranmer. Interpretation of geometrically weighted degree estimates in exponential random graph models. Political Networks Conference, Saint Louis, MO.
- 2016 Michael Levy.** Mental models of sustainable agriculture. Duck Family Graduate Workshop on Environmental Politics and Governance, Seattle, WA.
- 2016 Michael Levy,** Mark Lubell, Philip Leifeld, Skyler Cranmer. Estimating and interpreting geometrically weighted statistics in exponential random graph models. Midwest Political Science Association Conference, Chicago, IL.
- 2016 Michael Levy.** Mental models of sustainable agriculture. Sunbelt Social Network Conference, Newport Beach, CA.
- 2015 Michael Levy** and Mark Lubell. Innovation and cooperation in the structure of agriculture information networks. American Political Science Association Annual Meeting, San Francisco, CA.
- 2015 Michael Levy** and Mark Lubell. Innovation and cooperation in agricultural information networks. Political Networks Conference, Portland, OR.
- 2015 Michael Levy.** Cultural multilevel selection and social networks in sustainable viticulture. Biennial Global Conference: International Association for the Study of the Commons, Edmonton, AB.
- 2014 Michael Levy.** Cultural diffusion and polarization: An agent-based model. Center for Advanced Modeling Graduate Workshop, Baltimore, MD.
- 2014 Michael Levy,** Matthew Hoffman, Vicken Hillis, and Mark Lubell. Who joins the club? Learning pathways for sustainable agriculture certification. Environmental Politics Conference, Santa Barbara, CA.
- 2011 Michael Levy** and Jonathan Cumming. Development of soil, biodiversity, and arbuscular mycorrhizae on pasture-reclaimed surface mines in Appalachia. Annual Meeting of the Ecological Society of America, Austin, TX.

OUTREACH PRESENTATIONS

- 2016 Michael Levy.** Automation, lapply, and custom functions in R. Davis R Users' Group, Davis, CA.
- 2015 Michael Levy.** Exponential random graph models for statistical inference on networks. Statistical Sciences Symposium, UC Davis Department of Statistics, Davis, CA.
- 2015 Michael Levy.** Predicting interdependence: Inference from exponential random graph models of social networks. Statistical Methodology in the Social Sciences Conference, UC

Davis Institute for Social Sciences, Davis, CA.

- 2015 **Michael Levy**. ERGM tutorial. UC Davis Interdisciplinary Network Science Group, Davis, CA.
- 2014 **Michael Levy**. Environmental certifications among viticulturists. Lodi Winegrape Commission, Davis, CA.
- 2014 **Michael Levy**. dplyr: Data manipulation in R made easy. Davis R Users' Group, Davis, CA.
- 2012 **Michael Levy**. Stripping wild and wonderful: Truths and myths about surface mining in West Virginia. Science on Tap public science forum, Morgantown, WV.
- 2011 **Michael Levy** and Terence Houston. Weighing the long-term implications of mountaintop removal mining. Ecological Society of America podcast, The Ecologist Goes To Washington.
- 2011 Bob Baber, Ted Boettner, **Michael Levy**, and Jeff Skousen. Coal: The lifeblood of West Virginia? Democracy Matters panel discussion, Morgantown, WV.

Teaching Experience

UNIVERSITY OF CALIFORNIA, DAVIS

- 2016 Teaching Assistant, Statistical Rethinking: PhD-level course on applied computational Bayesian data analysis, with Richard McElreath.
- 2015 Developer and Instructor, R Bootcamp: Week-long intensive introduction to the statistical programming language R for 200 graduate students and postdoctoral scholars.
- 2013 Organizer and Lead, Seminar on agent-based models for the study of coupled human and natural systems.

SOFTWARE AND DATA CARPENTRY

- 2016 Developer and Co-Instructor, Pilot Social Sciences Data Carpentry Workshop, UC Davis.
- 2016 Co-Instructor, Software Carpentry Workshop, Stanford University.
- 2016 Co-Instructor, Software Carpentry Workshop, UC Davis.
- 2015 Co-Instructor, Data Carpentry Workshop, UC Davis.

INTERUNIVERSITY CONSORTIUM FOR POLITICAL AND SOCIAL RESEARCH (ICPSR)

- 2015 Teaching Assistant, Introduction to Social Network Analysis in R, with Lorien Jasny.

WEST VIRGINIA UNIVERSITY

- 2011 Teaching Assistant, Environmental Biology Laboratory.
- 2010 - 2011 Teaching Assistant, Total Science Experience: Mentored small group research projects from proposal to presentation.
- 2009 - 2010 Teaching Assistant, Principles of Biology Laboratory.

OTHER

2008 - 2009 English as a Foreign Language Teacher, Dogye Elementary School, Gangwon-do, South Korea.

2007 - 2008 MCAT Instructor, The Princeton Review, Boulder CO.

2005 - 2006 English as a Foreign Language Teacher, Han Yun Sik English Academy, Busan South Korea.

Additional Education

2016 Text Analytics, Interuniversity Consortium for Political and Social Research, Ann Arbor, MI.

2015 Seminar on College Teaching, Center for Educational Effectiveness, Davis, CA.

2015 Instructor training, Software Carpentry, Davis, CA.

2013 Multi-platform International Summer School on Agent-Based Modeling and Simulation, Cirad, Montpellier, France.

2011 Becoming the Messenger: Science communication training, National Science Foundation, Morgantown, WV.

2011 Lobbying Congress for Science, Biological Ecological Sciences Coalition, Washington DC.

Service

UC DAVIS

2015 - Co-Administrator, Davis R Users' Group.

2015 - Founder & Administrator, Interdisciplinary Network Science Group.

2014 - Maintainer, Statistics Courses Guide, Ecology Graduate Student Association.

2013 - Member, Admissions Committee, Graduate Group in Ecology.

2015 Graduate Student Representative, Climate Policy Faculty Search Committee, Department of Environmental Science and Policy.

2015 Mentor, Dustan Li Undergraduate Research Project.

2013 Mentor, AggieMentors high school student research program.

2013 Co-organizer, Future of Water in California Conference.

2013 Delegate, UC Day in DC.

WEST VIRGINIA UNIVERSITY

2010 - 2011 Mentor, Kylen Whipp Undergraduate Honors Thesis.