

August 2016

Curriculum Vitae
Kent F. Kovacs

University of Arkansas
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Fayetteville, AR 72701

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kkovacs@uark.edu

Current Employment

8/12-present *Assistant Professor*, Department of Agricultural Economics and
Agribusiness, University of Arkansas, Fayetteville, AR

Education

University of California, Davis, Agricultural and Resource Economics, Davis, CA
Doctor of Philosophy, 2006

Vassar College, Economics, Poughkeepsie, NY
Bachelor of Arts, 2000
General and Departmental Honors

Peer-Reviewed Publications

Kovacs, K., M. Mancini. 2016. "Conjunctive water management to sustain agricultural economic returns and a shallow aquifer at the landscape level." *Journal of Soil and Water Conservation*, forthcoming.

Kovacs, K., R. Haight, G. West. 2016. "What Causes Spatial Variations in Economic Development in Rural Forests in the United States?" *Growth and Change*, forthcoming.

Kovacs, K., M. Mancini, G. West. 2015. "Landscape irrigation management for maintaining an aquifer and economic returns." *Journal of Environmental Management*, 160, 271-282.

Kovacs, K., M. Popp, K. Brye, G. West. 2015. "On-Farm Reservoir Adoption in the Presence of Spatially Explicit Groundwater Use and Recharge." *Journal of Agricultural and Resource Economics*, 40(1), 23-49.

L. Nalley, M. Anders, K. Kovacs, B. Linqvist. 2015. "The Economic Viability of Alternative Wetting and Drying Irrigation in Arkansas Rice Production." *Agronomy Journal*, 107(2), 579-587.

Kovacs, K., E. Wailes, G. West, J. Popp, K. Bektemirov. 2014. "Optimal Spatial-Dynamic Management of Groundwater Conservation and Surface Water Quality with On-Farm Reservoirs." *Journal of Agricultural and Applied Economics*, 46,4(November 2014): 409-437.

- Kovacs, K., R. Haight, R. Mercader, D. McCullough. 2014. "A Bioeconomic Analysis of an Emerald Ash Borer Invasion of an Urban Forest with Multiple Jurisdictions." *Resource and Energy Economics*, 36(1), 270-289.
- Kovacs, K., R. Haight, S. Jung, D. Locke, J. O'Neil-Dunne. 2013. "Marginal Cost of Carbon Abatement from Planting Street Trees in New York City." *Ecological Economics*, 95, 1-10.
- Kovacs, K., S. Polasky, E. Nelson, B. Keeler, D. Pennington, A. Plantinga, S. Taff. 2013. "Evaluating the Return in Ecosystem Services from Investment in Public Land Acquisitions." *PLoS ONE*, 8(6), e62202.
- Kovacs, K. 2013. "An Empirical Examination of the Location and Timing of Non-renewals in a Farmland Differential Assessment Program." *The Annals of Regional Science*, 50(1), 245-263.
- Kovacs, K. 2012. "Integrating Property Value and Local Recreation Models to Value Ecosystem Services from Regional Parks." *Landscape and Urban Planning*, 108(2), 79-90.
- Keeler, B., S. Polasky, K. Brauman, K. Johnson, J. Finlay, A. O'Neill, K. Kovacs, B. Dalzell. 2012. "Linking Water Quality and Well-being for Improved Assessment and Valuation of Ecosystem Services." *Proceedings of the National Academy of Sciences*, 109(45), 18619-18624.
- Polasky, S., K. Johnson, B. Keeler, K. Kovacs, E. Nelson, D. Pennington, A. Plantinga, J. Withey. 2012. "Are Investments to Promote Biodiversity Conservation and Ecosystem Services Aligned?" *Oxford Review of Economic Policy*, 28(1), 139-163.
- Kovacs, K., T. Holmes, J. Englin, J. Alexander. 2011. "The Dynamic Response of Housing Values to a Forest Invasive Disease: Evidence from a Sudden Oak Death Infestation." *Environmental and Resource Economics*, 49, 445-471.
- Aukema J.E., B. Leung, K. Kovacs, C. Chivers, K. Britton K, J. Englin, S. Frankel, R. Haight, T. Holmes, A. Liebhold, D. McCullough, B. Von Holle. 2011. "Economic Impacts of Non-Native Forest Insects in the Continental United States." *PLoS ONE*, 6(9): e24587.
- Kovacs, K., R. Mercader, R. Haight, D. McCullough, N. Siegert, A. Liebhold. 2011. "The Influence of Satellite Populations of Emerald Ash Borer on Projected Economic Costs in U.S. Communities, 2010-2020." *Journal of Environmental Management*, 92, 2170-2181.
- Kovacs, K., T. Vaclavik, R. Haight, A. Pang, N. Cunniffe, C. Gilligan, R. Meentemeyer. 2011. "Predicting the Economic Costs and Property Value Losses Attributed to Sudden Oak Death Damage in California (2010-2020)." *Journal of Environmental Management*, 92, 1292-1302.
- T. Holmes, A. Liebhold, K. Kovacs, B. Von Holle. 2010. "A Spatial-Dynamic Value Transfer Model of Economic Losses from a Biological Invasion." *Ecological Economics*, 70 (1), 86-95.
- Kovacs, K., R. Haight, D. McCullough, R. Mercader, N. Siegert, and A. Liebhold. 2010. "Cost of Potential Emerald Ash Borer Damage in U.S. Communities, 2009-2019." *Ecological Economics*, 69 (3), 569-578.

Netusil, N., S. Chattopadhyay, and K. Kovacs. 2010. "Estimating the Demand for Tree Canopy: A Second-Stage Hedonic Price Analysis." *Land Economics* 86 (2), 281-293.

Kovacs, K. and D. Larson. 2008. "Identifying Individual Discount Rates and Valuing Public Open Space with Stated-Preference Models." *Land Economics* 84 (2), 209-224.

Kovacs, K. and D. Larson. 2007. "The Influence of Recreation and Amenity Benefits of Open Space on Residential Development Patterns." *Land Economics* 83 (4), 475-496.

Book chapters

T. Holmes, J. Aukema, J. Englin, R. Haight, K. Kovacs, and B. Leung. 2014. Chapter 24. Economic Analysis of Biological Invasion in Forests. In *Handbook of Forest Resource Economics*. eds. S. Kant and J. Alavalapati. Publisher: Routledge.

Papers in review and revision

"The influence of on- and off-farm surface water investment on groundwater extraction from an agricultural landscape." (with A. Durand-Morat)

"Addressing Genetic Pollution from Pollen Drift on a Heterogeneous Landscape." (with M. Mancini, E. Wailes, J. Popp)

"Groundwater depletion on an irrigated farm landscape and the tradeoffs among ecosystem services and economic returns." (with Y. Xu, G. West, M. Popp)

"Addressing Groundwater Declines with Precision Agriculture: An Economic Comparison of Monitoring Methods for Variable-Rate Irrigation." (with G. West)

"The extent and dynamics of sparsely settled forests in the contiguous US." (with Brian J McGill, Derek Brent Van Berkel, Bronwyn Rayfield, Sebastián Martinuzzi, Martin Lechowicz, Kathleen Bell, Eric White, Chris Colocousis, Anita Morzillo, Darla Munroe, Benoit Parmentier, Volker Radeloff)

Teaching

08/12-

University of Arkansas, Fayetteville, AR

- Principles of Environmental Economics, Undergraduate, Spring 2017.
- Principles of Agricultural Macroeconomics, Undergraduate, Spring 2013-2016.
- Agricultural, Environmental, and Resource Economics, Graduate, Spring 2013-2017.
- Special problems in Environmental and Resource Economics, Graduate, Summer, 2016.

- 05/11-08/12 Metropolitan State University, St. Paul, MN
- Economics of the Environment, Undergraduate, Summer 2011, 2012.
- 7/08-7/10 University of Nevada, Reno, NV
- Economic Theory and Policy, Undergraduate, Fall 2009.
 - Regression Analysis and Time Series, Undergraduate and Graduate, Spring 2009.
- 9/02-12/05 *Teaching Assistant*, Department of Agricultural and Resource Economics, University of California, Davis, CA
Natural Resource Economics, Environmental Economics, Financial Management I, Financial Management II, Consumer and Producer Theory, Industrial Organization and Game Theory
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Previous Employment

- 7/10-8/12 *Research Associate*, Department of Applied Economics and Institute on the Environment, University of Minnesota, St. Paul, MN
- 7/08-06/10 *Research Assistant Professor*, Department of Resource Economics, University of Nevada, Reno, NV
- 10/06-6/08 *Economist*, Northern Economics Inc., Bellingham, WA
- 1/06-9/06 *Research Assistant*, Department of Agricultural and Resource Economics, University of California, Davis, CA
- 08/00-08/01 *Research Assistant*, Federal Reserve Bank of Kansas City, Kansas City, MO
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Proceedings, outreach publications, and reports

Kovacs, K. and M. Mancini. 2016. "Sustaining agricultural economic returns and a shallow aquifer on a landscape using conjunctive water management." Presented at the 2016 UCOWR/NIWR Annual Water Resources Conference:
http://ucowr.org/files/2016_Conference/2016_Conference_Proceedings.pdf.

"Developing scenarios to assess ecosystem service tradeoffs: Guidance and experiences using InVEST", with Emily McKenzie, Amy Rosenthal, Joey Bernhardt, Evan Girvetz, Nasser Olwero, Jodie Toft. Prepared for the Natural Capital Project, 2012.

Kovacs, K., Pennington, D., Keeler, B., Kessler, D., Fletcher J., Polasky, S., Taff, S. 2011. "Return on Investment in Conservation: An Economic Analysis of Ecosystem Services from

Land Acquisitions by the Minnesota Department of Natural Resources”, Prepared for the Trust for Public Land.

Kovacs, Kent, J. Englin, T. Holmes, J. Alexander. 2009. "Evidence of the Dynamic Response of Housing Values to a Sudden Oak Death Infestation." In: Frankel, S.J.; Kliejunas, J.T.; Palmieri, K.M., tech. cords. 2010. Proceedings of the Sudden Oak Death Fourth Science Symposium. Gen. Tech. Rep. PSW-GTR-XXX, Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. XXXp.

Kovacs, Kent, J. Englin, T. Holmes, J. Alexander. 2009. “The SOD facts of life: property value losses from sudden oak death in Marin County.” In: McManus, Katherine A; Gottschalk, Kurt W., eds. Proceedings. 20th U.S. Department of Agriculture interagency research forum on invasive species 2009; 2009 January 13-16; Annapolis, MD. Gen. Tech. Rep. NRS-P-51. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station: 41

Haight, R. G., K. Kovacs, A.M. Liebhold, D.G. McCullough. 2009. “Economic assessment of potential emerald ash borer damage in urban areas in the United States.” In: McManus, Katherine A; Gottschalk, Kurt W., eds. Proceedings. 20th U.S. Department of Agriculture interagency research forum on invasive species 2009; 2009 January 13-16; Annapolis, MD. Gen. Tech. Rep. NRS-P-51. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station: 32-33

Kovacs, Kent. “Farmland Conversion in California: Evidence from the Williamson Act Program.” ARE Update, 11(5), 2008

“Economic Analysis of Future Offshore Oil and Gas Development: Beaufort Sea, Chukchi Sea, and North Aleutian Basin.” Prepared for Shell Exploration and Production, 2008

“Fiscal Impact Analysis of Kirkland Parkplace Mall Redevelopment.” Prepared for Touchstone, Inc., 2008 (*Lead Consultant*)

“New Whatcom Economic Impact Analysis.” Prepared for the Port of Bellingham, 2007 (*Lead Consultant*)

Presentations and Posters

“Tradeoffs among multiple ecosystem services and economic returns from groundwater depletion on a farm landscape.” Selected Presentation, *Agricultural and Applied Economics Association Annual Meeting*, Boston, MA, 2015, July 31st-August 2nd.

“Return on investment in on-farm storage reservoirs: A landscape perspective.” with T. Knapp, Selected Presentation, *SERA35: Delta States Farm Management Group Annual Meeting*, Vicksburg, MS, 2016, May 25th-27th.

“Sustaining agricultural economic returns and a shallow aquifer on a landscape using conjunctive water management.” Selected Presentation, *UCOWR/NIWR Annual Water Resources Conference*, Pensacola, FL, 2016, June 21st-23rd.

“Groundwater depletion on an irrigated farm landscape and the associated tradeoffs among multiple ecosystem services and economic returns.” Selected Presentation, *W3133: Benefits and Costs of Natural Resources Policies Affecting Ecosystem Services on Public and Private Lands*, Portland, OR, 2016, February 24th-26th.

“Landscape irrigation management for maintaining an aquifer and economic returns.” with G. West, Selected Poster, *W3190: Water Management Strategies for Addressing Long-Term Drought and Climate Uncertainty*, Salt Lake City, UT, 2015, October 28th-29th.

“Regional Irrigation Management with Conjunctive Surface and Groundwater Use”, Selected Poster, *Agricultural and Applied Economics Association Annual Meeting*, San Francisco, CA, 2015.

“To on-farm reservoir or not to on-farm reservoir: An economist’s perspective”, Invited Presentation, *Arkansas Water Resources Center Annual Watershed and Research Conference*, Fayetteville, AR, 2015.

“Spatial irrigation management to sustain groundwater and economic returns.” with G. West, Selected Presentation, *SERA35: Delta Region Farm Management and Agricultural Policy Working Group*, Vicksburg, MS, 2015.

“Spatial irrigation management to sustain groundwater and economic returns.”, Selected Presentation, *Southern Agricultural Economics Association Annual Meeting*, Atlanta, GA, 2015.

“Investment in on-farm reservoirs to align economic returns and ecosystem services.”, with Y. Xu, Selected Presentation, *Southern Agricultural Economics Association Annual Meeting*, Atlanta, GA, 2015.

“Determinants of Spatial Variation in Economic Development in Rural Forests in the United States” Selected Poster, *Agricultural and Applied Economics Association Annual Meeting*, Minneapolis, MN, 2014.

“Optimal Spatial-Dynamic Management of Groundwater Conservation and Surface Water Quality with On-Farm Reservoirs” with K. Bektemirov, Selected Presentation, *69th SWCS International Annual Conference*, Lombard, IL, 2014.

“Addressing Genetic Pollution from Pollen Drift on a Heterogeneous Landscape with Coasean Bargaining”, with M. Mancini, Selected Presentation, *Western Agricultural Economics Association Annual Meeting*, Colorado Springs, CO, 2014.

“Groundwater and Surface Water Quality Management with On-Farm Reservoirs” Selected Presentation, *SERA35: Delta Region Farm Management and Agricultural Policy Working Group*, Tillar, AR, 2014.

“Assessing On-Farm Reservoir Adoption for Groundwater Conservation and Water Quality Improvement in Arkansas.” with K. Bektemirov, Selected Oral Presentation, *Southern Regional Science Association Meeting*, San Antonio, TX, 2014.

“Management of Groundwater and Surface Water Quality with On-Farm Reservoirs” Selected Presentation, *Southern Agricultural Economics Association Annual Meeting*, Dallas, TX, 2014.

“Predicting the Location of Economic Development in Rural Forests” Invited Presentation, *SESYNC Working Group: Rural forest communities at a tipping point? Trends and actionable research opportunities*, Annapolis, MD, 2013.

“Conserving Groundwater Supply in the Arkansas Delta using On-Farm Reservoirs.” Selected Presentation, *Southern Agricultural Economics Association Annual Meeting*, Orlando, FL, 2013; Selected Presentation, *SERA35: Delta Region Farm Management and Agricultural Policy Working Group*, Vicksburg, MS, 2013.

“Preserving the Quantity and Quality of Water in the Arkansas Delta.” with K. Bektemirov, Selected Poster, *57th Annual Rural Life Conference*, Pine Bluff, AR, 2013; Selected Poster, *Arkansas Water Resources Center Annual Watershed and Research Conference*, Fayetteville, AR, 2013.

“A bioeconomic analysis of an emerald ash borer invasion of an urban forest with multiple jurisdictions.” Selected, *American Agricultural Economics Association Annual Meeting, AERE Track*, Seattle, WA, 2012.

“Economic valuation and tradeoffs, including the InVEST tool.” Invited, *5th SETAC Europe, Special Science Symposium: Ecosystem Services from Policy to Practice*, Brussels, Belgium, 2012.

“Do models of where conservation should occur match where conservation actually occurs?”, Invited, *Natural Capital Project Olympics*, Spring 2012, Olympics, Palo Alto, CA, 2012.

“Return on Investment in Conservation: An Economic Analysis of Ecosystem Services from Land Acquisitions in Minnesota”. Selected, *W2133: Benefits and Costs of Natural Resources Policies Affecting Public and Private Lands*, Albuquerque, NM, 2011; Selected, *American Agricultural Economics Association Annual Meeting*, Seattle, WA, 2012; Selected, *13th Occasional California Workshop on Environmental and Resource Economics*, Santa Barbara, CA, 2012.

“The Influence of Satellite Populations of Emerald Ash Borer on the Cost of Damage in U.S. Communities, 2010-2020.” Invited, *Symposium on Ash in North America*, West Lafayette, IN, 2010; Selected, *Minnesota-Wisconsin Invasive Species Conference*, St. Paul, MN, 2010

“Economic Assessment of Emerald Ash Borer, Gypsy Moth, and Sudden Oak Death Damage in the United States.” *National Center for Ecological Analysis and Synthesis*, Santa Barbara, CA, Invited, 2010 and 2009.

“An Empirical Examination of the Location and Timing of Non-renewals in a Farmland Differential Assessment Program.” Selected, *American Agricultural Economics Association Annual Meeting*, Milwaukee, WI, 2009

“The SOD facts of life: Property value damage from sudden oak death in Marin County, CA.” Selected Paper, *4th SOD Symposium*, Santa Cruz, CA, 2009; Invited, *20th USDA Interagency Research Forum on Invasive Species*, Annapolis, MD, 2009; Selected, *American Agricultural Economics Association Annual Meeting, AERE Track*, Milwaukee, WI, 2009

“Identifying Individual Discount Rates and Valuing Public Open Space with Stated-Preference Models.” Selected, *American Agricultural Economics Association Annual Meeting, AERE Track*, Portland, OR, 2007

“Recreation at open space and residential development patterns.” Selected, *8th Occasional California Workshop on Environmental & Resource Economics*, Santa Barbara, CA, 2005

Professional Service

Referee: *Australian Journal of Agricultural and Resource Economics*, *Agricultural and Resource Economics Review*, *Canadian Journal of Agricultural Economics*, *Ecological Economics*, *Environmental Management*, *Environmental and Resource Economics*, *Ecology Letters*, *Frontiers in Ecology and the Environment*, *Journal of Agricultural and Applied Economics*, *Journal of Agricultural and Resource Economics*, *Journal of Environmental Economics and Management*, *Journal of Environmental Management*, *Journal of Natural Resources Policy Research*, *PLoS One*, *Resources*, *Water Resources Research*

Guest Editor: *Ecological Applications*

Moderator:

American Agricultural Economics Association Annual Meeting, San Francisco, CA, 2015; *American Agricultural Economics Association Annual Meeting*, Seattle, WA, 2012; *American Agricultural Economics Association Annual Meeting, AERE Track*, Milwaukee, WI, 2009; *American Agricultural Economics Association Annual Meeting, AERE Track*, Portland, OR, 2007; *Western Regional Science Association Annual Meeting*, Maui, HI, 2004

News coverage:

Scienceline, “The high cost of carbon in city trees: They stymy climate change, but for a premium.” Poster October 18, 2013. <http://scienceline.org/2013/10/the-high-cost-of-carbon-in-city-trees/>

The Economist, “Endangered Trees: Making a hash of the ash.” Poster March 16, 2013. <http://www.economist.com/news/united-states/21573591-flying-scourge-widens-its-reach-making-hash-ash>

The New York Times, “The Toll From Tree-Boring Pests.” Posted September 13, 2011. <http://green.blogs.nytimes.com/2011/09/13/the-toll-from-tree-boring-pests/?scp=1&sq=aukema&st=cse>

Duluth New Tribune, “Conservation groups rally around money for public lands.” Posted January 7, 2011. <http://www.duluthnewtribune.com/event/article/id/188167/group/News/>.

Milwaukee Journal Sentinel, “Spread of ash borer still pestering officials,” Posted October 17, 2009. <http://www.jsonline.com/news/wisconsin/64677507.html>.

Grants, Awards, and Certificates

2016-2017. G. West, K. Kovacs (PI). “Tracking the growth of on-site irrigation infrastructure in the Arkansas Delta with remote sensing analysis”, Arkansas Water Resources Center, \$4,852.

2015-2017. K. Kovacs (PI), Q. Huang, E. Wailes, C. Henry. “Economics of Multiple Water-Saving Technologies across the Arkansas Delta Region”, Rice Research Promotion Board, \$43,500.

2014-2017. K. Kovacs (PI), Q. Huang, E. Wailes, C. Henry. “Economics of Multiple Water-Saving Technologies across the Arkansas Delta Region”, Soybean Promotion Board, \$70,000.

2014-2015. K. Kovacs (PI), Q. Huang (PI), E. Wailes, C. Henry. “Economics of Multiple Water-Saving Technologies across the Arkansas Delta Region”, Arkansas Water Resources Center, \$24,600.

2013-2014. K. Kovacs (PI), E. Wailes, J. Popp, K. Brye. “Economics of On-Farm Reservoirs across the Arkansas Delta Region: A conjunctive management approach to preserving groundwater and water quality”, Arkansas Water Resources Center. \$9,300.

2012-2014. B. McGill (PI), K. Bell (PI), D. Hart, K. Kovacs (co-PI), M. Lechowicz, L. Lindenfeld, A. Morzilla, D. Munroe, J. Rhemtulla, V. Radloff, T. Selfa, T. Spies, C. Wake, E. White, A. Wieskittel. “Pursuit: Rural forest communities at a tipping point? Trends and actionable research opportunities”, SESYNC (NSF Center). \$150,000

2010-2012. K. Kovacs (PI) and S. Polasky. “The Marginal Cost of Carbon Abatement from Planting Trees in New York City”, US Forest Service. \$40,000

2009-2011. K. Kovacs (PI) and J. Englin. “Economic Assessment of Strategies to Slow Ash Mortality caused by Emerald Ash Borer”, US Forest Service. \$60,000

2009-2010. K. Kovacs (co-PI) and J. Englin. “*P. ramorum* economic damages: Aggregating micro-landscape models of economic damage to the macro-landscape”, US Forest Service. \$35,000

2006-2007. K. Kovacs (co-PI) and D. Larson. "A Comparison of Farmland Conservation Programs in California", UC Giannini Foundation of Agricultural Economics, Mini-Grant. \$15,000

2004-2005. K. Kovacs (co-PI) and D. Larson. "Land Use Change, Recreation, and Residential Development", UC Giannini Foundation of Agricultural Economics, Mini-Grant. \$10,000

Honors

- Certificate of Merit for Sustaining Forests and Grasslands: In recognition of efforts to produce reliable estimates of the costs of the emerald ash borer invasion in the United States, US Department of Agriculture, May 2011
 - IMPLAN Certified Professional, Minnesota Implan Group, January 2007
 - Jastro-Shields Research Award, 2003, 2004, and 2005
 - UC Davis First-Year University Fellowship, 2001
 - UC Davis Guaranteed Second-Year Department Assistantship, 2001
 - Vassar Fellowship, 2001
 - Employee excellence at the Federal Reserve Bank of Kansas City (2), 2000-2001
 - Student Employee of the Year, Spring 2000
 - Olive M. Lammert Book Prize for Excellence in Organic Chemistry, 1997
 - Vassar Scholarship, 1996-2000
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References are available upon request.