

ANDREW J. PLANTINGA

Bren School of Environmental Science and Management
University of California
Santa Barbara, CA 93106-5131
E-mail: plantinga@bren.ucsb.edu

APPOINTMENTS:

Professor, Bren School of Environmental Science and Management, University of California, Santa Barbara (2013-present). Research and teaching in the field of environmental and resource economics.

Professor, Department of Agricultural and Resource Economics, Oregon State University (2008-2012), Associate Professor (2004-2008), Assistant Professor (2001-2004).

Visiting Researcher, l'Institut Nationale de la Recherche Agronomique, Dijon, France (2008-2009)

Assistant Professor, Department of Resource Economics and Policy, University of Maine (1995-2000).

Graduate Student Instructor, University of California-Berkeley (1993-1995).

Consultant, U.S.D.A. Forest Service, Northeast Forest Experiment Station, Radnor, PA (1991-1993).

Research Assistant, Resources for the Future, Energy and Natural Resources Division, Washington, DC (1990).

Forester, U.S.D.A. Forest Service, Forest Products Laboratory, Madison, WI (1988-1989).

Research Assistant, University of Wisconsin-Madison (1987-1988).

EDUCATION:

University of California-Berkeley.

PhD in Agricultural and Resource Economics (June 1995).

Fields: Natural Resource Economics (major), Game Theory and Industrial Organization (minor).

Dissertation Topic: The Allocation of Land to Forestry and Agriculture.

University of Wisconsin-Madison.

Masters of Science in Forestry (August 1988).

Grinnell College, Grinnell, Iowa.

Bachelor of Arts in English (May 1986).

HONORS:

2106 Paul A. Sabatier Best Conference Paper Award in the area of Science, Technology, and Environmental Politics, American Political Science Association. Award for Wibbenmeyer, M., Anderson, S., and A.J. Plantinga. 2016. Salience of Wildfire Risk and the Management of Public Lands.

Outstanding Research Publication in Agricultural Economics, Western Agricultural Economics Association, 2003. Award for Wu, J., and A.J. Plantinga. 2003. The Influence of Public Open Space on Urban Spatial Structure. *Journal of*

Environmental Economics and Management 46(2):288-309.

Research Fellow, Rural Development Research Consortium, University of California-Berkeley, appointed 2003.

S.G. Hall Fellowship in Forest Economics, University of California-Berkeley (1992-1995).

University Fellowship, University of Wisconsin-Madison (1987-1988).

Rosenfield Scholarship, Grinnell College (1985-1986).

WORKING PAPERS:

Ayres, A.B., Meng, K.C., and A.J. Plantinga. 2018. The Economic Value of Secure Water: Landowner Returns to Defining Groundwater Property Rights.

Runge, C.A., Plantinga, A.J., Larsen, A., Naugle, D.E., Helmstedt, K., Polasky, S., Donnelly, P., Smith, J.T., Lark, T., Lawler, J.J., Martinuzzi, S., and J. Fargione. 2018. Unintended Habitat Loss on Private Land from Grazing Restrictions on Public Lands.

Anderson, S.E., Bart, R.R., Kennedy, M.C., MacDonald, A.J., Moritz, M.A., Plantinga, A.J., Tague, C.L., and M. Wibbenmeyer. 2018. The Dangers of Disaster-Driven Responses to Climate Change.

Sloggy, M.R., Kling, D.M., and A.J. Plantinga. 2018. Measure Twice, Cut Once: Optimal Inventory and Harvest Under Volume Uncertainty and Price Volatility.

Fienup, M., and A.J. Plantinga. 2018. Unintended Effects of Environmental Policies: The Case of Urban Growth Controls and Agricultural Intensification.

Jaeger, W., Amos, A., Conklin, D., Langpap, C., Moore, K., and A.J. Plantinga. 2018. Understanding the Scope and Limitations of Drought Management Using Human-Natural Systems Models.

Larsen, A.E., MacDonald, A.J., and A.J. Plantinga. 2017. Missing the People for the Trees: Elucidating the Role of Human Behavior in the Ecology of Lyme Disease.

Wibbenmeyer, M., Anderson, S., and A.J. Plantinga. 2017. Salience and Government Provision of Public Goods.

Severen, C., and A.J. Plantinga. 2016. Land-Use Regulations, Property Values, and Rents: Decomposing the Effects of the California Coastal Act.

PUBLICATIONS:

Journal Articles

Cross, R., Plantinga, A.J., and R.N. Stavins. 2017. Terroir in the New World: Hedonic Estimation of Vineyard Sale Prices in California. *Journal of Wine Economics* 12(3):282-301.

Jaeger, W.K., Amos, A., Bigelow, D., Chang, H., Conklin, D., Haggerty, R., Langpap, C., Moore, K., Mote, P., Nolin, A., Plantinga, A.J., Schwartz, C., Tullios, D., and D. Turner. 2017. Finding Water Scarcity Amid Abundance Using Human-Natural System Models. *Proceedings of the National Academy of Science* 114(45):11884-9.

Bigelow, D.P., and A.J. Plantinga. 2017. Town Mouse and Country Mouse: Effects of

- Urban Growth Controls on Equilibrium Sorting and Land Prices. *Regional Science and Urban Economics* 65: 104-115.
- Gergaud, O., Plantinga, A.J., and A. Ringeval-Deluze. 2017. Anchored in the Past: Persistent Price Effects of Obsolete Vineyard Ratings in France. *Journal of Economic Behavior and Organization* 133: 39-51
- Dempsey, J.A., Plantinga, A.J., Kline, J., Lawler, J., Martinuzzi, S., V. Radeloff, and D.P. Bigelow. 2016. Effects of Local Land-Use Planning on Development and Disturbance in Riparian Areas. *Land Use Policy* 60:16-25.
- Bigelow, D., Plantinga, A.J., Lewis, D.J., and C. Langpap. 2016. How Does Urbanization Affect Water Withdrawals? Insights from an Econometric-Based Landscape Simulation. *Land Economics* 93(3):413-436.
- Ayres, A., Degolia, A., Fienup, M., Kim, J., Sainz, J., Urbisci, L., Viana, D., Wesolowski, G., Plantinga, A.J., and N. Tague. 2016. Wildfire and Climate Change in Western North America: A Guide to the Natural and Social Science Literature. *Geography Compass* 10/2: 67-86.
- Latta, G., Plantinga, A.J., and M. Sloggy. 2015. The Effects of Internet Use on Global Demand for Paper Products. *Journal of Forestry* 114(4): 433-440.
- Plantinga, A.J. 2015. Integrating Economic Land-Use and Biophysical Models. *Annual Reviews of Resource Economics* 7:2.1-2.17.
- Martinuzzi, S., Radeloff, V.C., Joppa, L.N., Hamilton, C.M, Helmers, D.P., Plantinga, A.J., and D.J. Lewis. 2015. Scenarios of future land use change around United States' Protected Areas. *Biological Conservation* 184: 446–455.
- Larsen, A.E., MacDonald, A.J., and A.J. Plantinga. 2014. Lyme Disease Risk Influences Human Settlement in the Wildland-Urban Interface: Evidence from a Longitudinal Analysis of Counties in the Northeastern U.S. *American Journal of Tropical Medicine and Hygiene* 91(4):747-755.
- Martinuzzi, S., J. C. Withey, A. M. Pidgeon, A. J. Plantinga, A. A. McKerrow, S. G. Williams, D. P. Helmers, and V. C. Radeloff. 2014. Future land-use scenarios and the loss of wildlife habitat in the southeastern U.S. *Ecological Applications* 25:160–171.
- Lawler, J., Lewis, D., Nelson, E., Plantinga, A.J., Polasky, S., Withey, J., Helmers, D., Martinuzzi, S., and V. Radeloff. 2014. Projected land-use change impacts on ecosystem services in the U.S. *Proceedings of the National Academy of Sciences* 111(20): 7492-7497.
- Hamilton, C.M., W.E. Thogmartin, V.C. Radeloff, A.J. Plantinga, P.J. Heglund, S. Martinuzzi, and A.M. Pidgeon. 2014. Change in agricultural land use constrains adaptation of National Wildlife Refuges to climate change. *Environmental Conservation* 42: 12-19.
- Polasky, S., Lewis, D.J., Plantinga, A.J., and E. Nelson. 2014. Implementing the Optimal Provision of Ecosystem Services. *Proceedings of the National Academy of Sciences* 111(17): 6248-6253.
- Plantinga, A.J., Helvoigt, T.L., and K. Walker. 2014. Critical Habitat for Threatened and Endangered Species: How Should the Economic Costs Be Evaluated? *Journal of Environmental Management* 134: 127-135.

- Dempsey, J.A., and A.J. Plantinga. 2014. How Well Do Urban Growth Boundaries Contain Development? Results for Oregon Using a Difference-in-Difference Estimator. *Regional Science and Urban Economics* 43:996-1007.
- Martinuzzi, S., Januchowski-Hartley, S., Pracheil, B., McIntyre, P., Plantinga, A.J., Lewis, D., and V. Radeloff. 2014. Threats and Opportunities for Freshwater Conservation Under Future Land Use Change Scenarios in the United States. *Global Change Biology* 20(1): 113-124.
- Haim, D., Plantinga, A.J., and E. Thomann. 2014. The Optimal Time Path for Carbon Abatement and Carbon Sequestration Under Uncertainty: The Case of Stochastic Targeted Stock. *Resource and Energy Economics* 36(1): 151-165.
- Nielsen, A.S.B, Plantinga, A.J., and R.J. Alig. 2014. Mitigating Climate Change through Afforestation: New Cost Estimates for the United States. *Resource and Energy Economics* 36(1): 83-98.
- Grout, C., Plantinga, A.J., and W.K. Jaeger. 2014. Pay or Waive: An Economic Assessment of Landowner Compensation Laws in the U.S. *Review of Environmental Economics and Policy* 8(1): 103-119.
- Mason, C.F., and A.J. Plantinga. 2013. The Additionality Problem with Offsets: Optimal Contracts for Carbon Sequestration in Forests. *Journal of Environmental Economics and Management* 66:1-14.
- Kovacs, K., Polasky, S., Nelson, E., Keeler, B., Pennington, D., Plantinga, A.J., and S.J. Taff. 2013. Evaluating the Return in Ecosystem Services from Investment in Public Land Acquisitions. *PLoS ONE* 8(6): e62202. doi:10.1371/journal.pone.0062202
- Martinuzzi, S., V.C. Radeloff, J.V. Higgins, D.P. Helmers, A.J. Plantinga, and D.J. Lewis. 2013. Key Areas for Conserving United States' Biodiversity Likely Threatened by Future Land Use Change. *Ecosphere* 4(5):art58.
- Jaeger, W.K., Plantinga, A.J., Chang, H., Grant, G., Hulse, D., McDonnell, J., Moradkhani, H., Morzillo, A.T., Mote, P., Nolin, A., Santelmann, M., and J. Wu. 2013. Toward a Formal Definition of Water Scarcity in Natural-Human Systems. *Water Resources Research* 49: 1-12.
- Beaudry, F., Radeloff, V.C., Pidgeon, A.M., Plantinga, A.J., Lewis, D.J., Helmers, D., and V. Butsic. 2013. The Loss of Forest Birds Habitats under Different Land Use Policies as Projected by a Coupled Ecological-Econometric Model. *Biological Conservation* 165: 1-9.
- Hamilton, C.M., Martinuzz, S., Plantinga, A.J., Radeloff, V.C., Lewis, D.J., Thogmartin, W.E., Heglund, P.J., and A.M. Pidgeon. 2013. Current and Future Land Use Around a Nationwide Protected Area Network. *PLoS ONE* 8(1): e55737. doi:10.1371/journal.pone.0055737
- Plantinga, A.J., Detang-Dessendre, C., Hunt, G.L., and V. Piguat. 2013. Housing Prices and Inter-urban Migration. *Regional Science and Urban Economics* 43: 296-306.
- Polasky, S., Johnson, K., Keeler, B., Kovacs, K., Nelson, E., Pennington, D., Plantinga, A.J., and J. Withey. 2012. Are Investments to Promote Biodiversity Conservation and Ecosystem Services Aligned? *Oxford Review of Economic*

Policy 28(1): 139-163.

- Withey, J.C., Lawler, J.J., Polasky, S., Plantinga, A.J., Nelson, E.J., Kareiva, P., Wilsey, C.B., Schloss, C.A., Nogeire, T.M., Ruesch, A., Ramos, J., and W. Reid. 2012. Maximising Return on Conservation Investment in the Conterminous USA. *Ecology Letters* 15: 1249-1256.
- Radeloff, V. C., Nelson, E., Plantinga, A.J., Lewis, D.J., Helmers, D., Lawler, J.J., Withey, J.C., Beaudry, F., Martinuzzi, S., Butsic, V., Lonsdorf, E., White, D., and S. Polasky. 2012. Economic-based Projections of Future Land Use under Alternative Economic Policy Scenarios in the Conterminous U.S. *Ecological Applications* 22(3):1036-49.
- Jaeger, W.K., Plantinga, A.J., and C. Grout. 2011. How has Oregon's Land Use Planning System Affected Property Values? *Land Use Policy* 29:62-72.
- Cross, R., Plantinga, A.J., and R.N. Stavins. 2011. The Value of Terroir: Hedonic Estimation of Vineyard Sale Prices. *Journal of Wine Economics* 6(1):1-14.
- Haim, D., Alig, R.J., Plantinga, A.J., and B. Sohngen. 2011. Climate Change and Future Land Use in the United States: An Economic Approach. *Climate Change Economics* 2(1): 27-51.
- Cross, R., Plantinga, A.J., and R.N. Stavins. 2011. What is the Value of Terroir? *American Economic Review Papers and Proceedings* 101(3): 152-56.
- Grout, C.A., Jaeger, W.K., and A.J. Plantinga. 2011. Land-Use Regulations and Property Values in Portland, Oregon: A Regression Discontinuity Design Approach. *Regional Science and Urban Economics* 41:98-107.
- Lewis, D.J., Plantinga, A.J., Nelson, E., and S. Polasky. 2011. The Efficiency of Voluntary Incentive Policies for Preventing Biodiversity Loss. *Resource and Energy Economics* 33(1):192-211.
- Eichman, H., Hunt, G.L., Kerkvliet, J., and A.J. Plantinga. 2010. Local Employment Growth, Migration, and Public Land Policy: Evidence from the Northwest Forest Plan. *Journal of Agricultural and Resource Economics* 35(2):316-333.
- McGough, B., Plantinga, A.J., and C. Costello. 2009. Optimally Managing a Stochastic Renewable Resource under General Economic Conditions. *The B.E. Journal of Economic Analysis and Policy*, Vol. 9, Iss. 1 (Contributions), Article 56.
- Lewis, D.J., Plantinga, A.J., and J. Wu. 2009. Targeting Incentives to Reduce Habitat Fragmentation. *American Journal of Agricultural Economics* 91(4):1080-1096.
- Lubowski, R.N., Plantinga, A.J., and R.N. Stavins. 2008. What Drives Land-Use Changes in the United States? A National Analysis of Landowner Decisions. *Land Economics* 84(4):529-550.
- Nelson, E., Polasky, S., Lewis, D.J., Plantinga, A.J., Lonsdorf, E., White, D., Bael, D., and J.J. Lawler. 2008. Efficiency of Incentives to Jointly Increase Carbon Sequestration and Species Conservation on a Landscape. *Proceedings of the National Academy of Sciences* 105(28):9471-6.
- Plantinga, A.J., and S. Bernell. 2007. The Association Between Urban Sprawl and

- Obesity: Is it a Two-Way Street? *Journal of Regional Science* 47(5):857-879.
- Lewis, D.J., and A.J. Plantinga. 2007. Policies for Habitat Fragmentation: Combining Econometrics with GIS-Based Landscape Simulations. *Land Economics* 83(2):109-127.
- Lubowski, R.N., Plantinga, A.J., and R.N. Stavins. 2006. Land-Use Change and Carbon Sinks: Econometric Estimation of the Carbon Sequestration Supply Function. *Journal of Environmental Economics and Management* 51(2):135-52.
- Plantinga, A.J., and S. Bernell. 2005. A Spatial Economic Analysis of Urban Land Use and Obesity. *Journal of Regional Science* 45(3):473-492.
- van 't Veld, K., and A. Plantinga. 2005. Carbon Sequestration or Abatement? The Effect of Rising Carbon Prices on the Optimal Portfolio of Greenhouse-Gas Mitigation Strategies. *Journal of Environmental Economics and Management* 50(1):59-81.
- Alig, R.J., and A.J. Plantinga. 2004. Future Forestland Area: Impacts from Population Growth and Other Factors that Affect Land Values. *Journal of Forestry* 102(8):19-24.
- Scrogin, D., Boyle, K., Parsons, G., and A.J. Plantinga. 2004. Effects of Regulations on Expected Catch, Expected Harvest, and Site Choice of Recreational Anglers. *American Journal of Agricultural Economics* 86(4):963-974.
- McGough, B., Plantinga, A.J., and B. Provencher. 2004. The Dynamic Behavior of Efficient Timber Prices. *Land Economics* 80(1):95-108.
- Wu, J., Adams, R.M., and A.J. Plantinga. 2004. Amenities in an Urban Equilibrium Model: Residential Development in Portland, Oregon. *Land Economics* 80(1):19-32.
- Wu, J., and A.J. Plantinga. 2003. The Influence of Public Open Space on Urban Spatial Structure. *Journal of Environmental Economics and Management* 46(2):288-309.
- Lewis, D.J., Hunt, G.L., and A.J. Plantinga. 2003. Does Public Lands Policy Affect Local Wage Growth? *Growth and Change* 34(1):64-86.
- Plantinga, A.J., and J. Wu. 2003. Co-Benefits from Carbon Sequestration in Forests: Evaluating Reductions in Agricultural Externalities from an Afforestation Policy in Wisconsin. *Land Economics* 79(1):74-85.
- Plantinga, A.J., Lubowski, R.N., and R.N. Stavins. 2002. The Effects of Potential Land Development on Agricultural Land Prices. *Journal of Urban Economics* 52(3):561-581.
- Plantinga, A.J., and S. Ahn. 2002. Efficient Policies for Environmental Protection: An Econometric Analysis of Incentives for Land Conversion and Retention. *Journal of Agricultural and Resource Economics* 27(1):128-45.
- Lewis, D.J., Hunt, G.L., and A.J. Plantinga. 2002. Public Conservation Land and Employment Growth in the Northern Forest Region. *Land Economics* 78(2):245-59.
- Matthews, S., O'Connor, R., and A.J. Plantinga. 2002. Quantifying the Impacts on

- Biodiversity of Policies for Carbon Sequestration in Forests. *Ecological Economics* 40(1):71-87.
- Ahn, S., Plantinga, A.J., and R.J. Alig. 2002. Determinants and Projections of Land Use in the South Central United States. *Southern Journal of Applied Forestry* 26(2):78-84.
- Plantinga, A.J., and D.J. Miller. 2001. Agricultural Land Values and the Value of Rights to Future Land Development. *Land Economics* 77(1):56-67.
- Plantinga, A.J., and T. Mauldin. 2001. A Method for Estimating the Cost of CO₂ Mitigation Through Afforestation. *Climatic Change* 49:21-40.
- Plantinga, A.J., Alig, R., and H. Cheng. 2001. The Supply of Land from Conservation Uses: Evidence from the Conservation Reserve Program. *Resources, Conservation and Recycling* 31:199-215.
- Parsons, G.R., Plantinga, A.J., and K.J. Boyle. 2000. Welfare Estimation with Narrow Choice Sets in Random Utility Models of Recreation Demand. *Land Economics* 76(1):86-99.
- Ahn, S., Plantinga, A.J., and R.J. Alig. 2000. Predicting Future Forest Land Area: A Comparison of Econometric Approaches. *Forest Science* 46(3):363-76.
- Plantinga, A.J., Mauldin, T., and D.J. Miller. 1999. An Econometric Analysis of the Costs of Sequestering Carbon in Forests. *American Journal of Agricultural Economics* 81(November):812-24.
- Miller, D.J., and A.J. Plantinga. 1999. Modeling Land Use Decisions with Aggregate Data. *American Journal of Agricultural Economics* 81(February):180-194.
- Mauldin, T.E., Plantinga, A.J., and R.J. Alig. 1999. Determinants of Land Use in Maine with Projections to 2050. *Northern Journal of Applied Forestry* 16(2):82-88.
- Plantinga, A.J. 1999. Technological Change is Shaping Operating Strategy in the Maine Pulp-and-Paper Industry. *Maine Management Review* 1(1):16-24.
- Plantinga, A.J. 1998. The Optimal Timber Rotation: An Option Value Approach. *Forest Science* 44(2):192-202.
- Parks, P.J., Hall, D.O., Kristrom, B., Masera, O.R., Moulton, R.J., Plantinga, A.J., Swisher, J.N., and J.K. Winjum. 1997. An Economic Approach to Planting Trees for Carbon Storage. *Critical Reviews in Environmental Science and Technology* 27:S9-S22.
- Plantinga, A.J. 1996. The Effect of Agricultural Policies on Land Use and Environmental Quality. *American Journal of Agricultural Economics* 78(November):1082-1091.
- Heath, L.S., Birdsey, R.A., Row, C., and A.J. Plantinga. 1996. Carbon Pools and Fluxes in U.S. Forest Products. *NATO ASI Series I*(40):271-78.
- Plantinga, A.J., and R.A. Birdsey. 1994. Optimal Forest Stand Management When Benefits are Derived from Carbon. *Natural Resource Modeling* 8(4): 373-387.
- Plantinga, A.J., and R.A. Birdsey. 1993. Carbon Fluxes Resulting from U.S. Private

Timberland Management. *Climatic Change* 23: 37-53.

Birdsey, R.A., Plantinga, A.J., and L.S. Heath. 1993. Past and Prospective Carbon Storage in United States Forests. *Journal of Forest Ecology and Management* 58: 33-40.

Morrisette, P.M., Darmstadter, J., Plantinga, A.J., and M.A. Toman. 1991. Prospects for a Global Greenhouse Gas Accord: Lessons from Other Agreements. *Global Environmental Change*, June: 209-223.

Morrisette, P.M., and A.J. Plantinga. 1991. Global Warming: A Policy Review. *Policy Studies Journal* 19(2): 163-172.

Rosenberg, N., Ince, P., Skog, K.E., and A. Plantinga. 1990. Understanding the Adoption of New Technologies in the Forest Products Industry. *Forest Products Journal* 40(10): 15-22.

Plantinga, A.J., Buongiorno, J., and R.J. Alig. 1990. Determinants of Changes in Non-Industrial Private Timberland Ownership in the United States. *Journal of World Forest Resource Management* 5: 29-46.

Other Publications

Jaeger, W., Plantinga, A.J., Langpap, C., Bigelow, D., and K. Moore. 2017. Water, Economics, and Climate Change in the Willamette Basin, Oregon. Oregon State University Extension Service Publication EM-9157.

Sloggy, M.R., Plantinga, A.J., and G.S. Latta. 2016. Modeling the Adaptation of the Forest Sector to Climate Change: A Coupled Approach. Proceedings of the 2016 Winter Simulation Conference, Arlington, VA, December 11-14, 2016.

Plantinga, A.J., and D.J. Lewis. 2014. Landscape Simulations with Econometric-Based Land-Use Models. In: J.M. Duke and J. Wu, eds., *The Oxford Handbook of Land Economics*. Oxford University Press. pp. 380-401.

Nielsen, A.S.B., Plantinga, A.J., and R.J. Alig. 2013. New Cost Estimates for Carbon Sequestration Through Afforestation in the United States. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, General Technical Report PNW-GTR-888.

Conte, M., Nelson, E., Carney, K., Fissore, C., Olwero, N., Plantinga, A.J., Stanley, B., and T. Ricketts. 2011. Terrestrial Carbon Sequestration and Storage. In: P. Kareiva, H. Tallis, T.H. Ricketts, G.C. Daily, and S. Polasky, eds., *Natural Capital: Theory and Practice of Mapping Ecosystem Service*. Oxford University Press.

Dempsey, J., Plantinga, A.J., and R.J. Alig. 2010. What Explains Differences in the Costs of Carbon Sequestration in Forests? A Review of Alternative Cost Estimation Methodologies. In: R.J. Alig, tech. coord., *Economic Modeling of Effects of Climate Change on the Forest Sector and Mitigation Options: A Compendium of Briefing Papers*. Gen. Tech. Rep. PNW-GTR-833. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.

Alig, R.J., Plantinga, A.J., Haim, D., and M. Todd. 2010. Area Changes in U.S. Forests and Other Major Land Uses, 1982 to 2002, with Projections to 2062. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research

Station, General Technical Report PNW-GTR-815.

- Plantinga, A.J., and K.R. Richards. 2010. International Forest Carbon Sequestration in a Post-Kyoto Agreement. In: Aldy, J.E., and R.N. Stavins, eds. *Post-Kyoto International Climate Policy*. Cambridge University Press.
- Andersson, K.P., Plantinga, A.J., and K.R. Richards. 2009. The National Inventory Approach for International Forest-carbon Sequestration Management. In: Helm, D., and C. Hepburn, eds. *The Economics and Politics of Climate Change*. Oxford University Press.
- Jaeger, W.K., Grout, C., and A.J. Plantinga. 2008. Evidence of the Effects of Oregon's Land Use Planning System on Land Prices. Cambridge, MA: Lincoln Institute of Land Policy Working Paper WPO8WJ1.
- Alig, R.J., and A. Plantinga. 2007. Methods for Projecting Areas of Private Timberland and Forest Cover Types. In Adams, D.M., and R.W. Haynes, *Resource and Market Projections for Forest Policy Development: Twenty-Five Years of Experience with the US RPA Timber Assessment*, Springer.
- Plantinga, A.J., and S. Bernell. 2007. Can Urban Planning Reduce Obesity? The Role of Self-Selection in Explaining the Link between Weight and Urban Sprawl. AAEA Session paper, 2007 ASSA Meeting, published in *Review of Agricultural Economics* 29(3).
- Plantinga, A.J. 2007. The Economics of Conservation Easements. In Ingram, G.K., and Y.-H. Hong, *Land Policies and their Outcomes*, Proceedings of the 2006 Land Policy Conference, Lincoln Institute of Land Policy.
- Jaeger, W.K., and A.J. Plantinga. 2007. How Have Land-Use Regulations Affected Property Values in Oregon? Oregon State University Extension Service, Special Report 1077, June.
- Jaeger, W.K., and A.J. Plantinga. 2007. The Economics Behind Measure 37. Oregon State University, Extension Service publication EM 8925, February.
- Plantinga, A.J., Alig, R.J., Eichman, H., and D.J. Lewis. 2007. Linking Land-Use Projections and Forest Fragmentation Analysis. Res. Pap. PNW-RP-570. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Station. 41 p.
- Bell, K.P., Boyle, K.J., Plantinga, A.J., Rubin, J., and M.F. Teisl. 2006. Objectives and Perspectives. In Bell, K.P., Boyle, K.J., and Rubin, J., eds., *Economics of Rural Land-Use Change*. Ashgate Publishing.
- Segerson, K., Plantinga, A.J., and E.G. Irwin. 2006. Theoretical Background. In Bell, K.P., Boyle, K.J., and Rubin, J., eds., *Economics of Rural Land-Use Change*. Ashgate Publishing.
- Plantinga, A.J., and E.G. Irwin. 2006. Overview of Empirical Methods. In Bell, K.P., Boyle, K.J., and Rubin, J., eds., *Economics of Rural Land-Use Change*. Ashgate Publishing.
- Plantinga, A.J. 2006. An Application of the Land-Use Shares Model. In Bell, K.P., Boyle, K.J., and Rubin, J., eds., *Economics of Rural Land-Use Change*. Ashgate Publishing.

- Lewis, D.J., and A.J. Plantinga. 2005. The Role of Conservation Lands in Regional Economies: The Case of the Northern Forest Region. In Gustanski, J.A., Hollenhorst, S., Harris, C., and Brabec, E., eds., *Advancing the Land Conservation Debate in the New Millennium: Economics, Technology and Policy*, Island Press.
- Lewis, David J., and Andrew J. Plantinga. 2005. "Research Methods to Address the Economics of Forest Habitat Fragmentation." In: Robert L. Deal and Seth M. White, eds., *Understanding Key Issues of Sustainable Wood Production in the Pacific Northwest*, U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, General Technical Report PNW-GTR-626, pp. 36–41.
- Miller, D., and A.J. Plantinga. 2004. Modeling Non-Stationary Markov Chains with Aggregate Data. 2003 Proceedings of the American Statistical Association, Business and Economic Statistics Section [CD-ROM], Alexandria, VA: American Statistical Association: pp. 290-296.
- Alig, R.J., Plantinga, A.J., Ahn, S., and J.D. Kline. 2003. Land Use Changes Involving Forestry in the United States: 1952 to 1997, with Projections to 2050. General Technical Report PNW-GTR-587. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 92 p.
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- Plantinga, A.J., Allen, T.G., and C. Bakker. 2001. An Investigation into the Causes of Urban Sprawl in Maine. University of Maine, Department of Resource Economics and Policy, Staff Paper REP-501.
- Lewis, D., and A.J. Plantinga. 2001. Public Conservation Land and Economic Growth in the Northern Forest Region. Maine Agricultural and Forest Experiment Station Miscellaneous Publication 748.
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- Plantinga, A.J. 1999. The Economics of Land Use: A Bibliography. Maine Agricultural and Forest Experiment Station Miscellaneous Publication 744.
- Plantinga, A.J. 1999. Optimal Harvesting Policies with Stationary and Non-Stationary Prices: An Option Value Approach. In Abildtrup, J., Helles, F., Holten-Andersen, P., Larsen, J.F., and B.J. Thorsen, eds. *Modern Time Series Analysis in Forest Products Markets*. Dordrecht: Kluwer Academic Publishers.

- Allen, T.G., and A.J. Plantinga. 1999. Investigations into the Potential of Measuring Biodiversity in Maine's Forests with Forest Inventory and Analysis (FIA) Data. Maine Agricultural and Forest Experiment Station Technical Bulletin 171.
- Plantinga, A.J., Mauldin, T., and R.J. Alig. 1999. Land Use in Maine: Determinants of Past Trends and Projections of Future Changes. U.S. Forest Service, Pacific Northwest Station Research Paper PNW-RP-511.
- Mauldin, T., Plantinga, A.J., and R.J. Alig. 1999. Land Use in the Lake States Regions: Analysis of Past Trends and Projections of Future Changes. U.S. Forest Service, Pacific Northwest Station Research Paper PNW-RP-519.
- Plantinga, A.J., Alig, R., and H. Cheng. 1999. Supply Functions for Conservation Lands: Estimates for U.S. Regions. University of Maine, Department of Resource Economics and Policy Staff Paper 481.
- Plantinga, A.J., and D.J. Miller. 1999. Agricultural Land Values and Future Land Development. Proceedings of the Keep America Growing Conference, Philadelphia, PA June 6-9, 1999.
- Mauldin, T., and A.J. Plantinga. 1998. An Econometric Analysis of the Costs of Reducing Atmospheric Carbon Dioxide Concentrations Through Afforestation. Proceedings of the World Congress of Environmental and Resource Economics, Venice, Italy, June 25-27, 1998.
- Plantinga, A.J. 1998. Land Use Projections for the United States South: Preliminary Results. University of Maine, Department of Resource Economics and Policy Staff Paper 480.
- Lindahl, J.B., and A.J. Plantinga. 1998. Input Use in Maine's Wood Products Industry. Maine Agricultural and Forest Experiment Station Miscellaneous Publication 740.
- Lindahl, J.B., and A.J. Plantinga. 1997. Time-Series Analysis of Maine Stumpage Prices. Maine Agricultural and Forest Experiment Station Technical Bulletin 168.
- Lindahl, J.B., and A.J. Plantinga. 1997. Forecasts of Maine Stumpage Prices: Results and Applications to Timber Harvesting. REP Staff Paper 474.
- Plantinga, A.J., and D.J. Miller. 1997. Maximum Entropy Estimation of Land Use Shares and Transitions. Maine Agricultural and Forest Experiment Station Technical Bulletin 166.
- Plantinga, A.J. 1996. Forestry Investments and Option Values: Theory and Estimation. Maine Agricultural and Forest Experiment Station Technical Bulletin 161.
- Morrisette, P.M., and A.J. Plantinga. 1991. The Global Warming Issue: Viewpoints of Different Countries. *Resources* 103: 2-6.
- Darmstadter, J., and A.J. Plantinga. 1991. The Economic Cost of CO₂ Mitigation: A Review of Estimates for Selected World Regions, with a Contribution on Forestry by Andrew Plantinga. Discussion Paper ENR91-06. Washington, DC: Resources for the Future.

Morrisette, P.M., Darmstadter, J., Plantinga, A.J., and M.A. Toman. 1990. Lessons from Other International Agreements for a Global CO₂ Accord. Discussion Paper ENR91-03. Washington, DC: Resources for the Future.

Morrisette, P.M., and A.J. Plantinga. 1990. How the CO₂ Issue is Viewed in Different Countries. Discussion Paper ENR91-02. Washington, DC: Resources for the Future.

Lange, W.J., Skog, K.E., Plantinga, A.J., and H. Spelter. 1990. Do Changes in Timber Resources Induce Technological Change? In: Forestry on the Frontier: Proceedings of the National Society of American Foresters Convention, Spokane, WA, September 1989.

Plantinga, A., Buongiorno, J., Alig, R.J., and J.S. Spencer, Jr. 1989. Timberland Area Change in the Lake States: Past Trends, Causes, and Projections. Res. Pap. NC-287. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 17 p.

Plantinga, A.J., Lange, W.J., and K.E. Skog. 1989. Capacity Change in the Forest Products Industry: An Evaluation of Modeling Approaches. In: Proceedings of the Forest Sector Analysis Symposium, Soderfors, Sweden, August 1989.

GRANTS:

Economic Assessment of Land-Based Strategies to Mitigate Climate Change in California (2018). Investigators: Erik Nelson and Andrew Plantinga. Sponsors: Next10, The Natural Conservancy. Amount: \$75,000.

Cattle/Carnivore Coexistence Project (2017). Investigator: Andrew Plantinga. Sponsor: National Geographic Society. Amount: \$44,654

Hazard SEES: Land Management Strategies for Confronting Risks and Consequences of Wildfire (2015-2019). Investigators: Naomi Tague, Ernesto Alvarado, Sarah Anderson, and Andrew Plantinga. Sponsor: National Science Foundation. Amount: \$1,750,000.

Wildfire Management, Ecosystem Dynamics, and Climate: The Role of Risk Salience in Driving Ecological Outcomes (2015-2017). Investigators: Andrew Plantinga and Naomi Tague. Sponsor: National Socio-Environmental Synthesis Center. Amount: \$250,000.

Land-Use Change and Conservation Policy in Brazil and the US for Biodiversity, Ecosystem Services and Economic Returns. Investigators: Joe Fargione, Stephen Polasky, and Andrew Plantinga. Sponsor: National Center for Ecological Analysis and Synthesis (SNAPP). Amount: \$292,190.

Forest Die-off, Climate Change, and Human Intervention in Western North America (2013-2018). Investigators: Philip Mote, Beverly Law, Andrew Plantinga, Heather Lintz. Sponsor: U.S. Department of Agriculture, National Institute of Food and Agriculture. Amount: \$4,000,000.

Graduate Education in the Economics of Mitigating and Adapting to Climate Change: Evaluating Tradeoffs, Resiliency and Uncertainty Using an Interdisciplinary Platform (2012-2014). Investigators: Susan Capalbo, Munisamy Gopinath, Andrew Plantinga, and Bruce Weber. Sponsor: U.S. Department of Agriculture, National Institute of Food and Agriculture. Amount: \$241,000.

Economic Research on Landscape Assessment, Modeling, and Management (2011-2012). Investigators: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific

Northwest Research Station. Amount: \$20,015.

Collaborative Research WSC Category 2: Anticipating water scarcity and informing integrative water system response in the Pacific Northwest (2010-2015).

Investigators: Jeff McDonnell, Philip Mote, Andrew Plantinga, Barbara Bond, John Bolte. Sponsor: National Science Foundation. Amount: \$4,348,693.

Predictions of Econometric and Programming Models of Land-Use Change (2010-2012). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$35,000.

Incentives to Promote Afforestation and Reduce Deforestation: Policy Analysis for Climate Change Mitigation (2009-2012). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$60,000.

Collaborative Research: Integrated Dynamic Modeling of Ecosystem Services – Incentive-Based Policies, Land-Use Decisions, and Ecological Outcomes (2008 - 2011). Investigators: S. Polasky, J. Lawler, E. Lonsdorf, A. Plantinga, V. Radeloff, D. Lewis, D. White. Sponsor: National Science Foundation. Amount: \$1,200,000.

Implications of IPCC Population and Income Scenarios for Land-Use Change in the United States (2008-2011). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$71,358.

Establishing Linkages between Land-Use Projections and the U.S. Forest Assessment System (2008-2010). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$36,000.

Interpretation, Documentation, and Presentation of 2010 Land Projection Results and Scenario Analysis (2007-2010). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$35,847.

National-level Projections of Land Conditions with Applications to Impacts of Climate Change (2007-2010). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$38,000.

The Effect of Land Use Regulations on Land Prices: A Case Study from Oregon (2007). Investigators: William Jaeger and Andrew Plantinga. Sponsor: Lincoln Institute of Land Policy. Amount: \$10,000.

Oregon Land Value Study (2006-2007). Investigators: Andrew Plantinga and William Jaeger. Sponsor: Oregon Community Foundation. Amount: \$85,000.

Economic Assessment of Forest Carbon Sequestration in the U.S. Mountain Region (2005-2009). Investigator: Andrew Plantinga. Sponsor: Montana State University/U.S. Department of Energy. Amount: \$100,000.

Land Condition Projections and Analyses for the 2010 RPA Assessment (2005-2006). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$69,000.

Integration of Land-Use Analyses with Renewable Resource Assessments: A Problem Analysis (2004-2006). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$30,000.

Projecting Forest Fragmentation in the Western United States (2004-2006).
Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$15,000.

Projecting Land-Use Change in the United States for the RPA (Resource Planning Act) Update of the 2000 RPA Assessment (2003-2006). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$25,698.

Economic and Policy Dimensions of Forest Fragmentation (2003-2005). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$20,000.

Land-Use Policies to Address the Fragmentation of Forest Habitat for Wildlife (2003-2005). Investigators: Andrew Plantinga and Raymond O'Connor. Sponsor: U.S. Forest Service, Pacific Northwest Research Station. Amount: \$27,000.

The Effect of Local Land Use Regulations on Farmland Retention (2001- 2003).
Investigators: JunJie Wu and Andrew Plantinga. Sponsor: National Research Initiative Competitive Grants Program. Amount: \$105,000.

Impacts of Large-Scale Afforestation Programs on Wildlife Habitat and Populations (2000-2002). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service, Pacific Northwest Station. Amount: \$25,200.

The Economics of Rural Land-Use Change (1999). Investigators: Kevin Boyle, Andrew Plantinga, Jonathan Rubin, Mario Teisl. Sponsor: Maine Agricultural and Forest Experiment Station. Amount: \$11,000.

Land Use Change and Carbon Sinks: An Econometric Estimation of the Carbon Sequestration Supply Function (1998-2000). Investigators: Robert Stavins and Andrew Plantinga. Sponsor: U.S. Department of Energy. Amount: \$200,000.

A Systems-Based Analysis of Land Use Change (1998-2000). Investigator: Andrew Plantinga. Sponsor: Fund for Rural America. Amount: \$165,000.

An Agricultural Systems Approach to Estimating Land Use Transitions (1997-1999). Investigator: Andrew Plantinga. Sponsor: National Research Initiative Competitive Grants Program. Amount: \$122,975.

Land use projections for the Lake States and Maine (1997-2000). Investigator: Andrew Plantinga. Sponsor: U.S. Forest Service Pacific Northwest Station. Amount: \$50,829.

Using Forest Inventory and Analysis (FIA) Data to Develop Measures of Biodiversity in Maine's Forests (1998). Investigator: Andrew Plantinga. Sponsor: Maine Forest Service. Amount: \$18,747.

One-Time Funding Proposal for Lecture Series (1996). Investigators: Andrew Plantinga and Kevin Boyle. Sponsor: Maine Agricultural and Forest Experiment Station. Amount: \$8000.

Maximum Entropy Estimation of Land Use Transition Probabilities (1996). Investigator: Andrew Plantinga. Sponsor: University of Maine, Summer Faculty Research Fund Award. Amount: \$5000.

SELECTED

Missing the People for the Trees: Elucidating the Role of Human Behavior in the

PRESENTATIONS:

Ecology of Lyme Disease. Invited Speaker, Energy and Environment Forum, Howard H. Baker Center for Public Policy, University of Tennessee.

Saliency and the Government Provision of Public Goods. Paris School of Economics, March 2017; University of Ferrara, Italy, April 2017, Yale University, September 2017, University of Maine, September 2017.

Land-Use Regulations, Property Values, and Rents: Decomposing the Effects of the California Coastal Act. INRA, Dijon, France, April 2017.

Anchored in the Past: Persistent Price Effects of Obsolete Vineyard Ratings in France. Harvard University, John F. Kennedy School of Government, November 2016.

Land Use and Competing Demands in a Global Context. Keynote address at the Land Use 2016 Conference, Edmonton, Alberta, May 4-5, 2016.

Integrated Modeling of the Food, Energy, and Water System. Invited Plenary Session Speaker, Workshop on Coupling Economic Models with Agronomic, Hydrologic, and Bioenergy Models for Sustainable Food, Energy, and Water Systems, Ames, Iowa, October 12-13, 2015.

What is the Value of Terroir?, University of Reims, Wine and Law Program, Reims, France, June 2015.

Land Use and Wildlife Conservation. Keynote address at the Environmental Economics Conference, Copenhagen, Denmark, August 2013.

The Value of Terroir: Hedonic Estimation of Vineyard Sale Prices, University of Puget Sound, Department of Economics, March 2011.

Landscape Simulations with Econometric Land-Use Models. Invited speaker at the workshop "Scale, location, and spatial interactions in the economic analysis of multi-functional natural resources: Lessons for forestry," Nancy, France, September 2010.

Land-Use Planning in Oregon: How Have Property Values Been Affected? Invited speaker at the Alberta Agricultural Economics Association meeting, Red Deer, Alberta, May 2010

The Efficiency of Voluntary Incentive Policies for Preventing Biodiversity Loss, Central Florida University, Department of Economics, February 2008; University of Wyoming, Department of Economics, May 2008; INRA-Paris, December 2008; INRA-Dijon, January 2009; GATE (Lyon), January 2009, INRA-Toulouse, March 2009.

Incentives for Reducing Habitat Fragmentation and Enhancing Carbon Sequestration, U.S. Environmental Protection Agency, Corvallis, August 2007.

Land-Use Change and Carbon Sequestration, Keynote Address at the Workshop on Carbon Sequestration in Agriculture and Forestry, Thessaloniki, Greece, June 27, 2007.

Targeting Incentives to Reduce Habitat Fragmentation, University of California, Santa Barbara, Donald Bren School of Environmental Science and Management, March 2007.

Optimal Reduction of Habitat Fragmentation with Incentive-Based Policies, Iowa

State University, Department of Economics, February 2007.

Planting Trees to Curb Global Warming: Science, Economics, and Recent Policy Developments, Grinnell College, Department of Economics, February 2007.

Are Biodiversity Protections a Boon or Bane for Local Economies? Evidence from the Northwest Forest Plan, Resources for the Future, November 2006.

Land-Use Change and Carbon Sinks: Econometric Estimation of the Carbon Sequestration Supply Function, Stanford University, Department of Economics, October 2005.

The Economic Consequences of Reserving Federal Land for Biodiversity Protection in the U.S. Pacific Northwest, U.S. Department of Agriculture, Economic Research Service, October 2004.

Urban Sprawl and Obesity, Portland State University, Department of Economics; Harvard University, John F. Kennedy School of Government; University of California-Irvine, Graduate School of Management and Department of Planning, Policy, and Design; Seattle University, Department of Economics and Finance, October and November 2003.

The Dynamic Behavior of Efficient Timber Prices, University of Minnesota, Department of Applied Economics, March 2003.

Internal Consistency in Models of Optimal Resource Use Under Uncertainty, University of California-Davis, Department of Agricultural and Resource Economics Seminar, October 2001.

The Determinants of Historical Changes in Farm Size and Farmland Area, Purdue University, Department of Agricultural Economics Seminar, March 2000.

Agricultural Land Values and Future Land Development, Iowa State University, Department of Economics Seminar, August 1998.

Modeling Land Use Decisions with Aggregate Data. Harvard University, John F. Kennedy School of Government and Department of Economics, Environmental Economics and Policy Seminar, February 1998.

Maximum Entropy Estimation of Land Use Shares and Transitions. University of Connecticut, Department of Agricultural and Resource Economics, December 1996.

Optimal Forest Management: An Option Value Approach. University of Colorado, Department of Economics Seminar, September 1996.

**PROFESSIONAL
ACTIVITIES:**

Vice-President, Association of Environmental and Resource Economists (AERE) (2016-2017).

Member, Dissertation Award Committee, Association of Environmental and Resource Economists (AERE) (2015-2017).

Co-Chair, Organizing Committee of the 2015 Association of Environmental and Resource Economists (AERE) Summer Conference.

Member, NSF Coupled Natural Human Systems Program Peer Review Panel, February 2014.

Member, U.S. Environmental Protection Agency, Science Advisory Board, Environmental Economics Advisory Committee (2012-2018).

Member, Association of Environmental and Resource Economists (AERE) Board of

Directors (2011-2013)

Associate Editor, *American Journal of Agricultural Economics* (2008 – 2011).

Editorial Council, *Journal of Environmental Economics and Management* (2006 – 2013).

Publication of Enduring Quality Committee, Association of Environmental and Resource Economists (AERE), Member (2004) and Chair (2005).

Member, NASA Land Cover Land Use Change Peer Review Panel, September 2005.

Member, Organizing Committee of the USDA/USEPA/Agriculture Canada Forestry and Agriculture Greenhouse Gas Modeling Forum, 2002.

Member, U.S. Department of Energy, Integrated Assessment of Global Climate Change Research Peer Review Panel, June 2001.

Selected Papers Topic Leader, American Agricultural Economics Association (2001).

Editorial Council, *Agricultural and Resource Economics Review* (1999-2005).

Chair, Selected Papers Committee, Northeast Agricultural and Resource Economics Association Meetings (1998).

Member, Selected Papers Committee, Northeast Agricultural and Resource Economics Association Meetings (1997).

Member, Association of Environmental and Resource Economists

Member, American Association of Wine Economists