

## *Curriculum Vitae*

### **GEORGE B. FRISVOLD**

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#### **Education**

- Ph.D., 1989     University of California, Berkeley, Agricultural and Resource Economics  
B.S., 1983     University of California, Berkeley, Political Economy of Natural Resources

#### **Professional Experience**

- 2021-         **Bartley P. Cardon Chair of Agribusiness Economics and Policy**, Department of Agricultural & Resource Economics, The University of Arizona, Tucson, AZ  
2002-         **Professor and Extension Specialist**, Department of Agricultural & Resource Economics, The University of Arizona, Tucson, AZ  
1997-2002    **Associate Professor and Extension Specialist**, Department of Agricultural & Resource Economics, The University of Arizona, Tucson, AZ  
1996-97      **Branch Chief**, Resource and Environmental Policy Branch, Natural Resources & Environment Division, Economic Research Service, USDA, Washington, DC  
1995-96      **Senior Economist**, President's Council of Economic Advisers, Executive Office of the President, Washington, DC  
1994          **Lecturer**, Department of Geography and Environmental Engineering, G.W.C. Whiting School of Engineering, The Johns Hopkins University, Baltimore, MD  
1989-95      **Agricultural Economist**, Resources and Technology Division, Economic Research Service, USDA, Washington, DC  
1986-87      **Visiting Research Scholar**, Department of Extension and Technology Transfer, National Institute of Rural Development, Hyderabad, India

#### **Affiliations**

- Climate Assessment for the Southwest
- University of Arizona, Center for Latin American Studies
- University of Arizona, Institute for Energy Solutions
- University of Arizona, Global Change Interdisciplinary Program

## Honors / Awards

- 2024 The article, Norsworthy, Ward, Shaw, Llewellyn, Nichols, Webster, Bradley, **Frisvold**, Powles, Burgos, Witt, Barrett (2012) “Reducing the risks of herbicide resistance: Best management practices and recommendations” is the most cited article in the 58 year history of the journal *Weed Science*, published by the Weed Science Society of America and Cambridge University Press.
- 2019 Fellow, Udall Center for Studies in Public Policy, University of Arizona
- 2017 Cactus and Pine Golf Superintendents Association Service Award (with A. Kerna Bickel and D. Duval) for report *Contribution of the Golf Industry to the Arizona Economy*
- 2015 University of Arizona, College of Agriculture & Life Sciences, Extension Team Award (with A Kerna & D Duval), Economic Impact Assessment Team.
- 2007 Contributed one chapter to *Regulating Agricultural Biotechnology: Economics and Policy*, R.E. Just, J.M. Alston, and D. Zilberman (eds.), winner of the Quality of Communication Award from the American Agricultural Economics Association
- 2007 Award presented by the Intergovernmental Panel on Climate Change for contributing to its award of the 2007 Nobel Peace Prize
- 1997 Society for Technical Communication, Technical Communication Award for Scholarly / Professional Articles for Day, K. and G. Frisvold. Cooperative Research Bolsters War on Cancer. *Forum for Applied Research and Public Policy* 11(1996), 60-64.
- 1996 Letter of appreciation from President William Jefferson Clinton for economic analysis of Everglades restoration policies
- 1992 USDA Economic Research Service Administrator's Special Merit Award for Superior Service for Outstanding Publications on Public Research Investment
- 1992 USDA Certificate of Appreciation for Sustained Superior Performance and Contributions to the Resources and Technology Division
- 1991 USDA Certificate of Merit Award for Extraordinary and Exemplary Performance in the Program of the Resources and Technology Division
- 1991 USDA Certificate of Merit Award for Mentoring Minority Employees
- 1991 USDA Certificate of Merit Award for Staff Analysis

## Service to the Agricultural and Applied Economics Association (AAEA)

- Special Issue Editor (with D. Ervin) on Herbicide Resistance Management, for *Choices*, 2016
- Symposium Organizer (with T. Hurley and P. Mitchell), Herbicide Resistant Weeds and Sustainable Weed Management, AAEA Annual Meeting, 2012
- Co-Editor, *Review of Agricultural Economics*, 2004-9
- AAEA membership committee, 2005-8
- Associate Editor, *American Journal of Agricultural Economics*, 2000-2
- Member AAEA selection committee for Quality of Communications Award, 1999-2001 (recused in 2000 because one of my publications was nominated for award)
- Editorial Board Member, *Choices*, 1998-2000

### **Service to Other Professional Organizations**

- Member, U.S. EPA Pesticide Program Dialogue Committee, Resistance Management Work Group, 2021-present
- Special Issue Guest Editor, *Journal of the American Water Resources Association (JAWRA)*, 2021-22
- Editorial Council, *Journal of Agricultural and Resource Economics*, 2015-2018, 2021-24
- Associate Editor, *Pest Management Sciences* 2016-present
- Associate Editor, *Water Economics & Policy* 2015-present
- Advising Editor, *AgBioForum*, 2004-present
- Weed Science Society of America, Education Committee Member, 2016-present
- President, USDA Multi-State Research Project, NC-1034: Impact Analyses and Decision Strategies for Agricultural Research, 2011-2019
- Conference Organizer, “Alternative Governance Structures for Sustainable Use of Biotechnology.” International Consortium for Agricultural Bioeconomy Research Pre-Conference, 2018
- Grant Panel Manager, USDA AFRI CARE Program, 2017
- Chairperson of the Cotton and Economics Marketing Technical Conference of the Beltwide Cotton Conferences, 2010-11
- Vice-Chair of the Cotton and Economics Marketing Technical Conference of the Beltwide Cotton Conferences, 2009-10
- Member, Western Agricultural Economics Association (WAEA) Selection Committee for 2010 “Outstanding Published Graduate Student or MS Thesis” Award
- Co-Editor, *Journal of Agricultural and Resource Economics*, 2001-3
- Chair, WAEA Selection Committee for 2002 “Outstanding Extension Career in Agricultural Economics” and “Outstanding Extension Program in Agricultural Economics” Awards.

### **Intramural Service**

- Director of Graduate Studies, Department of Agricultural & Resource Economics, University of Arizona (current)
- Member, Committee on Global Change. The Committee administers the University of Arizona's Ph.D. minor on Global Change (current)
- Chair, Advisory Board, The Jimmie S. & Helen F. Hillman Endowment for the Exchange of Scholars, University of Arizona (2010-2021)
- Acting Department Head, Department of Agricultural and Resource Economics, University of Arizona, Fall Semester 2013 and Spring Semester 2024

## Publications

### Books

- [3] NASEM (National Academies of Sciences, Engineering, and Medicine) (2020) *Safeguarding the Bioeconomy*. The National Academies Press: Washington, DC. (Lead author: Chapter 2, Contributing author: Chapters 3 and 4).
- [2] Colby, B & **G Frisvold** (eds.) (2011) *Adaptation and Resilience: The Economics of Climate-Water-Energy Challenges in the Arid Southwest*. Washington, DC: Resources for the Future Press. Volume co-editor and co-author of eight chapters.
- [1] **Frisvold, G** & B Kuhn. (eds.) (1999) *Global Environmental Change and Agriculture*. Northampton, MA: Edward Elgar. 1999.

### Journal Articles

- [89] **Frisvold, G** (2024) Arizona policy responses to water shortage: Can they have an impact? *Choices* (in press).
- [88] **Frisvold, G**, J Atla (2024) Agricultural economic water productivity differences across counties in the Colorado River Basin. *Hydrology* 11, 125.
- [87] **Frisvold, G**, D Duval (2024) Agricultural water footprints and productivity in the Colorado River Basin. *Hydrology* 11, 5.
- [86] **Frisvold, G**, C Agme, D Ervin, J Allen, S Askew, RG Bowling, J Brosnan, M Elmor, T Gannon, J Kaminski, L McCarty, J McCurdy, A. Patton, J Taylor, JB Unruh, M Bagavathiannan (2023) Extension event attendance increases adoption of weed management practices by sports field managers. *Weed Technology* 37, 578-87.
- [85] **Frisvold, G**, L Fernandez, F Lehner, S McAfee, S Megdal, E Payton, J Schmidt, J Vano, C Woodhouse (2022) Featured Collection Introduction: Severe Sustained Drought Revisited: Managing the Colorado River System in Times of Water Shortage 25 Years Later—Part II. *Journal of the American Water Resources Association* 58, 1049-1052
- [84] **Frisvold, G**, L Fernandez, F Lehner, S McAfee, S Megdal, E Payton, J Schmidt, J Vano, C Woodhouse (2022) Featured Collection Introduction: Severe Sustained Drought Revisited: Managing the Colorado River System in Times of Water Shortage 25 Years Later—Part I. *Journal of the American Water Resources Association* 58, 597-784.
- [83] Allen, J, D Ervin, **G Frisvold**, J Brosnan, J McCurdy, R Bowling, A Patton, M Elmore, T Gannon, L McCarty, P McCullough, J Kaminski, S Askew, A Kowalewski, J Unruh, S McElroy, M Bagavathiannan (2022) Herbicide-Resistance in Turf Systems: Insights and Options for Managing Complexity. *Sustainability* 14, 13399.
- [82] Duval, D, A Bickel, **G Frisvold** (2022). Effects of reservoir levels on Arizona national recreation area visitation, visitor spending, and local economies. *Journal of the American Water Resources Association* 58, 622-638.

- [81] Jussaume, R, K Dentzman, **G Frisvold**, D Ervin, M Owen (2022). Factors that influence on-farm decision-making: Evidence from weed management. *Society & Natural Resources* 35, 527-546.
- [80] **Frisvold, G**, S Moss, A Hodgson, M Maxon (2021) Understanding the U.S. bioeconomy: a new definition and landscape. *Sustainability* 13, 1627, <https://doi.org/10.3390/su13041627>
- [79] **Frisvold, G** (2020) The U.S. dairy industry in the 20th & 21st century. *Journal of Food Law & Policy* 16, 197-226.
- [78] Jørgensen; P, C Folke, P Henriksson, K Malmros, M Troell, A Zorzet, A Aktipis, Z Brown, Y Carrière, S Downes, R Dunn, G Epstein, **G Frisvold**, Y Gröhn, G Gujar, D Hawthorne, D Jasovsky, E Klein, F Klein, G Lhermie, D Mota-Sanchez, C Omoto, H Scott, D Wernli, S Carroll, (2020) Coevolutionary governance of antibiotic and pesticide resistance. *Trends in Ecology & Evolution*, 35, 484-494.
- [77] **Frisvold, G**, J Albright, D Ervin, M Owen, J Norsworthy, K Dentzman, T Hurley, R Jussaume, J Gunsolus, and W Everman (2020) Do farmers manage weeds on owned and rented land differently? Evidence from US corn and soybean farms. *Pest Management Science* 76, 2030-2039.
- [76] Bickel, AK, D Duval, **G Frisvold** (2019) Simple approaches to examine economic impacts of water reallocations from agriculture. *Journal of Contemporary Water Research & Education* 168, 29-48.
- [75] **Frisvold G** (2019) How low can you go? Measuring impacts of reduced pesticide use. *Pest Management Science* 75, 1223-1233.
- [74] Ervin, D, E Breshears, **G Frisvold**, T Hurley, K Dentzman, J. Gunsolus, R Jussaume, M Owen, J Norsworthy, M Al Mamun, W Everman (2019) Farmer attitudes toward cooperative approaches to herbicide resistance management: A common pool ecosystem service challenge. *Ecological Economics* 157, 237-245.
- [73] Jørgensen, P, A Aktipis, Z Brown, Y Carrière, Sharon Downes, R Dunn, G Epstein, **G Frisvold**, D Hawthorne, Y Gröhn, G Gujar, D Jasovský, E Klein, F Klein, G Lhermie, D Mota-Sanchez, C Omoto, M Schlüter, H Scott, D Wernli, S Carroll (2018) Dynamics of antibiotic and pesticide susceptibility and the Anthropocene operating space. *Nature Sustainability* 1, 632-641.
- [72] Duval, D, A Bickel, **G Frisvold** (2018) Farm to school programs' local foods activity in Southern Arizona: A case study. *Journal of Agriculture, Food Systems, and Community Development* 8, 53-72.
- [71] **Frisvold, G**, C Sanchez, N Gollehon, S Megdal, P Brown (2018) Evaluating gravity flow irrigation, with lessons from Yuma, Arizona, USA. *Sustainability* 10, 1548; <https://doi.org/10.3390/su10051548>.
- [70] **Frisvold, G** (2018). A weed management game: A teaching tool. *Pest Management Science* 74, 2376-2382.

- [69] Davis, A & **G Frisvold** (2017). Are herbicides a once in a century method of weed control? *Pest Management Science* 73, 2209-2220.
- [68] Duval, D, A Kerna, **G Frisvold**, K Umeda (2017) Water conservation and Cooperative Extension turfgrass programs in the Desert Southwest. *Golf Course Management*, August 2017, 74-77.
- [67] Barrett, M, D Ervin, **G Frisvold**, R Jussaume, D Shaw, S Ward (2017). A wicked view. *Weed Science* 65, 441-443.
- [66] **Frisvold, G**, M Bagavathiannan, J Norsworthy (2017) Positive and normative modeling for Palmer amaranth control and herbicide resistance management. *Pest Management Science* 73, 1110-1120.
- [65] Ervin, D, **G Frisvold** (2016) Are community-based approaches to manage herbicide resistance wisdom or folly? *Choices* 4<sup>th</sup> Quarter, 31, 1- 4.
- [64] Ervin, D, **G Frisvold, G**, D Ervin (2016) Theme overview: Herbicide resistance management, *Choices* 4<sup>th</sup> Quarter, 31, 1- 8.
- [63] Ervin, D, **G Frisvold** (2016) Community-based approaches to herbicide resistant weed management: Lessons from science and practice. *Weed Science* 64, 609-626.
- [62] **Frisvold, G**, T Bai (2016) Irrigation technology choice as adaptation to climate change in the western U.S. *Journal of Contemporary Water Research & Education* 158, 62-77.
- [61] Hurley, T, **G Frisvold** (2016) Economic barriers to herbicide resistance management. *Weed Science* 64, 585-594.
- [60] Livingston, M, J Fernandez-Cornejo & **G Frisvold** (2016) Economic returns to herbicide resistance management in the short and long run: The role of neighbor effects. *Weed Science* 64, 595-608.
- [59] Pannell, D, P Tillie, E Rodriguez-Cerezo, D Ervin, **G Frisvold** (2016) Herbicide resistance: Economic and environmental challenges *AgBioForum* 19, 136-155.
- [58] Dong, F, P Mitchell, T Hurley, **G Frisvold** (2016) Quantifying adoption intensity for weed resistance management practices and its determinants among U.S. soybean, corn, and cotton farmers. *Journal of Agricultural and Resource Economics* 41, 42-61.
- [57] **Frisvold, G** (2015) Water, agriculture, and drought in the West under changing climate and policy regimes. *Natural Resources Journal* 55, 293-328.
- [56] **Frisvold, G**, J Reeves (2015) Genetically modified crops: International trade and trade policy effects. *International Journal of Food and Agricultural Economics* 3, 1-13.
- [55] Kerna, A, **G Frisvold**, L Jacobs, V Farrell, L Houtkooper, S Misner (2015) Application of IMPLAN to extension programs: Economic impacts of the University of Arizona Cooperative Extension SNAP-Ed spending. *Journal of Extension* 53, 1-4, Article # 6TOT4.

- [54] Naranjo, S, P Ellsworth, **G Frisvold** (2015) Economic value of biological control in integrated pest management of managed plant systems. *Annual Review of Entomology* 60, 621-645.
- [53] Bark, R, **G Frisvold**, K Flessa (2014) The role of economics in transboundary restoration water management in the Colorado River Delta. *Water Resources and Economics* 8, 43-56.
- [52] **Frisvold, G** (2014) Overview of the special issue in honor of Jimmie S. Hillman. *AgBioForum* 17, 1-3.
- [51] Büyüktaktın, İE, Z Feng, AD Olsson, **G Frisvold**, & Ferenc Szidarovszky (2014) Invasive species control optimization as a dynamic spatial process: An application to buffelgrass (*Pennisetum ciliare*) in Arizona. *Invasive Plant Science and Management* 7, 132-146.
- [50] Büyüktaktın, İE, Z Feng, **G Frisvold**, & F Szidarovszky (2013) Invasive species control based on a cooperative game. *Applied Mathematics* 4, 54-59.
- [49] **Frisvold, G** & S Deva (2013) Climate and choice of irrigation technology: implications for climate adaptation. *Journal of Natural Resources Policy Research* 5, 107-127.
- [48] **Frisvold, G** & K Konyar (2013) Climate change mitigation policies: Implications for agriculture and water resources. *Journal of Contemporary Water Research and Education* 150, 27-42.
- [47] **Frisvold, G** & T Marquez (2013) Water requirements for large-scale solar energy projects in the West. *Journal of Contemporary Water Research and Education* 150, 106-116.
- [46] **Frisvold, G** & A Murugesan (2013) Use of weather information for agricultural decision making. *Weather, Climate & Society* 5, 55-69.
- [45] Norman, L, M Villarreal, R Niraula, T Meixner, **G Frisvold**, W Labiosa (2013) Framing scenarios of binational water policy with a tool to visualize, quantify and value changes in ecosystem services. *Water* 5, 852-874.
- [44] **Frisvold, G** & S Deva (2012) Farm size, irrigation practices, and conservation program participation in the US Southwest. *Irrigation and Drainage* 61, 569-582.
- [43] **Frisvold, G** & K Konyar (2012) Less water: How will agriculture in southern Mountain states adapt? *Water Resources Research* 48, W05534, doi:10.1029/2011WR011057.
- [42] Norsworthy, J, S Ward, D Shaw, R Llewellyn, R Nichols, T Webster, K Bradley, **G Frisvold**, S. Powles, N Burgos, W Witt, M Barrett (2012) Reducing the risks of herbicide resistance: Best management practices and recommendations. *Weed Science* 60, 31-62.
- [41] Büyüktaktın, İE, Z Feng, **G Frisvold**, F Szidarovszky, A Olsson (2011) A dynamic model of controlling invasive species. *Computers & Mathematics with Applications* 62, 326-3333.
- [40] **Frisvold, G**, & J Reeves (2010) Resistance management and sustainable use of agricultural biotechnology. *AgBioForum* 13, 343-359.
- [39] Thompson, G, S Aradhyula, **G Frisvold**, R Tronstad (2010) Does paying referees expedite reviews? Results of a natural experiment. *Southern Economic Journal* 76, 678-692.

- [38] **Frisvold, G, A. Boor, J Reeves** (2009) Simultaneous diffusion of herbicide resistant cotton and conservation tillage. *AgBioForum* 12, 249-257.
- [37] **Frisvold, G., T Hurley, P Mitchell** (2009) Adoption of best management practices to control weed resistance by corn, cotton, and soybean growers. *AgBioForum* 12, 370-381.
- [36] **Frisvold, G, T Hurley, P Mitchell** (2009). Overview: Herbicide resistant crops—diffusion, benefits, pricing, and resistance management. *AgBioForum* 12, 244-248.
- [35] Hurley, T, P Mitchell, **G Frisvold** (2009) Characteristics of herbicides and weed-management programs most important to corn, cotton, and soybean growers. *AgBioForum* 12, 269-280.
- [34] Hurley, T, P Mitchell, **G Frisvold** (2009) Effects of weed resistance concerns and resistance management practices on the value of Roundup Ready® crops. *AgBioForum* 12, 291-302.
- [33] Innes, R & **G Frisvold** (2009) The Economics of endangered species. *Annual Review of Resource Economics* 1, 485-512.
- [32] **Frisvold, G & K Day-Rubenstein** (2008) Bioprospecting and biodiversity conservation: What happens when discoveries are made? *Arizona Law Review* 50, 545-576.
- [31] **Frisvold, G & J Reeves** (2008) The costs and benefits of refuge requirements: The case of Bt cotton. *Ecological Economics* 65, 87-97.
- [30] **Frisvold, G, J Reeves, R Tronstad** (2006) Bt cotton adoption in the United States and China: International trade and welfare effects. *AgBioForum* 9, 69-78.
- [29] Huffman, W, G Norton, G. Traxler, **G. Frisvold, J Foltz** (2006) Winners and losers: Formula versus competitive funding of agricultural research. *Choices* 24, 269-274.
- [28] **Frisvold, G, J Reeves, R Tronstad** (2006) Bt Cotton Adoption in the United States and China: International Trade and Welfare Effects. *AgBioForum* 9, 69-78.
- [27] **Frisvold G** (2004) How federal farm programs affect water use, quality, and allocation among sectors. *Water Resources Research* 40, W12S05.
- [26] Day-Rubenstein, K, P Heisey, C Klotz-Ingram, **G Frisvold** (2003) Competitive grants and the funding of agricultural research in the U.S. *Review of Agricultural Economics* 25, 352-368.
- [25] **Frisvold, G, J Sullivan, A Ranases** (2003) Genetic improvements in major U.S. crops: The size and distribution of benefits. *Agricultural Economics* 28, 109-199.
- [24] **Frisvold, G & D Osgood** (2002) Ambos Nogales: A tale of two cities and water management on the U.S.-Mexico Border. *Journal of Law and Border Studies* 2, 7-36.
- [23] Day-Rubenstein, K & **G Frisvold** (2001) Genetic prospecting and biodiversity development agreements. *Land Use Policy* 18, 205-219.
- [22] **Frisvold, G, K Femicola, M Langworthy** (2001) Market returns, infrastructure and the supply and demand for extension services. *American Journal of Agricultural Economics* 83, 758-763.



- [21] **Frisvold, G** & D Osgood (2001) Financing wastewater collection and treatment on the U.S.-Mexico border. *Water Resources Update* 121, 40-49.
- [20] Day-Rubenstein, K, M Stuart, **G Frisvold** (2000) Agricultural land use in tropical countries: Patterns, determinants, and implications for biodiversity loss. *World Resources Review* 12, 621-650.
- [19] **Frisvold, G** (2000) Data, information, and rural environmental policy: What will the next ten years bring? *Review of Agricultural Economics* 22, 238-45.
- [18] **Frisvold, G** & M Caswell (2000) Transboundary water management: Game-theoretic lessons for projects on the U.S.-Mexico border. *Agricultural Economics* 24, 101-111.
- [17] **Frisvold, G**, J Sullivan, A Ranases (1999) Who benefits from genetic improvements in U.S. crops? *AgBioForum* 2, 226-35.
- [16] **Frisvold, G** & P Condon (1998) The Convention on Biological Diversity and agriculture: Implications and unresolved debates. *World Development* 26, 551-70.
- [15] Winters, P, R Murgai, A de Janvry, E Sadoulet, **G Frisvold** (1998) Economic and welfare impacts of climate change on developing countries. *Environmental and Resource Economics* 12, 1-12.
- [14] **Frisvold, G**, K Fuglie, C Klotz-Ingram (1998) Growth of private agricultural research. *Choices* 13, 22-3.
- [13] Day, K & **G Frisvold** (1996) Cooperative research bolsters war on cancer. *Forum for Applied Research & Public Policy* 11, 60-64.
- [12] Larson, B & **G Frisvold** (1996) Fertilizer use in Sub-Saharan Africa: What is needed and why. *Food Policy* 21, 509-525.
- [11] Larson, B & **G Frisvold** (1996) Uncertainty over future environmental taxes: Impacts on current investment in resource conservation. *Environmental & Resource Economics* 8, 461-471.
- [10] **Frisvold, G** & P Condon (1995) The Convention on Biological Diversity: Implications for agriculture. *Technological Forecasting & Social Change* 50, 41-54.
- [9] **Frisvold, G** & K Ingram (1995) Sources of agricultural productivity growth and stagnation in Sub-Saharan Africa. *Agricultural Economics* 13, 51-61.
- [8] Westenbarger, D & **G Frisvold** (1995) Air pollution and farm-level crop yields: An empirical analysis of corn and soybeans. *Agricultural & Resource Economics Review* 24, 156-165.
- [7] **Frisvold, G** (1994) Does supervision matter? Some hypothesis tests using Indian farm-level data. *Journal of Development Economics* 43, 217-238.
- [6] **Frisvold, G** & P Condon (1994) Biodiversity conservation and biotechnology development agreements. *Contemporary Economic Policy* 12, 1-9.
- [5] Westenbarger, D & G Frisvold (1994) Agricultural exposure to ozone and acid precipitation. *Atmospheric Environment* 28, 2895-2907.

- [4] Day, K & **G Frisvold** (1993) Medical research and genetic resources management: The case of taxol. *Contemporary Policy Issues* 11, 1-11.
- [3] Day, K & **G Frisvold** (1993) What happened to natural resources and environmental research in the US? *Evolutionary Trends in Plants* 1, 1-4.
- [2] **Frisvold, G** (1991) Emerging issues in the allocation of public agricultural research funds. *American Journal of Agricultural Economics* 73, 876-881.
- [1] **Frisvold, G**, R Mines & J Perloff (1988) Effects of job site sanitation and living conditions on the health and welfare of agricultural workers. *American Journal of Agricultural Economics* 70, 873-885.

#### Chapters in Books and Monographs

- [38] Cingiz, K, H Chavarria, J Ecuru, G Frisvold, M Kardung, J Wesseler (2024). Perspectives on bioeconomy policies. In *Encyclopedia of Energy, Natural Resource, and Environmental Economics*, 2<sup>nd</sup> Edition. T Ancev (ed.) Elsevier (in press).
- [37] **Frisvold, G** (2023) Bioprospecting and incentives for biodiversity conservation: Lessons from the history of paclitaxel. In *Sustainable Resource Development in the 21st Century - Essays in Memory of Peter Berck*. D Zilberman, JM Perloff, C Berck (eds.) New York: Springer Nature.
- [36] Bickel, AK, D Duval, **G Frisvold** (2020) Paying for prevention: Evaluating Arizona rancher spending to avoid or reduce livestock conflicts with the Mexican gray wolf. In *Proceedings of the Vertebrate Pest Conference*. DM Woods (ed.) Paper No. 11, Volume 29.
- [35] **Frisvold, G** (2019) Economic assessment of IPM implementation. In *Integrated Management of Insect Pests: Current and Future Developments*. M Kogan, EA Heinrichs (eds.) Cambridge: Burley Dodds.
- [34] Naranjo, S, **G Frisvold**, P Ellsworth (2019) Economic value of arthropod biological control. In *The Economics of Integrated Pest Management of Insects*. D Onstad, P Crain (eds.) Wallingford, UK: CABI.
- [33] Konyar, K, **G Frisvold** (2019). Climate policies as water policies. In *Applied Methods for Agriculture and Natural Resource Management: A Festschrift in Honor of Richard Howitt*. S Msangi, D MacEwan (ed). New York: Springer Verlag.
- [32] **Frisvold, G** & M Caswell (2018). Transboundary water management: Game-theoretic lessons for projects on the U.S- Mexico border. In *Economics of Water Resources: Institutions, Instruments and Policies for Managing Scarcity*. M Renwick (ed.) London: Routledge.
- [31] **Frisvold, G** & S Deva (2016) Climate and choice of irrigation technology: implications for climate adaptation. In *Climate Variability and Water Dependent Sectors: Impacts and Potential Adaptations*. D Peck, J Peterson (eds.) London: Routledge.

- [30] Colby, B, **G Frisvold** & M Mealy (2015) Reallocating climate risks through water trading. In *Routledge Handbook of Water Economics and Institutions*. K Burnett, R Howitt, J Roumasset, C Wada (eds.) London: Routledge.
- [29] **Frisvold, G** (2014) Herbicide resistant crops. In *Encyclopedia of Food and Agricultural Ethics*. P Thompson & D Kaplan (eds.) Dordrecht, The Netherlands: Springer.
- [28] **Frisvold, G** & J Reeves (2014) Aggregate effects: Adopters and non-adopters, consumers, and investors. In *Handbook on Agriculture, Biotechnology and Development*. S Smyth, P Phillips, & D Castle (eds.) Cheltenham, UK: Edward Elgar Publishing.
- [27] **Frisvold, G** & J Reeves (2014) Herbicide resistant crops and weeds: Implications for herbicide use and weed management. In *Integrated Pest Management: Pesticide Problems, Vol. 3*. D Pimentel & R Peshin (eds.) Dordrecht, The Netherlands: Springer.
- [26] **Frisvold, G** & J Reeves (2014) IPM, Bt crops, and insecticide use: The U.S. experience. In *Integrated Pest Management: Experiences with Implementation, Vol. 4*. R Peshin & D Pimentel (eds.) Dordrecht, The Netherlands: Springer.
- [25] **Frisvold, G**, L Jackson, J Pritchett, & J Ritten (2013) Agriculture and ranching. In *Assessment of Climate Change in the Southwest United States: A Report Prepared for the National Climate Assessment*, G Garfin, A Jardine, R Merideth, M Black, & S LeRoy (eds.) Report by the Southwest Climate Alliance. Washington, DC: Island Press.
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