

Graham Epstein

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Orlando, FL 32816-1356

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EDUCATION

Indiana University, Bloomington, IN

Ph.D., 2015. Public Policy

Dissertation: Collective action and institutional fit

Committee: Michael McGinnis (Chair), Burney Fischer, Sergio Fernandez, Daniel Cole, Eric Coleman

University of Guelph, Guelph, ON, Canada

M.Sc. 2008. International Rural Planning and Development.

Thesis: Compliance and fisheries co-management

Committee: John FitzGibbon, John Devlin

University of Waterloo, Waterloo, ON, Canada

B.Sc. 2006. Honours Ecology and Environmental Biology

PUBLICATIONS

Cox, M., S. Villamayor-Tomas, N.C. Ban, **G. Epstein**, L. Evans, F. Fleischman, M. Nenadovic, G.A.G. Lopez, P.F. van Laerhoven, C. Meek and I.P. Ibarra. 2020. From concepts to comparisons: A resource for diagnosis and measurement in social-ecological systems. *Environmental Science & Policy*, 107, pp.211-216.

Cumming, G. S., and **G. Epstein**. 2020. Landscape sustainability and the landscape ecology of institutions. *Landscape Ecology*.

Andrews, E. J., S. Harper, T. Cashion, J. Palacios-Abrantes, J. Blythe, J. Daly, S. Eger, C. Hoover, N. Talloni-Alvarez, L. Teh, N. Bennett, **G. Epstein**, C. Knott, S. L. Newell, and C. K. Whitney. 2020. Supporting early career researchers: insights from interdisciplinary marine scientists. *ICES Journal of Marine Science*.

Blythe, J., D. Armitage, G. Alonso, D. Campbell, A. C. E. Dias, **G. Epstein**, M. Marschke, and P. Nayak. 2019. Frontiers in coastal well-being and ecosystem services research: A systematic review. *Ocean & Coastal Management*:105028.

Drescher, M., **G. Epstein**, K. Warriner, R. Rooney. 2019. An investigation of the effects of conservation incentive programs on management of invasive species by private landowners. *Conservation Science and Practice*, p.e56.

Oberlack, C., D. Sietz, E. Bürgi, A.C. Brémond, J. Dell'Angelo, K. Eisenack, E. Ellis, **G. Epstein**, M. Giger, A. Heinemann and C. Kimmich. 2019. Archetype analysis in sustainability research: meanings, motivations, and evidence-based policy making. *Ecology and Society*, 24(2).

Eisenack, K., S. Villamayor-Tomas, **G. Epstein**, C. Kimmich, N. Magliocca, D. Manuel-Navarrete, C. Oberlack, M. Roggero, and D. Sietz. 2019. Design and quality criteria for archetype analysis. *Ecology and Society*, 24(3).

Cole, D., **G. Epstein**, and M. McGinnis. 2019. The Utility of Combining the IAD and SES Frameworks. *International Journal of the Commons*, 13(1).

Carrière, Y., Z.S. Brown, S.J. Downes, G. Gujar, **G. Epstein**, C. Omoto, N.P. Storer, D. Mota-Sanchez, P.S. Jørgensen, and S.P. Carroll. 2019. Governing evolution: A socioecological comparison of resistance management for insecticidal transgenic Bt crops among four countries. *Ambio*, pp.1-16.

- Jørgensen, P. S., A. Aktipis, Z. Brown, Y. Carrière, S. Downes, R. R. Dunn, **G. Epstein**, G. B. Frisvold, D. Hawthorne, Y. T. Gröhn, G. T. Gujar, D. Jasovský, E. Y. Klein, F. Klein, G. Lhermie, D. Mota-Sanchez, C. Omoto, M. Schlüter, H. M. Scott, D. Wernli, and S. P. Carroll. 2018. Antibiotic and pesticide susceptibility and the Anthropocene operating space. *Nature Sustainability* 1:632-641.
- Bennett, A., L. Acton, **G. Epstein**, R. Gruby, and M. Nenadovic. 2018. Embracing conceptual diversity to integrate power and institutional analysis: Introducing a relational typology. *International Journal of the Commons* 12(2) 330-357.
- Epstein, G.**, E. Andrews, D. Armitage, P. Foley, J. Pittman, and R. Brushett. 2018. Human dimensions of ecosystem-based management: Lessons in managing trade-offs from the Northern Shrimp Fishery in Northern Peninsula, Newfoundland. *Marine Policy* 97: 10-17.
- Davies, T.E., **G. Epstein**, S. E. Aguilera, C. Brooks, M. Cox, L. S. Evans, S. M. Maxwell, and M. Nenadovic and N.C. Ban, N.C. 2018. Assessing trade-offs in large marine protected areas. *PloS One*, 13(4), p.e0195760.
- Alexander, S.M., **G. Epstein**, Ö Bodin, D. Armitage, and D. Campbell. 2018. Participation in planning and social networks increase social monitoring in community-based conservation. *Conservation Letters*, p.e12562
- Jupiter, S. D., **G. Epstein**, N. C. Ban, S. Mangubhai, M. Fox, and M. Cox. 2017. A Social–Ecological Systems Approach to Assessing Conservation and Fisheries Outcomes in Fijian Locally Managed Marine Areas. *Society & Natural Resources*:1-16.
- Ban, N. C., T. E. Davies, S. E. Aguilera, C. Brooks, M. Cox, **G. Epstein**, L. S. Evans, S. M. Maxwell, and M. Nenadovic. 2017. Social and ecological effectiveness of large marine protected areas. *Global Environmental Change* 43:82-91.
- Epstein, G.** 2017. Local rulemaking, enforcement and compliance in state-owned forest commons. *Ecological Economics* 131:312-321.
- Bennett, N. J., R. Roth, S. C. Klain, K. Chan, P. Christie, D. A. Clark, G. Cullman, D. Curran, T. J. Durbin, **G. Epstein**, A. Greenberg, M. P. Nelson, J. Sandlos, R. Stedman, T. L. Teel, R. Thomas, D. Veríssimo, and C. Wyborn. 2017. Conservation social science: Understanding and integrating human dimensions to improve conservation. *Biological Conservation* 205: 93-108.
- Bennett, N., R. Roth S.C. Klain, K.M.A. Chan, D.A. Clark, G. Cullman, **G. Epstein**, M.P. Nelson, R. Stedman, T.L. Teel, R.E.W. Thomas, C. Wyborn, D. Verissimo, D. Currans, J. Sandlos, A. Greenberg. 2016. Mainstreaming the social sciences in conservation. *Conservation Biology* 31: 56-66.
- Cox, M., S. Villamayor-Tomas, **G. Epstein**, L. Evans, N. Ban, F. Fleischman, M. Nenadovic, and G. Garcia-Lopez. 2016. Synthesizing theories of natural resource management and governance. *Global Environmental Change* 39: 45-56.
- Nenadovic, M., and **G. Epstein**. 2016. The relationship of social capital and fishers' participation in multi-level governance arrangements. *Environmental Science & Policy* 61: 77-86.
- Ramcilovic-Suominen, S. and **G. Epstein**. 2015. The Impacts of deterrence, social norms and legitimacy on forest rule compliance in Ghana. *Forest Policy and Economics*, 55, 10-20.
- Epstein, G.**, J. Pittman, S. Alexander, S. Berdej, T. Dyck, U. Kreitmair, S. Villamayor-Tomas, K. Rathwell, and D. Armitage. 2015. Institutional fit and the sustainability of social-ecological systems. *Current Opinion in Environment and Sustainability* 14: 34-40.
- Cumming, G., D. Cumming, K. Maciejewski, M. Nenadovic, K. Kotschy, **G. Epstein**, H. Biggs, C. Moore, N. Ban, A. de Vos, M. Etienne, R. Mathevet, C. Allen, D. Biggs, M. Schoon. 2015. Understanding protected areas resilience: A multi-scale social-ecological framework. *Ecological Applications* 25(2): 299-319.

- Vogt, J.M., **G. Epstein**, S.K. Mincey, B.C. Fischer, and P. McCord. 2015. Putting the “E” in SES: Unpacking the ecology in the social-ecological systems framework. *Ecology and Society* 20(1).
- Villamayor-Tomas, S., P. Grundmann, **G. Epstein**, T. Evans, and C. Kimmich. 2015. The water-energy-food security nexus through the lenses of the IAD framework and value chain analysis. *Water Alternatives* 8 (1): 735-755.
- Farmer, J. R., **G. Epstein**, S. L. Watkins, and S. K. Mincey. 2014. Organic farming in West Virginia: A behavioral approach. *Journal of Agriculture, Food Systems, and Community Development* 4 (4): 155-171.
- Epstein, G.**, M. Nenadovic, and A. Boustany. 2014. Into the deep blue sea: Commons theory and international governance of Atlantic Bluefin Tuna. *International Journal of the Commons* 8 (2): 277-303.
- Epstein, G.**, C. Meek, I. Perez., and M. Schoon. 2014 Governing the invisible commons: ozone regulation and the Montreal Protocol.. *International Journal of the Commons* 8 (2): 337-360.
- Fleischman, F.D., N. C. Ban, L.S. Evans, **G. Epstein**, G. Garcia-Lopez, and S. Villamayor-Tomas. 2014. Governing large-scale social-ecological systems: lessons from a comparison of five cases. *International Journal of the Commons* 8(2): 428-456.
- Cole, D. H., **G. Epstein**, and M. D. McGinnis. 2014. Digging deeper into Hardin's pasture: the complex institutional structure of ‘the tragedy of the commons’. *Journal of Institutional Economics* 10 (3): 353-369.
- Epstein, G.**, J.M. Vogt, M. Cox, and L. Shimek. 2014. Confronting problems of method in the study of sustainability. *Forest Policy and Economics* 42: 42-50.
- Epstein, G.**, J.M. Vogt, S.K. Mincey, M. Cox, and B.C. Fischer. 2013. Missing ecology: integrating ecological perspectives with the social-ecological systems framework. *International Journal of the Commons* 7 (2): 432-453.
- Ramcilovic-Suominen, S. and **G. Epstein**. 2012. Towards an analytical framework for forest law compliance *International Forestry Review* 14(3):326-336.

BOOK CHAPTERS

- Epstein, G.**, A. Bennett, R. Gruby, L. Acton, and M. Nenadovic. 2014. Studying Power with the Social-Ecological System Framework. In *Understanding Society and Natural Resources*, eds. M. J. Manfredo, J. J. Vaske, A. Rechkemmer and E.A. Duke: Springer Netherlands. 111-135.

WORK EXPERIENCE

- | | |
|--|---------|
| Postdoctoral Research Associate, School of Politics, Security and International Affairs and Coastal Systems Cluster, University of Central Florida | 2020- |
| Sessional Instructor, ERS 701, Complexity and Sustainability in Social-Ecological Systems, School of Environment, Resources and Sustainability, University of Waterloo | 2019 |
| Policy Development Internship, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) | 2017-19 |
| Co-Instructor, ERS 375, Coastal Social-Ecological Systems, School of Environment, Resources and Sustainability, University of Waterloo | 2016 |
| SSHRC Postdoctoral Associate, School of Environment, Resources and Sustainability, University of Waterloo. | 2015- |
| Associate Instructor, SPEA E162, Environment and People. School of Public and Environmental Affairs, Indiana University. | 2014 |
| Research Assistant to Dr. Tom Evans. Community Adaptation and Vulnerability in Arctic Regions (CAVIAR) II. Ostrom Workshop in Political Theory and Policy Analysis, Indiana University | 2012-13 |

Research Assistant to Dr. Elinor Ostrom. Defining the social-ecological system framework. Ostrom Workshop in Political Theory and Policy Analysis, Indiana University	2011-12
Teaching Assistant. Tourism and Recreation Planning. School of Environmental Design and Rural Development, University of Guelph.	2007

GRANTS, FELLOWSHIPS, & AWARDS

York University, Data Analysis and Report Contract (\$4,500)	2019
York University, Data Analysis Contract (\$500)	2019
Food and Agricultural Organization of the United Nations (FAO), Institutional Analysis of Social-Ecological Systems Report Grant (US\$5,000)	2018
Food and Agricultural Organization of the United Nations (FAO), Workshop Travel Grant (~\$2,000)	2018
Socio-Environmental Synthesis Center (SESYNC) Pursuit (~US\$200,000) Co-PI: Dr. Graeme Cumming	2017-18
SSHRC Insight Development Grant (\$71,000) PI: Derek Armitage	2017-18
World Wildlife Foundation, Capelin Workshop Travel Grant (~\$1,200)	2017
Social Sciences and Humanities Research Council of Canada, Postdoctoral Fellowship (\$81,000)	2016-17
Socio-Environmental Synthesis Center (SESYNC) Graduate Student Workshop (~\$50,000)	2016
Elinor Ostrom Prize (£1000), Best paper 2014, Journal of Institutional Economics	2015
David and Lucille Packard Foundation, (\$80,000) Co-applicant with PI's Dr. Natalie Ban, Dr. Michael Cox, and Dr. Stacy Jupiter	2015
Canadian Wildlife Federation, Workshop Travel Grant (\$1100)	2014
International Congress of Arctic Social Sciences Conference Travel Grant (\$500)	2014
Resilience Alliance, Conference Travel Grant (€550)	2014
Ostrom Workshop Graduate Student Research Grant (\$3155)	2014
Ostrom Memorial Award, Most Innovative Paper, International Journal of the Commons (€250)	2014
Vincent and Elinor Ostrom Workshop in Political Theory and Policy Analysis, Indiana University. Conference Travel Grant (\$800)	2013
School of Public and Environmental Affairs (SPEA), Indiana University. Conference Travel Grant (\$1200)	2013
Graduate and Professional Student Organization, Indiana University. Conference Travel Grant. (\$500)	2013
Resilience Alliance, 2013 Annual Science Meeting Travel Grant (~\$2500)	2013
Thor Heyerdahl Summer School in Environmental Governance, Norwegian University of Life Sciences Travel Grant (~\$1,500)	2011
Virgil T. Devault Graduate Fellowship (\$16000)	2009-10
School of Environmental Design and Rural Development, University of Guelph, Graduate Research Grant (\$500)	2007
University of Guelph, Graduate Entrance Scholarship (\$2000)	2006

CONFERENCE AND WORKSHOP PRESENTATIONS

Epstein, G. *Collective action and the problem of fit.* Presented at the Modelling Ostrom Social-Ecological Synthesis Workshop. (Annapolis, USA, April 2019).

Epstein, G. *Framing investigations of environmental governance with the social-ecological systems framework.* Presented at the FAO-SES Expert Workshop. (Rome, Italy, January 2018).

Epstein, G. *Collective action and environmental policy: insights for policy.* Presented at the Ontario Ministry of Agriculture, Food and Rural Affairs. (Guelph, Canada, November 2017).

- Epstein, G.** *Governing marine ecosystems and the social-ecological system framework*. Presented at the Governance of Social-Ecological Systems Summer School 2017. (Brest, France, July 2017).
- Epstein, G.** *Managing tradeoffs in fisheries and fisheries research*. Presented at the Canadian Association of Geographers of Ontario Conference 2016. (Waterloo, Canada, October 2016).
- Epstein, G.** *Incentives, social networks and governance: Theoretical perspectives on building stakeholder support for the adoption and implementation of integrated management*. Presented at the Coastal Zone Canada Conference 2016. (Toronto, Canada, June 2016)
- Epstein, G.** *Management of forage fisheries*. Poster presented at the University of British Columbia 2016 Science Meeting. (Vancouver, Canada, May 2016)
- Epstein, G.** *Local rulemaking, compliance theory and conditional cooperation in state-owned forest commons*. Presented at the University of Eastern Finland. (Joensuu, Finland, November 2015)
- Epstein, G.** *Institutional fit in forest commons: exploring the contributions of appropriation rules to biophysical forest outcomes*. Presented at the International Association for the Study of the Commons 2015 Global Conference. (Edmonton, Canada, May 2015)
- Epstein, G.,** A. Sandberg, I. Bay-Larsen, and G. Hovelsrud. *A Process-Oriented to the Study of Adaptation to Climate Change*. Workshop on the Workshop (WOW) 5 (Bloomington, IN, June 2014).
- Epstein, G.** *Governing Large-Scale Marine Protected Areas*. Presented at the Workshop on the Workshop (WOW) 5 (Bloomington, IN, June 2014).
- Epstein, G.** *Studying Power with the Social-Ecological System Framework*. Presented at the Workshop on the Workshop (WOW) 5 (Bloomington, IN, June 2014)
- Epstein, G.** *Political Science and Conservation*. Presented at the **Conservation Social Sciences: Elucidating “What?”, “How?” and “Why?” to Inform Conservation Practice Workshop at the North America Congress for Conservation Biology** (Missoula, Montana, July 2014).
- Epstein, G.,** A. Sandberg, I. Bay-Larsen, and G. Hovelsrud. *A Process-Oriented to the Study of Adaptation to Climate Change*. Presented at the International Congress of Arctic Social Sciences VIII conference (Prince George, Canada, May 2014).
- Villamayor-Tomas, S, and **G. Epstein**. *Institutional Change in Forest Commons*. Presented at Resilience 2014: Resilience Alliance International Science and Policy Conference (Montpellier, France, May 2014).
- Epstein, G.** *Trust, Legitimacy and Compliance in Forest Commons*. Presented at Resilience 2014: Resilience Alliance International Science and Policy Conference (Montpellier, France, May 2014).
- Epstein, G.** *Workshop Institutionalism and the Study of Social-Ecological Systems*. Presented at the University of Nordland (Bodo, Norway, January 2014).
- Epstein, G.** *Power and Institutional Analysis*. Presented at the International Association for the Study of the Commons 2013 Global Conference. (Kitafuji, Japan, June 2013).
- Epstein, G.,** Kreitmaier, U. *Defining an Interdisciplinary Framework: Coordination and the Science of Sustainability*. Presented at the International Association for the Study of the Commons 2013 Global Conference. (Kitafuji, Japan, June 2013).

- Epstein, G.,** Nenadovic, M., Cox, M., Boustany, A. *Diagnosing Oceanic Commons: ICCAT and the Atlantic Bluefin Tuna.* Presented at the International Association for the Study of the Commons 2013 Global Conference. (Kitafuji, Japan, June 2013).
- Epstein, G.,** Ban, N. *The social-ecological system meta-analysis database (SESMAD) project.* Presented at the 2013 Resilience Alliance Science Meeting (Drakensberg, South Africa, April 2013).
- Epstein, G.,** Vogt, J.M., Mincey, S.K. *Towards an Interdisciplinary Social-Ecological Systems (SES) Framework.* Presented at The EcoSummit 2012 (Columbus, Ohio, October 2012).
- Epstein, G.** *Individuals, Institutions and Social-Ecological Systems.* Presented at the University of Nordland (Bodo, Norway, September 2012)
- Epstein, G.,** Vogt, J.M. *Ecological Gaps in Forest Commons Research.* Presented at the Association of SPEA PHD Students conference (Bloomington, IN, March 2012)
- Epstein, G.** *Ecology and the Social-Ecological Systems Framework.* Presented at the Workshop in Political Theory and Policy Analysis Colloquium (Bloomington, IN, February 2012)

RESEARCH AND UNPUBLISHED REPORTS

- Epstein, G.** 2018. *Applying Ostrom's Social-Ecological System Framework to Sustainability Challenges.* Unpublished report, Rome Italy: Food and Agricultural Organization of the United Nations.
- Epstein, G.** 2015. "Political Science, Environmental Governance and Conservation" in Bennett, N. J. & Roth, R. (eds.). *The Conservation Social Sciences: What? How? and Why?* Vancouver, BC: Canadian Wildlife Federation and Institute for Resources, Environment and Sustainability, University of British Columbia.
- Bennett, N.J. R. Roth, S. Klain, K.M.A. Chan, D.A. Clark, G. Cullman, **G. Epstein**, M.P.Nelson, R. Stedman, T.L. Teel, R.E.W. Thomas & C. Wyborn. 2015. *The Conservation Social Sciences: An Overview and A Process for Setting a Research Agenda* in Bennett, N. J. & Roth, R. (eds.). *The Conservation Social Sciences: What?, How? and Why?* Vancouver, BC: Canadian Wildlife Federation and Institute for Resources, Environment and Sustainability, University of British Columbia.
- Cox, M., **Epstein, G.** Vogt, J. M., Babbitt, P., Chan, J., Chaturvedi, R., Grebreegziabher, Z., Larsson, J., Lewis, J. Nath, S., Nold, K., Priyadarshini, P., Salk, C., Tucker, C. and B.C. Fischer. 2011. *Revisiting the Lothlorien Nature Sanctuary.* Bloomington IN: The Workshop in Political Theory and Policy Analysis.
- Epstein, G.** 2010. *2007-2008 Submerged Macrophyte Survey of the Detroit and St. Clair River.* Unpublished report Burlington, ON: Department of Fisheries and Oceans, Canada.
- Epstein, G.** 2008. *Compliance and fisheries co-management: An investigation of a novel fisheries management regime in Lake Malawi* Guelph, ON: University of Guelph.

UNIVERSITY, SCHOOL & DISCIPLINARY SERVICE

Courses Taught

ERS 701 Complexity and Sustainability in Social-Ecological Systems, PhD Course	2019
ERS 375 Coastal Social-Ecological Systems, Co-Instructor with Dr. Derek Armitage	2016
SPEA E162 People and the Environment. Instructor	2014

Editorial Board

<i>Sustainability Science</i>	2017-
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Peer Reviewer

Ecological Economics; Conservation Biology; Ecology and Society; International Journal of the Commons; Climate Risk Management; Sustainability Science; Biodiversity and Conservation; Conservation Letters; Biological Conservation; Trends in Ecology and Evolution; Conservation and Society; Policy and Society; Environmental Policy and Governance; Global Environmental Change; Sustainability; Science; Forest Policy and Economics; Journal of Cleaner Production; Conservation Science and Practice; Development Policy Review; Forest Ecology and Management; Ambio; Politics and the Life Sciences; Journal of Poverty; Current Opinion in Environmental Sustainability; Global Ecology and Conservation; Nature Sustainability; Ambiente & Sociedade; Pacific Conservation Biology; PLOS One; Climatic Change

Conference Review

Abstract Review for the International Association for the Study of the Commons (IASC) 2015 in Edmonton, Canada

Funding Reviews

<i>ArcticNet Full Proposal (External Expert)</i>	2019
<i>OMAFRA University of Guelph Research Partnership Agri-food and Rural Policy Letter of Intent</i>	2018
<i>OMAFRA University of Guelph Research Partnership Agri-food and Rural Policy Full Proposal</i>	2018
<i>OMAFRA University of Guelph Research Partnership Agri-food and Rural Policy Letter of Intent</i>	2017
<i>OMAFRA New Directions Research Program</i>	2016

Ostrom Workshop in Political Theory and Policy Analysis

Ecology and SES Working Group, founder and member	2011-14
Colloquium committee, member	2013-14

Guest Lecturer

Indiana University, Environment and People (Undergraduate)	2011-12
Indiana University, Institutional Analysis (Doctorate)	2012
University of Guelph, Planning and Development Policy Analysis (Master's)	2013
University of Waterloo, Ecosystem and Resource Management (Undergraduate)	2016
Wilfrid Laurier University, Perspectives on Resource and Environmental Management (Master's)	2016
University of Waterloo, International Development Issues (Undergraduate)	2016-17

ASSOCIATION MEMBERSHIPS

International Association for the Study of the Commons (IASC)