

Jennifer L. Raynor

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Education

- 2017 Ph.D. in Ag. and Applied Economics, University of Wisconsin-Madison (UW-Madison)
- 2016 M.S. in Environment and Resources, UW-Madison
- 2012 M.A. in Applied Economics, Johns Hopkins University
- 2005 B.A. in Economics, LeMoyne College: *integral honors* (highest honors) and *summa cum laude*

Positions Held

- 2022-curr. Assistant Professor, Forest and Wildlife Ecology Department, UW-Madison
- 2019-22 Assistant Professor, Economics Department, Wesleyan University
- 2017-19 Research Economist, National Oceanic and Atmospheric Administration (NOAA) Fisheries
- 2013-17 Graduate Teaching and Research Assistant, UW-Madison
- 2006-13 Economist, Bureau of Labor Statistics

Affiliations and Boards

- 2024-curr. Chair (founding), Science Advisory Board, Global Fishing Watch
- 2023-curr. Trustee, Board of Trustees, Global Fishing Watch
- 2023-curr. Faculty Affiliate, Ag. & Applied Economics Department, UW-Madison
- 2023-curr. Research Associate, Environmental Markets Lab (emLab), UC Santa Barbara
- 2023-curr. Faculty Affiliate and Teton Fellow, College of Business, University of Wyoming
- 2019-22 Faculty Affiliate, College of the Environment, Wesleyan University

Fields of Interest

- Primary Environmental and Resource Economics, Applied Econometrics, Causal Inference
- Secondary Data Science/Machine Learning, Geographic Information Systems (GIS), Remote Sensing

Publications

Refereed journal articles (#led or co-led paper, *graduate student co-author; [Google Scholar](#) profile)

- #10. **Raynor, J.**, S. Orofino, C. Costello, G. McDonald, J. Mayorga, and E. Sala (2025). “[Little-to-no industrial fishing occurs in fully and highly protected marine areas](#).” *Science* 389: 392-395.
→ **Featured on the cover of *Science*** (July 2025)
Selected media: [The New York Times](#), [NPR](#), [Deutsche Welle](#), [Agencia EFE](#)
- #9. Lewis, L., **J. Raynor**, and L. Richardson (2024). “[The nature of the beast: wildlife valuation from the iconic to the ordinary](#).” *Annual Review of Resource Economics* 16: 11.1-11.20.
- 8. G. McDonald, J. Bone, C. Costello, G. Englander, **J. Raynor** (2024). “[Global expansion of marine protected areas and the redistribution of fishing effort](#).” *Proceedings of the National Academy of Sciences* 121(29): e2400592121.

7. Paolo, F., D. Kroodsmas, **J. Raynor**, T. Hochberg, P. Davis, J. Cleary, L. Marsaglia, S. Orofino, C. Thomas, and P. Halpin (2024). “[Satellite mapping reveals extensive industrial activity at sea.](#)” *Nature* 625: 85–91.
Selected media: [Financial Times](#), [The Economist](#), [The Conversation](#), [Le Monde](#), [Die Zeit](#)
- #*6. Medoff, S. *, J. Lynham, and **J. Raynor** (2022). “[Spillover benefits from the world’s largest fully protected MPA.](#)” *Science* 20(378): 313-316.
Selected media: [Ocean with David Attenborough](#), [National Geographic](#), [Bloomberg](#), [BBC](#)
- #5. **Raynor, J.**, C. Grainger, and D. Parker (2021). “[Wolves make roadways safer, generating large economic returns to predator conservation.](#)” *Proceedings of the National Academy of Sciences* 118(22): e2023251118.
Selected media: [The Atlantic](#), [The Economist](#), [The Washington Post](#), [Freakonomics](#), [The Associated Press](#)
4. Lynham, J., A. Nikolaev, **J. Raynor**, T. Vilela, and J.C. Villaseñor-Derbez (2021). “[Reply to ‘Catch rate composition affects assessment of protected area impacts’.](#)” *Nature Communications* 12(1): 1590.
3. Lynham, J., A. Nikolaev, **J. Raynor**, T. Vilela, and J.C. Villaseñor-Derbez (2020). “[Impact of two of the world’s largest protected areas on longline fishery catch rates.](#)” *Nature Communications* 11(1): 979.
Selected media: [National Geographic](#), [Smithsonian Magazine](#)
2. Siders, Z., N. Ducharme-Barth, F. Carvalho, D. Kobayashi, S. Martin, **J. Raynor**, T.T. Jones, and R. Ahrens (2020). “[Ensemble random forests as a tool for modeling rare occurrences.](#)” *Endangered Species Research* 43: 183-197.
- #1. **Raynor, J.** and D. Phaneuf (2020). “[Can native species compete with valuable exotics? Valuing ecological changes in the Lake Michigan recreational fishery.](#)” *Journal of Great Lakes Research* 46(3): 643-655.

In Revision

11. Sagar, H.S.S.C. *, **J. Raynor**, F.A. Edwards, F.J. Sanderson, S. Jones, D.W. Yu, A. Bush, M.E. Persche, T. Bodasing, M.E. Taïre, B. Gottesman, M.A. Feika, L. Nyallay, Z. Burivalova. “Carbon finance initiatives can provide biodiversity benefits.” *Conservation Science and Practice*.
12. **Raynor, J.** and T. Lohrer.* “Satellite-based fishing fleet tracking: A new foundation for fisheries science and management.” *Fish and Fisheries*.

Working Papers

13. Frank, E., A. Missrian, D. Parker, and **J. Raynor**. “Option value of apex predators: Evidence from a river discontinuity.” [NBER Working Paper](#)

Popular press articles

2. **Raynor, J.** (Jul. 24, 2025). “[We tracked illegal fishing in marine protected areas – satellites and AI show most bans are respected, and could help enforce future ones.](#)” *The Conversation*.
1. **Raynor, J.** (Jan. 3, 2024, lead article). “[We used AI and satellite imagery to map ocean activities that take place out of sight, including fishing, shipping and energy development.](#)” *The Conversation*.

Fellowships, Honors, and Awards

- 2021-22 [Think Tank Fellowship](#), College of the Environment, Wesleyan University
 2021 [Lone Mountain Fellowship](#), Property and Environment Research Center (PERC)
 2005 Wall Street Journal Student Achievement Award
 Misc. Member of *Phi Kappa Phi*, *Pi Gamma Mu*, and *Omicron Delta Epsilon* honors societies

Grants and Funding

- 2024 U.S. Department of Agriculture Hatch Grant, “Economic Effects of Wolf Recovery on the Agricultural Sector in the United States” (\$122,433)
 2021 Wesleyan University, Quantitative Analysis Center Student Apprenticeship (\$5,000)
 2018 National Oceanic and Atmospheric Administration, internal competition (\$60,000)

Presentations and WorkshopsResearch Presentations

- 2025 National Academies of Sciences, Engineering, and Medicine, Workshop on Conservation, Animal Health Research, and New Approach Methods
 University of Hawai‘i at Mānoa, Workshop on Energy and Environmental Research
 UW-Madison, Biology Colloquium
 UW-Madison, Department of Forest & Wildlife Ecology Seminar Series
 2024 University of Minnesota, Department of Applied Economics Seminar Series
 PERC, Innovations in Wildlife Conservation in the Pacific Northwest Workshop
 Global Fishing Watch, Satellite Mapping Reveals Extensive Industrial Activity at Sea Webinar
 Gulf States Marine Fisheries Commission, Validating Rec. Fishing Effort Estimates Workshop
 NOAA Fisheries, Citizen Science/Remote Sensing for Rec. Fishing Analysis Workshop
 UW-Madison, Environmental and Resource Economics Seminar
 2023 Allied Social Science Associations (ASSA) Annual Meeting
 UW-Madison, Center for Ecology and the Environment Fall Symposium
 UW-Madison, Environmental and Resource Economics Seminar
 2022 Assoc. of Environmental and Resource Economists (AERE) Summer Conference
 Indiana University, Young Scholars Symposium on Natural Resource Governance
 University of Wyoming, Haub School of the Environment Seminar
 University of Wyoming, College of Business Seminar
 Bates College, Economics Department Seminar
 Le Moyne College, Social Sciences Seminar Series
 Colgate University, Environmental Studies Department Brownbag Series

- Queens University of Charlotte, Data Analytics Symposium
- 2021 Western Economic Association International (WEAI) 96th Annual Conference
AERE Summer Conference
Yale University, School of the Environment Seminar
PERC, Fellowship Seminar Series
Wesleyan University, Wasch Center Lecture Series
- 2019 PERC, Incentives for Wildlife Workshop
Wesleyan University, College of Social Studies Monday Lunch Series
- 2018 International Institute of Fisheries Economics and Trade (IIFET) Conference
Le Moyne College, Social Sciences Seminar Series
- 2017 North Carolina State University, Camp Resources Workshop
WEAI 92nd Annual Conference
Heartland Environmental and Resource Economics Workshop at Illinois (poster)

Workshop Participation

- 2024 University of Wyoming, Grand Teton Group Workshop
- 2023 University of Wyoming, Yellowstone International Wildlife Policy Conference Development
UC Santa Barbara, Quantifying Climate Resilience Workshop
UC Santa Barbara (with Conservation Intl.), Climate Solutions Collaborative Workshop
UC Santa Barbara (with Environmental Defense Fund), Climate and Oceans Workshop
- 2022 University of Wyoming, Grand Teton Group Workshop
- 2018 Western Pacific Fishery Management Council, Sea Turtle/Seabird Bycatch Workshops

Teaching Experience

UW-Madison

- Undergrad Decision Methods for Natural Resource Managers: 2023, 2024
- Undergrad Climate Change Economics and Policy (Teaching Assistant): 2016
- Undergrad Introductory Biology (Teaching Assistant): 2013, 2014 (2)

Wesleyan University

- Undergrad Introduction to Economic Theory: 2019 (2), 2020, 2021
- Undergrad Climate Change Economics and Policy: 2020 (2), 2021
- Undergrad Environmental and Resource Economics: 2020, 2021

Guest Lectures

- Graduate UW-Madison, PhD Research Colloquium (Ag. & Applied Economics): 2025
UW-Madison, Assessment of Environmental Impact (Soil Sciences): 2025
- Undergrad UW-Madison, The Environment and the Global Economy (Ag. & Applied Economics): 2024
University of Wyoming, Approaches to Problem Solving in the Environment: 2023
- Professional Conservation Strategy Fund, Economics and Finance for Environmental
Leadership: 2022, 2023, 2024;
Conservation Strategy Fund, Natural Resource Economics: self-paced online course

Service

Profession

- 2023-24 Mentor, AERE Scholars Program
- 2022, 23 Mentor, AERE Graduate-Student Engagement Matchup Program
- Ongoing Referee for: Journal of the Association of Environmental and Resource Economists, Environmental and Resource Economics, Land Economics, International Review of Environmental and Resource Economics, Journal of Outdoor Recreation and Tourism, Lake and Reservoir Management

Department and University

- 2024-curr. Senator, Faculty Senate, UW-Madison
- 2024-25 Member, Committee for Justice, Equity, Diversity, and Inclusion, UW-Madison
- 2021-22 Mentor, First Generation Student Collective, Wesleyan University
- 2020 Panel member, New Faculty Orientation Program, Wesleyan University
- 2020 Mentor, Remote Teaching Mentor Program, Wesleyan University
- 2020, 2019 Search committee member, Department of Economics, Wesleyan University
- 2016-17 Mentor, Nelson Institute Mentor Program, UW-Madison
- 2015-17 Organizer, Environmental Economics Seminar, UW-Madison

Advising

- Ongoing Tai Lohrer UW-Madison (Ph.D. Ag. and Applied Economics - chair)
- Ongoing Tara Mittelberg, UW-Madison (Ph.D. Ag. and Applied Economics)
- Ongoing Heather Cox, UW-Madison (Ph.D. Forestry)
- 2022 Pukitta Chunsuttiwat, UW-Madison (Ph.D. Ag. and Applied Economics)
- 2021 Sarah Medoff, University of Hawai'i at Mānoa (Ph.D. Economics)
- 2022 J.J. LaCorte, Wesleyan University (Environmental Studies capstone - chair)
- 2022 Asher Leeming, Wesleyan University (Environmental Studies capstone - chair)
- 2021 Harrison Karp, Wesleyan University (Economics honors thesis, high honors - chair)

Media Coverage

Media Impact Summary

Research covered in major international outlets, including *The New York Times*, *The Associated Press*, *The Washington Post*, *Financial Times*, *The Economist*, NPR, BBC, *National Geographic*, *Scientific American*, **and other leading outlets across 20+ countries** (e.g., *Agencia EFE*, *Le Monde*, *Die Zeit*, and *Der Spiegel*). Coverage includes print, radio, TV, and film, featuring dedicated segments in the documentary *Ocean with David Attenborough*; national public radio in the USA, Australia, Canada, and Germany; and the *Freakonomics* podcast. My work has also inspired a joke on *Late Night with Seth Meyers* and appeared as a question on a German prime-time trivia show (*Wer weiß denn sowas?* on ARD). **Five papers rank in the top 0.01–0.5% of all ~30 million research outputs ever tracked by Altmetric**, a leading global index of research visibility.

Detailed Coverage by Publication

Raynor, *et al.* (2025): Top 0.5% of all research outputs ever tracked by Altmetric. Selected coverage includes: [The New York Times](#), [NPR](#) (Weekend Edition), [The Conversation](#), [Deutsche Welle](#), [Agencia EFE](#) (world's largest Spanish-language wire service, with wide international syndication), [Deutschlandfunk](#) (Germany), [GEO](#) (Germany), [Le Temps](#) (Switzerland), [Oceanographic Magazine](#) (UK), [Space.com](#), [Phys.org](#), and [Carbon Pulse](#) (UK), with additional feature coverage in 50+ outlets across 20+ countries.

Paolo, Kroodsmas, Raynor, *et al.* (2024): Top 0.03% of all research outputs ever tracked by Altmetric. Selected coverage includes: [Financial Times](#), [The Economist](#), [NPR](#) (Short Wave), [BBC](#), [The Guardian](#), [Nature News](#), [Smithsonian Magazine](#), [New Scientist](#), [The Verge](#), [Tech Crunch](#), [Space.com](#), [Le Monde](#) (France), [Die Zeit](#) (Germany), [El Tiempo](#) (Colombia), and [elDiario.es](#) (Spain); and broadcast coverage from [The Weather Channel](#), ABC [TV](#) and [radio](#) (Australia), and [Times Radio](#) (UK). Complete collated coverage available [here](#).

Medoff, Lynham, and Raynor (2022): Top 0.2% of all research outputs ever tracked by Altmetric. Selected coverage includes: a feature in the documentary [Ocean with David Attenborough](#); print coverage from [Bloomberg](#), [BBC](#), [The Guardian](#), [National Geographic](#), [Nature News](#), [Science News](#), [AAAS](#), [Popular Science](#), [Der Spiegel](#) (Germany), [ABC](#) (Australia), [Mongabay](#), and several local media outlets; and broadcast coverage from [Science Friday](#), [Hawaii Public Radio](#), and German Public Radio ([Deutschlandfunk](#))

Raynor, Grainger, and Parker (2021): Top 0.01% of all research outputs ever tracked by Altmetric. Selected coverage includes: a feature on the the [Freakonomics](#) podcast; print coverage from [The Atlantic](#), [The Economist](#), [The Associated Press](#), [The Washington Post](#), [BBC](#), [Ars Technica](#), [Smithsonian Magazine](#), [Scientific American](#), [ScienceNews](#), [Daily Mail](#) (UK), [DerStandard](#) (Austria), [El País](#) (Spain), [FRB](#) (France), and FOX6 News Milwaukee ([print](#), [TV](#)); and broadcast coverage from [CBC Radio](#) (Quirks and Quarks, Canada) and [ABC Radio National](#) (Late Night Live, Australia)

Lynham, Nikolaev, Raynor, *et al.* (2020): Top 0.01% of all research outputs ever tracked by Altmetric. Selected coverage includes: [National Geographic](#), [Smithsonian Magazine](#), [Mongabay](#)

Additional interviews: [Important not Important](#) podcast, [Our Shared Seas](#), [Nautilus](#)