

ALEXANDER LEVENTON METCALF

CURRICULUM VITAE

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APPOINTMENTS

University of Montana, College of Forestry & Conservation

2026 – Present	Professor, Dept. of Society & Conservation
2021 – 2026	Associate Professor, Dept. of Society & Conservation
2018 – 2021	Assistant Professor, Dept. of Society & Conservation
2015 – 2018	Research Assistant Professor, Dept. of Society & Conservation
2013 – 2015	Research Assistant Professor, Dept. of Forest Management
2012	Teaching Adjunct Professor, Dept. of Society & Conservation

Juniata College

2008 – 2011	Teaching Adjunct Professor, Dept. of Environmental Sciences

PREPARATION

2010 – 2012	Post-Doctoral Scholar, Penn State University, University Park, PA *Human dimensions of private forest conservation*
2010	Doctor of Philosophy (Ph.D.), Penn State University, University Park, PA Dual Degree: Forest Resources; Human Dimensions of Natural Resources & the Environment *Dissertation: "Human dimensions of private forest landownership: Sampling, estimation, decision making, and implications."*
2006	Master of Science (M.S.), Penn State University, University Park, PA Forest Resources *Thesis: "Sampling protocol for a statewide survey of Pennsylvania's private forest landowners."*
2001	Bachelor of Science (B.S.), Juniata College, Huntingdon, PA Environmental Science

PUBLICATIONS
ORCiD: 0000-0001-9532-585X
* indicates trainee as lead author

Refereed journal articles

48. *Nesbitt, H. K., **Metcalf, A. L.**, Uden, D. R., Williamson, M. A., Chaffin, B. C., Floyd, T. M., & Allen, C. R. (2026). Diagnosing and navigating scale mismatches in a social-ecological system: Cross-scale feedbacks and cross-level interactions enable regime shift management in the Great Plains. Ecology and Society, 31(2), 8. https://doi.org/10.5751/ES-17079-310208

47. *Legatzke, H. L., Floyd, T. M., Chaffin, B. C., Banerjee, S., Gulab, S., Hamlin, S. L., Meredith, G. R., **Metcalf, A. L.**, Nesbitt, H. K., Sutherland-Rowen, E. S., Uden, D. R., & Allen, C. R. (2026). Influences of ecological change and social networks on conservation professionals' and producers' risk assessments of a vegetation transition. Ecology and Society, 31(1), 41. https://doi.org/10.5751/ES-16957-310141

46. **Metcalf, A. L.**, & Angle, J. W. (2026). Effects of political identity activation and inaccurate metaperceptions on attitudes toward wolves. Conservation Biology, 40(3), e70212. https://doi.org/10.1111/cobi.70212

45. **Metcalf, A. L.**, Chandler, J. W., & Birdsong, M. H. (2026). Private ownership of public trust wildlife habitat in Montana, U.S.A. (2004–2023). Environmental Management, 76(1), 36. https://doi.org/10.1007/s00267-025-02336-6

44. **Metcalf, A. L.**, Metcalf, E. C., Gude, J. A., Baldridge, J., & Lewis, M. S. (2026). Increasing tolerance of wolves in Montana, United States (2012–2023). Conservation Science and Practice, 8(2), e70218. https://doi.org/10.1111/csp2.70218

43. **Metcalf, A. L.**, Metcalf, E. C., Brenner, L. J., Nesbitt, H. K., Phelan, C. N., Lewis, M. S., & Gude, J. A. (2025). The wildlife attitude-acceptability framework's potential to inform human dimensions of wildlife science and practice. Human Dimensions of Wildlife, 30(4), 415-429. https://doi.org/10.1080/10871209.2024.2318330

42. *Legatzke, H., Chaffin, B. C., Floyd, T. M., Banerjee, S., Church, S., Gulab, S., Hamlin, S., Meredith, G. R., **Metcalf, A. L.**, Nesbitt, H. K., Sutherland-Rowan, E., Uden, D. R., & Allen, C. R. (2025). Governance of a landscape: The role of formal and informal organizations. Journal of Environmental Management, 380, e124974. https://doi.org/10.1016/j.jenvman.2025.124974

41. *Scholtz, R., Uden, D. R., Allred, B. W., Donovan, V. M., Maestas, J. D., Morford, S L., Jones, M. O., Naugle, D. E., Cady, S. M., Fogarty, D. T., **Metcalf, A. L.**, Chaffin, B. C., Craig, A., Roberts, C., Rowen, E., Meredith, G., Nesbitt, H. K., Williamson, M. A., Gulab, S., Hamlin, S., Lohani, S., & Twidwell, D. (2025). Reconciling scale using the Resist-Accept-Direct (RAD) framework to improve management of woody encroachment in grasslands. Journal of Environmental Management, 387, e125820. https://doi.org/10.1016/j.jenvman.2025.125820

40. *Nesbitt, H. K., **Metcalf, A. L.**, Floyd, T. M., Uden, D. R., Chaffin, B. C., Gulab, S., Banerjee, S., Vallury, S., Hamlin, S. L., Metcalf, E.C., Fogarty, D. T., Twidwell, D., & Allen, C. R. (2024). Social networks and transformative behaviours in a grassland social-ecological system. People and Nature, 6(5), 1877-1892. https://doi.org/10.1002/pan3.10695 (Note: selected as Rachel Carson Prize runner up for 2024 by the Editors at People and Nature)

39. *Lamar, S., Burnham, M., **Metcalf, A. L.**, Ebel, S. A., Graves, D. M., & Sundstrom, A. (2024).

Understanding the hidden costs and benefits of living with grizzly bears in Montana. Society & Natural Resources, 37(9), 1378-1396. https://doi.org/10.1080/08941920.2024.2361418

38. *Birdsong, M. H., **Metcalf, A. L.**, Metcalf, E. C., Nesbitt, H. K., & Gude, J. A. (2024). The influence of social identity on attitudes toward wildlife. Conservation Biology, 38(4), e14243. https://doi.org/10.1111/cobi.14243 (Note: second-highest Altmetric score of any article published in Conservation Biology in 2025)

37. *Roth, P. A., Muth, A. B., **Metcalf, A. L.**, & Finley, J. C. (2024). Conservation-Based Estate Planning: Toward a Sustainable Future for Private Lands. Society & Natural Resources, 37(6), 865-882. https://doi.org/10.1080/08941920.2024.2310229

36. *Smith, A. P., **Metcalf, A. L.**, Metcalf, E. C., Yung, L., Swinger, B., Cummins, T. M., Chaffin, B. C., Shuver, A., & Slattery, D. (2024). US beef producer perspectives on "sustainable beef" and implications for sustainability transitions. Discover Sustainability, 5(1), 91. https://doi.org/10.1007/s43621-024-00253-y

35. Azevedo, F., Pavlović, T., Rêgo, G. G.,... **Metcalf, A.L.**, … & Huang, G. (2023). Social and moral psychology of COVID-19 across 69 countries. Scientific data, 10(1), 272. https://doi.org/10.1038/s41597-023-02080-8

34. *Nesbitt, H. K., **Metcalf, A. L.**, Metcalf, E. C., Costello, C. M., Roberts, L. L., Lewis, M. S., & Gude, J. A. (2023). Human dimensions of grizzly bear conservation: The social factors underlying satisfaction and coexistence beliefs in Montana, USA. Conservation Science and Practice, 5(3), e12885. https://doi.org/10.1111/csp2.12885

33. *Moore, M., Metcalf, E. C., & **Metcalf, A. L.** (2023). Connecting Collective Memory and Community Resilience: A Case Study of Anaconda, Montana. Journal of Rural and Community Development, 18(3). https://journals.brandonu.ca/jrcd/article/view/2294

32. *Smith, A. P., Metcalf, E. C., **Metcalf, A. L.**, & Yung, L. (2023). A Revised Adaptive Decision-Making Framework for Rangeland Management. Rangeland Ecology & Management, 91, 30-43. https://doi.org/10.1016/j.rama.2023.07.003

31. *Vallury, S., Smith, A. P., Chaffin, B. C., Nesbitt, H. K., Lohani, S., Gulab, S., Banerjee, S., Floyd, T. M., **Metcalf, A. L.**, Metcalf, E. C., Twidwell, D., Uden, D. R., Williamson, M. A., & Allen, C. R. (2022). Adaptive capacity beyond the household: a systematic review of empirical social-ecological research. Environmental Research Letters, 17(6), 063001. https://doi.org/10.1088/1748-9326/ac68fb

30. *Smith, A. P., Metcalf, E. C., Nesbitt, H. K., Leonard, H. J., Cummins, T. M., **Metcalf, A. L.**, & Graefe, A. R. (2022). Confidence, community & conservation: Exploring the relationship between self-efficacy and experience in female hunters. Journal of Outdoor Recreation and Tourism, 40, 100568. https://doi.org/10.1016/j.jort.2022.100568

29. Ulrich-Schad, J. D., Li, S., Arbuckle, J. G., Avemegah, E., Brasier, K. J., Burnham, M., Chaudhary, A. K., Eaton, W. M., Gu, W., Haigh, T., Jackson-Smith, D., **Metcalf, A.L.**, Pradhananga, A., Prokopy, L.S., Sanderson, M., Wade, E., & Wilke, A. (2022). An inventory and assessment of sample sources for survey research with agricultural producers in the US. Society & Natural Resources, 35(7), 804-812. https://doi.org/10.1080/08941920.2022.2081392

28. Van Bavel, J. J., Cichocka, A., Capraro, V., Sjåstad, H., Nezlek, J. B., ... **Metcalf, A.L.** …(~200 others) & Jørgensen, F. J. (2022). National identity predicts public health support during a

global pandemic. Nature Communications, 13(1), 517. https://www.nature.com/articles/s41467-021-27668-9 (Note: selected among the Top 25 Social Science and Human Behaviour Articles of 2022 by Nature Communications)

27. Glikman, J. A., Frank, B., Ruppert, K. A., Knox, J., Sponarski, C. C., Metcalf, E. C., **Metcalf, A. L.**, & Marchini, S. (2021). Coexisting with different human-wildlife coexistence perspectives. Frontiers in Conservation Science, 2, 703174. https://doi.org/10.3389/fcosc.2021.703174

26. *Pendergraph, D. P., Ranieri, J., Ermatinger, L., Baumann, A., **Metcalf, A. L.**, DeLuca, T. H., & Church, M. J. (2021). Differentiating Sources of Fecal Contamination to Wilderness Waters Using Droplet Digital PCR and Fecal Indicator Bacteria Methods. Wilderness & Environmental Medicine, 32(3), 332-339. https://doi.org/10.1016/j.wem.2021.04.007

25. *Nesbitt, H.K., **Metcalf, A.L.**, Lubeck, A.A., Metcalf, E.C., Beckman, C., Smith, A. P., & Cummins, T. M. (2021). Collective factors reinforce individual contributions to human-wildlife coexistence. Journal of Wildlife Management, 85(6), 1280-1295. https://doi.org/10.1002/jwmg.22061

24. Berry, M. S., Repke, M. A., **Metcalf, A. L.**, & Jordan, K. E. (2020). Promoting healthy decision-making via natural environment exposure: Initial evidence and future directions. Frontiers in Psychology, 11, 1682. https://doi.org/10.3389/fpsyg.2020.01682

23. *Sketch, M., Dayer, A. A., & **Metcalf, A. L.** (2020). Western ranchers' perspectives on enablers and constraints to flood irrigation. Rangeland Ecology & Management, 73(2), 285-296. https://doi.org/10.1016/j.rama.2019.12.003

22. Carter, N., Williamson, M. A., Gilbert, S., Lischka, S. A., Prugh, L. R., Lawler, J. J., **Metcalf, A. L.**, Jacob, A., Beltran, B. J., Castro, A. J., Sage, A., & Burnham, M. (2020). Integrated spatial analysis for human–wildlife coexistence in the American West. Environmental Research Letters, 15(2), 021001. https://doi.org/10.1088/1748-9326/ab60e1

21. Jones, K., Abrams, J., Belote, T., Beltran, B., Brandt, J., Carter, N., Castro, A. J., Chaffin, B. C., **Metcalf, A. L.**, Roesch-McNally, G., Wallen, K., & Williamson, M. A. (2019). The American West as a social-ecological region: Drivers, dynamics, and implications for nested social-ecological systems. Environmental Research Letters, 14(11), 115008. https://doi.org/10.1088/1748-9326/ab4562

20. *Sketch, M., Dayer, A. A., & **Metcalf, A. L.** (2020). Engaging landowners in the conservation conversation through landowner-listening workshops. Society & Natural Resources, 33(5), 669-680. https://doi.org/10.1080/08941920.2019.1657996

19. **Metcalf, A.L.**, Phelan, C.N., Pallai, C., Norton, M., Yuhas, B., Finley, J.C., & Muth, B.A. (2019). Microtargeting for conservation. Conservation Biology, 33(5), 1141-1150. https://doi.org/10.1111/cobi.13315

18. McWethy, D. B., Schoennagel, T., Higuera, P. E., Krawchuk, M., Harvey, B. J., Metcalf, E. C., Schultz, C., Miller, C., **Metcalf, A. L.**, Buma, B., Virapongse, A., Kulig, J. C., Stedman, R. C., Ratajczak, Z., & Nelson, C. (2019). Rethinking resilience to wildfire. Nature Sustainability, 2(9), 797-804. https://doi.org/10.1038/s41893-019-0353-8

17. Blascovich, G. M., & **Metcalf, A. L.** (2019). Improving non-hunters' attitudes toward hunting. Human Dimensions of Wildlife, 24(5), 480-487. https://doi.org/10.1080/10871209.2019.1605636

16. *Lubeck, A., **Metcalf, A.L.**, Beckman, C., Yung, L., & Angle, J. (2019). Collective factors drive individual invasive species control behaviors: Evidence from private lands in Montana, USA. Ecology & Society, 24(2), 32-41. https://doi.org/10.5751/ES-10897-240232

15. Higuera, P. E., **Metcalf, A. L.**, Miller, C., Buma, B., Metcalf, E. C., McWethy, D., Ratajczak, Z., Nelson, C., Chaffin, B., Stedman, R., McCaffrey, S., Schoennagel, T., Harvey, B., Hood, S., Schultz, C., Black, A., Campbell, D., Haggerty, J., Keane, R., Krawchuk, M., Kulig, J., Rafferty, R., & Virapongse, A. (2019). Integrating subjective and objective dimensions of resilience in fire-prone landscapes. BioScience, 69(5), 379-388. https://doi.org/10.1093/biosci/biz030 (Note: Selected as "Editor's Choice" for Volume 69, Issue 5)

14. Bagavathiannan, M. V., Graham, S., Ma, Z., Barney, J. N., Coutts, S. R., Caicedo, A. L., De Clerck-Floate, R., West, N. M., Blank, L., **Metcalf, A. L.**, Lacoste, M., Evans, J. A., Moreno, C., Burke, I., & Beckie, H. (2019). Considering weed management as a social dilemma bridges individual and collective interests. Nature Plants, 5(4), 343-351. https://doi.org/10.1038/s41477-019-0395-y

13. **Metcalf, A.L.**, Angle, J.W., Phelan, C.N., Muth, B.A., & Finley, J.C. (2019). More "bank" for the buck: Microtargeting and normative appeals to increase social marketing efficiency. Social Marketing Quarterly, 25(1), 26-39. https://doi.org/10.1177/1524500418818063

12. Graham, S., **Metcalf, A.L.**, Gill, N., Niemiec, R., Moreno, C., Bach, T., Ikutegbe, V., Hallstrom, L., Ma, Z., & Lubeck, A. (2019). Opportunities for better use of collective action theory in research and governance for invasive species management. Conservation Biology, 33(2), 275-287. https://doi.org/10.1111/cobi.13266

11. *McIver, C., **Metcalf, A.L.**, & Berg, E. (2018). Procurement contracting and forest communities: Factors affecting local business utilization in the inland Northwest. Journal of Forestry, 116(5), 412-419. https://doi.org/10.1093/jofore/fvy033

10. *Repke, M. A., Berry, M. S., Conway III, L. G., **Metcalf, A. L.**, Hensen, R. M., & Phelan, C. (2018). How does nature exposure make people healthier?: Evidence for the role of impulsivity and expanded space perception. PLoS ONE, 13(8), e0202246. https://doi.org/10.1371/journal.pone.0202246

9. *Lauer, F.I., **Metcalf, A.L.**, Metcalf, E.C., & Mohr, J.J. (2018). Public engagement in social-ecological systems management: An application of social justice theory. Society and Natural Resources, 31(1), 4-20. https://doi.org/10.1080/08941920.2017.1364456 (Note: Received the "Rabel J. Burdge & Donald R. Field Outstanding Article Award" for best general research article published in SNR Volume 31).

8. **Metcalf, A. L.**, Metcalf, E. C., Khumalo, K., Gude, J., Kujala, Q., & Lewis, M. S. (2017). Public wildlife management on private lands: Reciprocity, population status, and stakeholders' normative beliefs. Human Dimensions of Wildlife, 22(6), 564-582. https://doi.org/10.1080/10871209.2017.1372534

7. Duvall, A. L., **Metcalf, A. L.**, & Coates, P. S. (2017). Conserving the greater sage-grouse: A social-ecological systems case study from the California-Nevada region. Rangeland Ecology & Management, 70(1), 129-140. https://doi.org/10.1016/j.rama.2016.08.001

6. Gruver, J.B., **Metcalf, A.L.**, Muth, B.A., Finley, J.C., & Luloff, A.E. (2016). Making decisions about forestland succession: Perspectives from Pennsylvania's private forest landowners. Society and Natural Resources, 30(1), 47-62. https://doi.org/10.1080/08941920.2016.1180728

5. *Ver Planck, N.R., **Metcalf, A.L.**, Finley, A.O., & Finley, J.C. (2016). Evaluation of National Woodland Owner Survey estimators of private forest area and landowners: A case study of Montana. Forest Science, 62(5), 525-534. https://doi.org/10.5849/forsci.15-196

4. **Metcalf, A.L.**, Gruver, J.B., Finley, J.C., & Luloff, A.E. (2016). Segmentation to focus outreach: Behavioral intentions of private forest landowners in Pennsylvania. Journal of Forestry, 114(4), 466-473. https://doi.org/10.5849/jof.15-030

3. **Metcalf, A.L.**, Finley, J.C., Luloff, A.E., Shumway, D.L., & Stedman, R.C. (2014). Progress in private forest landowner estimation. Journal of Forestry, 112(3), 312-315. https://doi.org/10.5849/jof.14-037

2. **Metcalf, A.L.**, Finley, J.C., Luloff, A.E., Shumway, D.L., & Stedman, R.C. (2012). Private forest landowners: Estimating population parameters. Journal of Forestry, 110(7), 362-370. https://doi.org/10.5849/jof.11-089

1. Luloff, A.E., Finley, J.C., Myers, W.L., **Metcalf, A.L.**, Matarrita, D.C., Gruver, J.B., Gordon, J., & Raboanarialina, C. (2011). What do stakeholders add to identification of conservation lands? Society and Natural Resources, 24(12), 1345-1353. https://doi.org/10.1080/08941920.2011.589098

Other publications

Book chapters

1. Metcalf, E.C., **Metcalf, A.L.**, and Mohr, J.J. (2017). "Building social capacity toward restoration success." In, S. Allison & S.D. Murphy (Eds.), *Routledge Handbook of Ecological and Environmental Restoration*. Routledge.

Management & technical reports; non-refereed publications

33. **Metcalf, A. L.**, Metcalf, E. C., Birdsong, M. A., Lewis, M. S., & Gude, J. A. (2024). "Trends in Montanans' views regarding wolves and management of wolves in Montana." MT Department of Fish, Wildlife, and Parks: Helena, MT.

32. **Metcalf, A. L.,** Birdsong, M. A., Metcalf, E. C., Baldridge, J., Lewis, M. S., & Gude, J.A. (2024). "Montanans' perspectives on wolves and wolf management in Montana: Quantitative human dimensions survey summary. F23AF00123/W-192-R 2023 Annual Progress Report." Submitted to MT Department of Fish, Wildlife and Parks: Missoula, MT.

31. **Metcalf, A. L.** (2023). "Microtargeting for conservation agriculture in the Chesapeake Bay Watershed. Final programmatic report." Submitted to the National Fish and Wildlife Foundation: Missoula, MT.

30. **Metcalf, A. L.** & Chandler, J. (2022). "Microtargeting for MT homeowner wildfire risk assessment program recruitment." Submitted to MT Department of Natural Resources and Conservation: Missoula, MT.

29. Miller, C., Higuera, P. E., McWethy, D. B., **Metcalf, A. L.**, Metcalf, E. C., Black, A. E., Clark, L., & Hodge, H. (2021). Developing Strategies to Support Social-Ecological Resilience in Flammable Landscapes: A Structured Approach for Natural Resource Managers and Other

Stakeholders. *Res. Note RMRS-RN-92. Fort Collins, CO: US Department of Agriculture, Forest Service, Rocky Mountain Research Station. 41 p. https://doi. org/10.2737/RMRS-RN-92.*, *92*.

28. **Metcalf, A.L.**, Hodge, H., and Davis, C. (2020). "Monitoring social outcomes of forest management in the southwestern crown-of-the-continent." Research report submitted to the Southwestern Crown of the Continent Collaborative.

27. Costello, C., Nesbitt, H.K., **Metcalf, A.L.**, Metcalf, E.C., Roberts, L., Gude, J., Lewis, M. (2020). "Results of a 2020 survey of Montanans regarding the topic of grizzly bear management." Montana Fish Wildlife and Parks Research Summary, No. 47.

26. *Nesbitt, H.K., **Metcalf, A.L.**, & Metcalf, E.C. (2020). "Human dimensions of grizzly bear management in Montana." Research report submitted to the Montana Department of Fish, Wildlife, and Parks.

25. *Phelan, C.N. & **Metcalf, A.L.** (2019). Prime prospects: Social and Biophysical inventory of Pennsylvania conservation opportunities. Research report submitted to PA Department of Conservation and Natural Resources.

24. Lewis, M., **Metcalf, A.L.**, Metcalf, E.C., Phelan, C.N., Gude, J., Kujala, Q., & Inman, R. (2018). *Better understanding Montanans thoughts regarding wolf management in Montana*. Montana Fish Wildlife and Parks HD Unit Research Summary, No. 42.

23. *Beckman, C., **Metcalf, A.L.**, & Lubeck, A. (2018). *Wildfire risk reduction: Landowners' perspectives and behaviors across Montana*. Summary of research results presented to Montana Natural Resources Collaborative Working Group. 6p.

22. *Lubeck, A., & **Metcalf, A.L.** (2017). *Landowners' perspectives on weed control across Montana*. Summary of research results presented to Montana Natural Resources Collaborative Working Group. 6p.

21. *Phelan, C., **Metcalf, A.L.**, & Metcalf, E.C. (2017). *Longitudinal change in wolf tolerance among MT residents.* An interim report to the MT FWP. 12p.

20. *Phelan, C., & **Metcalf, A.L.** (2017). *Riparian buffers in the Pennsylvania Chesapeake Bay watershed.* An interim report to the PA DCNR and Mellon Foundation. 5p.

19. *Phelan, C., & **Metcalf, A.L.** (2017). *Priority conservation areas in the Gallatin Valley.* Final report to the Gallatin Valley Land Trust. 44p.

18. *McIver, C.P, **Metcalf, A.L.,** & Dodson, E. (2016). Making every dollar count: Leveraging federal investments in land management to benefit local communities. *Rural Connections* Fall: 21-24.

17. *Lauer, F.I., Metcalf, E.C., **Metcalf, A.L.**, & Brown, J. (2016). *Understanding visitor experiences at the Upper Missouri River Breaks National Monument*. A report to the Bureau of Land Management. 12p.

16. **Metcalf, A.L.**, Finley, J.C., & Luloff, A.E. (2015). *Regional variation among Pennsylvania private forest landowners*. A report to the PA Dept. of Conservation and Natural Resources, Bureau of Forestry, Harrisburg, PA: 15p.

15. **Metcalf, A.L.**, Muth, B.A., Finley, J.C., & Luloff, A.E. (2015). *Gender, values, and behaviors of Pennsylvania private forest landowners*. A report to the PA Dept. of Conservation and Natural Resources, Bureau of Forestry, Harrisburg, PA: 9p.

14. **Metcalf, A.L.**, Metcalf, E.C., Kumalo, K., Gude, J., Kujala, Q., & Lewis, M. (2015). *Acceptability of Brucellosis and elk management tools among MT stakeholder groups*. A report to the MT Dept. of Fish, Wildlife, and Parks, Helena, MT: 7p.

13. *Sketch, M., **Metcalf, A.L.**, & Davis, C. (2015). *Analysis of attendance at Southwestern Crown Collaborative Meetings*. A report to the Southwestern Crown of the Continent Collaborative Forest Landscape Restoration Program. 14p.

12. Metcalf, E.C., & **Metcalf, A.L.** (2014). *Visitor use and sense of place on the Blackfoot River, MT.* Final report for the Montana Dept. of Fish, Wildlife, and Parks, Region 2, Missoula, MT: 38p.

11. Gruver, J.B., **Metcalf, A.L.**, Finley, J.C., Luloff, A.E., & Muth, A.B. (2013). *The future of Penn's Woods: A mixed-methods study of parcelization and Pennsylvania's private forests.* Final report for the Pennsylvania Dept. of Conservation and Natural Resources, Bureau of Forestry, Harrisburg, PA: 73p.

10. **Metcalf, A.L.**, Metcalf, E.C., & Nickerson, N.P. (2012). *Behavioral Risk Factor Surveillance System: Outdoor recreation and resident health.* Final report for the Montana State Parks, Helena, MT: 44p.

9. **Metcalf, A.L.**, Finley, J.C., Luloff, A.E., & Muth, B.A. (2012). *Pennsylvania's private forests: 2010 private forest landowner summary*. Final report for the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, Harrisburg, PA: 42p.

8. Bitz, M., Metcalf, E.C., & **Metcalf, A.L.** (2012). *Hunter perceptions of Montana's Block Management Program: A One Montana report.* Final report for One Montana, Bozeman, MT: 62p.

7. Bitz, M., Metcalf, E.C. & **Metcalf, A.L.** (2012). *Landowner satisfaction with Montana's Block Management Program: A One Montana report.* Final report for One Montana, Bozeman, MT: 17p.

6. Kelsey, T.W., **Metcalf, A.L.**, & Salcedo, R. (2012). *Marcellus shale: Land ownership, local voice, and the distribution of lease and royalty dollars*. Penn State Center for Economic and Community Development. University Park, PA: 15p.

5. **Metcalf, A.L.** & Finley, J.C. (2011). *Social and biophysical constraints to timber availability in 25 Pennsylvania Counties*. Final report for the Pennsylvania Hardwood Development Council, Harrisburg, PA: 73pp.

4. **Metcalf, A.L.**, & Johnson, D.L. (2010). *Wood product's market analysis: Huntingdon, County, PA.* Final report for the Huntingdon County Business and Industry and the Juniata Center for Entrepreneurial Leadership, Huntingdon, PA: 27pp.

3. **Metcalf, A.L.**, Finley, J.C., Luloff, A.E., & Stedman, R.C. (2008). *Pennsylvania's private forest landowners: Results from a statewide survey*. Final report for the Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, Harrisburg, PA: 53 pp.

2. **Metcalf, A.L.**, Finley, J.C., & Johnson, D.L. (2007). *Timber availability assessment for Berks and Huntingdon counties, PA.* Final report for the Pennsylvania Hardwood Development Council, Harrisburg, PA: 23 pp.

1. Luloff, A.E., Finley, J.C., Myers, W.L., **Metcalf, A.L.**, Matarrita, D.C., Gruver, J.B., & Raboanarialina, C. (2007). *The Pennsylvania Highlands: Phase I final report*. Final report for the USDA Forest Service, Milford, PA: 46 pp.

Popular Press

5. **Metcalf, A. L.** (2026). "Op-Ed: The forgotten key to wildlife management: Values." In Mountain Journal. Published July 16. https://mountainjournal.org/grizzly-bears-science-and-values-the-forgotten-key-to-wildlife-management/

4. **Metcalf, A. L.**, & Angle, J. W. (2026). "Americans generally like wolves — except when we're reminded of our politics." In The Conversation. Published January 7. https://theconversation.com/americans-generally-like-wolves-except-when-were-reminded-of-our-politics-267511 (Note: syndicated nationally, including High Country News and Phys.org)

3. **Metcalf, A. L.** (2026). "The big (bad?) wolf with Alex Metcalf." Interview on A New Angle podcast (host: J. W. Angle). Published January 8. https://scholarworks.umt.edu/anewangle_podcasts/425/

2. **Metcalf, A. L.** (2024). "Grizzly bear conservation is as much about human relationships as it is the animals." In The Conversation. Published April 16. https://theconversation.com/grizzly-bear-conservation-is-as-much-about-human-relationships-as-it-is-the-animals-226364

1. Higuera, P., **Metcalf, A. L.**, McWethy, D., & Balch, J. (2021). "Skip the fireworks this record-dry 4th of July, over 150 wildfire scientists urge the US West." In The Conversation. Published June 30. https://theconversation.com/skip-the-fireworks-this-record-dry-4th-of-july-over-150-wildfire-scientists-urge-the-us-west-163561

Selected media coverage of research

3. **Metcalf, A. L.**, Metcalf, E. C., Gude, J. A., Baldridge, J., & Lewis, M. S. (2026), Conservation Science and Practice — "Tolerance for wolves increasing, Montana study shows," Montana Free Press; "UM researchers: Vast majority of Montanans tolerate wolves," Missoula Current; "Wolves: Love them or hate them, the numbers don't lie," Mountain Journal.

2. **Metcalf, A. L.**, Chandler, J. W., & Birdsong, M. H. (2026), Environmental Management — "Two-thirds of Montana's private land is in the hands of a few thousand owners," Montana Free Press (syndicated in Daily Inter Lake, Bozeman Daily Chronicle, Explore Big Sky, Belgrade News, Fairfield Sun Times); "Montana's largest landowners control 63 percent of state's private land," Mountain Journal; "No smoke, no fire, in trends of Montana land ownership," On Land (Western Landowners Alliance).

1. **Metcalf, A. L.**, & Angle, J. W. (2026), Conservation Biology — "Pack politics: How political identity can twist perception of wolves," Mountain Journal; "UM research: Political reminders can intensify wolf divisions," Missoula Current; "Americans generally like wolves − except when reminded of politics," High Country News; Phys.org.

RESEARCH SUPPORT (TOTAL: $7,562,836)

33. **Metcalf, A. L.** & Sells, S. N. (2026). Advancing elk management through integrated monitoring of elk and predator dynamics in the Blackfoot Watershed. Rocky Mountain Elk Foundation. $25,000. FY2026-2027.

32. **Metcalf, A. L.** (2026). Human dimensions of wolf-livestock interactions research. Rocky Mountain Wolf Project. $7,500. FY2026-2027.

31. Walsh, D. & **Metcalf, A. L.** (2025). Regional adaptive management of CWD: *A social-ecological systems approach to human behavior change, ungulate management, and disease control.* Pilot funding. USDA-APHIS Wildlife Services National Wildlife Research Center. **$372,791** FY26.

30. Sells, S., Gude, J., Podruzny, K., Parks, M., Lewis, M., **Metcalf, A. L.**, & Metcalf, E. C. (2023) *Wolf harvest management strategy evaluation*. Montana Department of Fish, Wildlife, and Parks. **$265,000** FY23-25.

29. **Metcalf, A. L.**, & Metcalf, E. C. (2022). *Human dimensions of wolves in the northern Rockies from 2013 to 2023*. Montana Department of Fish, Wildlife, and Parks. **$275,000** FY2022-24

28. Dobrowski, S., Higuera., P., **Metcalf, A. L.**, Davis, K., Littlefield, C., Kemp, K., Parks, S., & Crausbay, S. (2021). *Informing decision to resist, accept, or direct post-fire vegetation transitions.* USGS North Central Climate Adaptation Science Center. **$349,068** FY2022-24

27. Graves, D.M., Wells, J., Burnham, M., Williamson, M.A., Epstein, K., & **Metcalf, A.L.** (2021). *The (emotional) tragedies of environmental conflict: A rural risk and well-being assessment in two acts*. NSF EPSCoR Idaho Seed Funding Opportunity #3. **$70,844**. FY2022.

26. Twidell, D., Allen, C.R., Banerjee, S., Chaffin, B.C., & Floyd, T.M., *with **Metcalf, A.L.** and Allred, B. as senior personnel.* (2019). RII Track-2 FEC: *Resilience informatics for the convergence of critical capacities to address regional-scale environmental change.* NSF 18-589 OIA EPSCoR Research Infrastructure. **$3,953,265**. FY2019-2024.

25. **Metcalf, A.L.** & Hand, M. (2019). Increasing homeowner participation in wildfire risk assessments. *Rocky Mountain Research Station* and *Montana Department of Natural Resources and Conservation.* **$45,826**. FY2019-2020.

24. **Metcalf, A.L.** & Metcalf, E.C. (2019). Human dimensions of grizzly bear management. *Montana Department of Fish Wildlife and Parks*. **$25,307**. FY2019-2020.

23. **Metcalf, A.L.**, Birt, N., Ehrhart, M., and Angle, J. (2018). Agricultural behavior change for conservation: A watershed wide approach. *National Fish and Wildlife*. **$999,942**. FY2019-2021

22. **Metcalf, A.L.**, Metcalf, E.C., Clarke, L., Higuera, P., McWethy, D., & Miller, C. (2018). Co-production of management alternatives to promote social-ecological resilience in fire-prone landscapes. *Aldo Leopold Wilderness Institute*. **$20,000**. FY2018-2020.

21. Proffit, K., Mowry, R., Jourdonnais, C., Ramsey, Mitchell, M., Metcalf, E.C., & **Metcalf, A.L.** (2018). Effects of changes in travel management and hunter access on elk distributions in the northern Sapphire Mountains. *MPG Ranch*. **$155,000** as part of $425,000. FY2019-2020

20. **Metcalf, A.L**. (2017). Socio-economic monitoring, data analysis. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program.* **$5,677** supplemental. FY2018-2020.

19. Stark, T., Keefer, M., & **Metcalf, A.L.** (2017). Efficiency in natural resource extension: Riparian buffers in the Chesapeake Bay Watershed, Pennsylvania. *National Fish and Wildlife Federation* **$50,000** as part of $750,000. FY2018-2020

18. **Metcalf, A.L**. (2017). Priority conservation areas: Spatial analysis of the Gallatin Valley, MT. *Gallatin Valley Land Trust*. **$4,750**. FY2017

17. Dayer, A., & **Metcalf, A.L.** (2017). Human dimensions of working wet meadow conservation. *Intermountain West Joint Venture*. **$5,735** as part of $50,000. FY2017-2018.

16. **Metcalf, A.L.** & Metcalf, E.C. (2017). Longitudinal attitude change among MT residents toward wolves. *MT Fish Wildlife and Parks*. **$14,426**. FY2017-2018

15. **Metcalf A.L.**, Muth, B.A., & Finley, J.C. (2016). Expanding riparian buffer installation in Pennsylvania: Prime prospect outreach to private landowners. *Mellon Foundation*. **$25,000**. FY2017-2019.

14. **Metcalf A.L.**, Muth, B.A., & Finley, J.C. (2016). Expanding riparian buffer installation in Pennsylvania: Prime prospect outreach to private landowners. *PA Dept. of Conservation and Natural Resources*. **$50,000**. FY2016-2018.

13. **Metcalf A.L.** Improving outreach and enhancing stewardship on MT private lands. (2015). *MT Natural Resources Collaborative Working Group*. **$37,000**. FY2016-2017.

12. Higuera, P., **Metcalf, A.L.**, Metcalf, E.C., McWethy, D., & Miller, C. (2015). Identifying ecological and social resilience in fire-prone landscapes. *Joint Fire Science Program*. **$290,560** FY2016-2018.

11. **Metcalf, A.L.** (2015). Socio-economic monitoring of community members and stakeholders. *Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program.* **$46,000**. FY2015-2016.

10. Metcalf, E.C. & **Metcalf, A.L.** (2015). Quantitative assessment of visitor experiences at the Upper Missouri River Breaks National Monument. *US Bureau of Land Management.* **$15,000**. FY2015-FY2016.

9. **Metcalf, A.L.** & Anderson, N.M. (2015). Social science support for: Integration of biofuels and bio-products production into forest products supply chains using modular biomass gasification and carbon activation. *US Department of Agriculture, Forest Service, Rocky Mountain Research Station.* **$170,000**. FY2014-2015. **$62,845** modification. FY2016-2017.

8. **Metcalf A.L.** & Metcalf, E.C. (2014). Resident, hunter, and landowner attitudes toward elk management in areas with Brucellosis. *Montana Fish, Wildlife, and Parks, Wildlife Division.* **$19,000**. FY2014

7. Metcalf, E.C. & **Metcalf, A.L.** (2014). Understanding visitor experiences at the Upper Missouri River Breaks National Monument, a qualitative investigation. *US Bureau of Land Management*. **$13,500**. FY2014.

6. **Metcalf, A.L.**, Nickerson, N., & Metcalf, E.C. (2013). Behavioral risk factor surveillance system (as part of the MT State Comprehensive Outdoor Recreation Plan). *Montana Fish, Wildlife, and Parks, State Parks Division*. **$9,800**, as part of $44,550. FY2013

5. Metcalf, E.C. & **Metcalf, A.L.** (2012). Recreational use survey: Blackfoot and Bitterroot Rivers. *Montana Fish, Wildlife, and Parks, Region 2.* **$15,000**. FY2013.

4. Finley, J.C., Luloff, A.E., & **Metcalf, A.L.** (2011). Parcelization and the future of Penn's Woods. *Pennsylvania Department of Conservation and Natural Resources.* **$130,000**. FY2011-2012

3. Johnson, D.L. & **Metcalf, A.L.** (2010). Wood products analysis for Huntingdon County, PA. *Huntingdon County Business and Industry.* **$4,000**. FY2010.

2. Finley, J.C. & **Metcalf, A.L.** (2009). Timber availability assessment: Expanded analysis. *Pennsylvania Hardwood Development Council.* **$25,000**. FY2009.

1. Finley, J.C. & **Metcalf, A.L.** (2008). Pilot study: Timber availability in PA counties. *Pennsylvania Hardwood Development Council.* **$5,000**. FY2009.

PRESENTATIONS

* indicates graduate student as lead author

Invited presentations

48. Metcalf, A. L. & Metcalf, E. C. (2025). "Human dimensions of grizzly bear conservation in Montana." Invited presentation to the Lewis & Clark Library Big Read Series. Helena, MT. Oct. 6.

47. Metcalf, A. L. (2025). "Social identity influences on wildlife conservation." Invited presentation to Wilburforce Foundation leadership. Virtual, July 12.

46. Metcalf, A. L. (2025). "Credibility and the ecosystem of trust for conservation success." Invited presentation to Wilburforce Foundation grantees. Virtual, May 15.

45. Metcalf, A. L. (2024). "Understanding psychological reactance for conservation success." Invited presentation to Wilburforce Foundation grantees. Virtual, March 19.

44. Metcalf, A. L. (2024). "Microtargeting for conservation agriculture in the Chesapeake Bay Watershed." Invited presentation at the National Fish and Wildlife Foundation Agriculture Forum. Virtual.

43. Metcalf, A. L. (2024). "Social identity influences on wildlife conservation." Invited presentation to Wilburforce Foundation grantees. Virtual.

42. *Lamar, S., Burnham, M., & Metcalf, A. L. (2024). "The hidden costs and benefits of living with grizzly bears in Montana." Invited presentation to Wilberforce Foundation grantees. Virtual.

41. Metcalf, A. L. (2024). "Social science 201 – Human dimensions of grizzly bear management." Invited panelist (1 of 4) at the Interagency Grizzly Bear Committee, 2nd Grizzly Bear Information, Education, and Outreach Summit.

40. Trans-Atlantic Wildlife Management Conference. Tolerance typologies of attitudes toward wolf management and conservation. May, 2022. Yellowstone National Park (via Zoom).

39. National Fish and Wildlife Foundation Long Island Sound Collaborative. Prime prospect approaches for water quality. April, 2022. New York, NY (via Zoom).

38. Grizzly Bear Coalition. Human dimensions of grizzly bear management and conservation. March, 2022. Yellowstone National Park (via Zoom).

37. Montana DCNR Fire Adapted Learning Network. Fire adapted communities. July, 2021. (Zoom webinar)

36. USGS Science Webinar. Human dimensions of climate change. May, 2021. (Zoom webinar).

35. University of Montana Wildlife Leadership Council. Human dimensions of grizzly bear conservation. April, 2021. Missoula, MT.

34. W.A. Franke College of Forestry and Conservation, Department of Society and Conservation, Conservation Social Science Seminar. Data analytics to improve conservation planning and implementation. Feb. 16, 2021. Missoula, MT (via Zoom).

33. National Fish and Wildlife Foundation Agriculture Network Forum. Microtargeting for conservation agriculture: The Prime Prospect approach. Feb. 10, 2021. Richmond, VA (via Zoom).

32. California Delta Science Task Force. Microtargeting for Conservation. July 24, 2019. Davis, CA.

31. University of Montana Lecture at the Food, Water, Energy Nexus. Science & Practice: Water & Resilience. April 4, 2019. Co-panelists: Nancy Grimm, Brian Chaffin, Lisa Eby. Missoula, MT.

30. USDA Forest Service Rocky Mountain Research Station Spring Seminar. Big data to prioritize outreach. Co-presenters: Joe St. Peter & Conor Phelan. Missoula, MT.

29. 2018 All-Bay Agriculture Network Forum: Improving local waters while restoring the Chesapeake Bay. Innovations to accelerate riparian forest buffer implementation. Dec. 4, 2018. Co-presenters: Nate Birt & Conor Phelan. Lancaster, PA.

28. University of Montana College of Business Brownbag Lecture Series. More "bank" for the buck: Microtargeting and normative appeals to increase social marketing efficiency. Nov. 16, 2018. Co-presenter: Justin Angle. Missoula, MT.

27. Montana State University Ecology Lecture Series. Human dimensions of wildlife in Montana: Attitudes, acceptability, and tolerance. Nov. 8, 2018. Co-presenter: E.C. Metcalf. Bozeman, MT

26. National Fish and Wildlife Foundation Webinar Series. Agricultural behavior change for conservation: A watershed-wide approach. Nov. 6, 2018. (Online webinar)

25. USDA Forest Service, Regional Leadership Team (Region 1). July 17, 2018. CFLRP social monitoring strategy and program. Co-presenter: Alice Lubeck. Missoula, MT.

24. Intermountain West Joint Venture. July 10, 2018. The human dimensions of conserving working wet meadow habitats in Sage Steppe landscapes. Co-presenters: Mary Sketch and Ashley Dayer. Missoula, MT.

23. Richard K. Mellon Foundation & National Fish and Wildlife Foundation. March 23, 2018. Using consumer data to target conservation efforts. Harrisburg, PA.

22. University of Montana, W.A. Franke College of Forestry and Conservation, Department of Society and Conservation. March 21, 2018. Big data, behavioral science, and the marketing future of conservation. Missoula, MT.

21. Pennsylvania Forest Buffer Summit. February 28, 2018. Prime prospects: Prioritizing private riparian buffer restoration. State College, PA.

20. Penn State University, Department of Ecosystem Science and Management. August 24, 2017. Science for stewardship: Powering extension with conservation social science. University Park, PA.

19. Chesapeake Bay Watershed Forested Riparian Buffer Advisory Committee. August 3, 2017. Social-ecological landscape inventory and prime prospect analysis. Harrisburg, PA.

18. Chesapeake Riparian Buffer Networking Forum. March 2-3, 2017. Identifying "prime prospect" private landowners for riparian buffer restoration. Adamstown, MD.

17. Chesapeake Conservancy. January 11, 2017. Human dimensions of riparian buffer restoration. Mill Hall, PA.

16. Brucellosis research group. September 24, 2015. Human dimensions of brucellosis management. Jackson, WY.

15. South Dakota Game, Fish, and Parks Leadership Program. July 20, 2015. Successful public engagement in wildlife management (full day workshop). Pierre, SD.

14. Montana Brucellosis Working Group Meeting. July 16, 2015. Acceptability of brucellosis management tools for elk among Montana stakeholder groups. Co-presenter: Elizabeth C. Metcalf. Bozeman, MT.

13. Montana Fish, Wildlife, and Parks Commission. November 13, 2014. Attitudes toward Brucellosis management tools among hunters, landowners, and general residents. Helena, MT.

12. Montana Natural Resources Collaborative Working Group. January 21, 2014. The role of stakeholders' values in building stronger partnerships. Missoula, MT.

11. University of Montana, Department of Society and Conservation. February 2012. Recreational access to private lands: Keystone lessons in Big Sky Country. Missoula, MT.

10. University of Vermont Rubenstein School of the Environment. May 14, 2012. Forestry extension: Partnerships enabling stewardship. Burlington, VT.

9. Pennsylvania Hardwood Development Council and the PA Secretary of Agriculture Redding. November 2010. Social and biophysical constraints to timber availability in 25 Pennsylvania counties. State College, PA.

8. Pennsylvania Forest Steward Annual Meeting. July 2010. Human dimensions of Pennsylvania private forests: Opportunities for conservation. Rock Springs, PA.

7. Pennsylvania Forest Steward Annual Meeting. July 2010. Planning the future forests of Pennsylvania. Rock Springs, PA.

6. Huntingdon County Business and Industry and Juniata Center for Entrepreneurial Leadership. May 2010. Wood products market opportunities. Huntingdon, PA.

5. Allegheny Chapter of the Society of American Foresters. February 2009. Landowner perspectives. State College, PA.

4. Juniata College Summer Speaker Series. July 2008. Social perspectives on natural resource issues and research. Huntingdon, PA.

3. PA DCNR Bureau of Forestry Cooperative Forest Management Annual Meeting. January 2008. Results from a statewide survey of private forest landowners. Carlisle, PA.

2. Pennsylvania Joint Legislative Forestry Task Force. October 2006. Exploring private forest landowners of Pennsylvania. State College, PA.

1. Pennsylvania Forest Steward Annual Meeting. August 2006. Private forest ownership in Pennsylvania. University Park, PA.

Presentations at conferences and professional meetings (oral unless otherwise noted)

75. *Baize, A., **Metcalf, A. L.**, Sells, S., Sipe, H., & Lipp, B. (2025). *"Prioritizing attractant securing investments in the Bitterroot Valley, MT."* 7th International Human-Bear Conflicts Workshop.

Oct. 5-9: Kalispel, MT.

74. **Metcalf, A. L.** & Angle, J. W. (2025). *"Social identity activation and incorrect metaperceptions induce unnecessary polarization of attitudes toward wolves in Montana."* Pathways Conference 2025, Human Dimensions of Wildlife. September 7-10: Estes Park, CO.

73. *Lipp, B., **Metcalf. A. L.**, Angle, J. W., & Sells, S. (2025). *"A systematic scoping review of social identity theory in human dimensions of wildlife research."* Pathways Conference 2025, Human Dimensions of Wildlife. September 7-10: Estes Park, CO.

72. *Baize, A., **Metcalf, A. L.**, Sells, S., Sipe, H., & Lipp, B. (2025). *"A framework for prioritizing bear attractant securement efforts."* Pathways Conference 2025, Human Dimensions of Wildlife. September 7-10: Estes Park, CO.

71. *Baize, A., **Metcalf, A. L.**, & Sells, S. (2025). *"A Framework for Prioritizing Attractants to Reduce Black and Grizzly Bear Conflicts." (Poster).* 63rd Annual Meeting of the MT Chapter of the Wildlife Society. March 4-7: Billings, MT.

70. **Metcalf, A. L.** (2024). *"Social identity shapes attitudes toward large carnivores."* North American Congress for Conservation Biology. June 23-28: Vancouver, BC.

69. **Metcalf, A. L.**, Birdsong, M. A., Metcalf, E. C., Lewis, M. S., & Gude, J. A. (2024*). "Montanans' changing attitudes toward wolves (2012-2023)."* MT Chapter of The Wildlife Society Annual Meeting. February 5-8, 2024: Butte, America.

68. **Metcalf, A. L.**, Birdsong, M. A., Metcalf, E. C., Nesbitt, H. K., & Gude, J. A. (2024*). "The influence of social identity on attitudes toward grizzly bears."* MT Chapter of The Wildlife Society Annual Meeting. February 5-8, 2024: Butte, America.

67. Sipe, H. A., Sells, S. N., Gude, J. A., Podruzny, K. M., Parks, M., Lewis, M. S., Metcalf, A. L., and Metcalf, E. C. (2024). "*Management strategy evaluation for informing decisions about wildlife management and conservation."* MT Chapter of The Wildlife Society Annual Meeting. February 5-8, 2024: Butte, America.

66. **Metcalf, A. L.**, Metcalf E. C., Nesbitt, H. K., Gude, J. A., & Lewis, M. (2023). "Populating the wildlife 'attitude-acceptability' framework to inform human dimensions of wildlife science and practice." Pathways 2023: Human Dimensions of Wildlife Conference and Training Program. May 31 to June 3, 2023: Fort Collins, CO.

65. *Cummins, T., Metcalf, A.L. (2022). *Conflicting social identities key to conservation agriculture adoption.* Virtual talk at Soil and Water Conservation Society Annual Conference. Denver, CO. July 31-Aug. 3.

64. *Nesbitt, H.K., Gulab, S., Floyd, T., Chaffin, B.C., Metcalf, A.L., Banarjee, S., & Allen, C.R. (2022). *Social network drivers of adaptive behaviors in agricultural producers in the American Great Plain.* Virtual talk at North American Congress for Conservation Biology. Reno, NV. July 18.

63. *Nesbitt, H.K., Gulab, S., Floyd, T., Chaffin, B.C., Metcalf, A.L., Banarjee, S., & Allen, C.R. (2022). *Social networks and adaptive behavior in agricultural producers in the American Great Plains*. Virtual talk at Sunbelt, Cairns, Australia. July 12.

62. *Smith, A.P., Metcalf, A.L., Cummins, T., Metcalf, E.C. (2022). *What does 'sustainable beef' mean to you? An examination of US beef producers' perspectives.* Agriculture, Food, and Human Values Society Conference, Athens, GA. May 18-21.

61. *Smith, A.P., Metcalf, A.L., Cummins, T., Metcalf, E.C. (2022). *Confidence, community, and conservation: Exploring the relationship between self-efficacy and experience in female hunters*. National Environmental and Recreation Research Symposium. Annapolis, MD. April 3-5.

60. *Nesbitt, H.K., Gulab, S., Floyd, T., Chaffin, B.C., Metcalf, A.L., Banarjee, S., & Allen, C.R. (2021). *Adaptive capacity & behavior of agricultural producers in a grassland social-ecological system: A social network approach.* Virtual talk at American Geophysical Union Annual Meeting, New Orleans, LA. Dec. 15.

59. *Nesbitt, H.K., Gulab, S., Floyd, T., Chaffin, B.C., Metcalf, A.L., Banarjee, S., & Allen, C.R. (2021). *Adaptive capacity of agricultural producers in a grassland social-ecological system: A social network approach*. Ecological Society of America Annual Meeting. Virtual: August 2-6.

58. *Smith, A., Metcalf, E.C., **Metcalf, A.L.**, Nesbitt, H.K., Moore, M., & Cummins, T. (2020). *Exploring the continuum of public engagement in conservation science: Responsibility, relationships, and "life" beyond the manuscript. Interactive Session.* North American Congress for Conservation Biology. Virtual: July 27-31.

57. *Cummins, T., **Metcalf, A.L.**, Angle, J., Slattery, D., Chandler, J., Rayburn, K., & Ehrhart, M. (2020). *Understanding conservation adoption on farms in the Chesapeake Bay Watershed.* North American Congress for Conservation Biology. Virtual: July 27-31.

56. *Leonard, H., **Metcalf, A.L.**, Angle, J., Chandler, J., & Bender, N. (2020). *A systematic mapping of conservation marketing research to date.* North American Congress for Conservation Biology. Virtual: July 27-31.

55. *Nesbitt, H.K., **Metcalf, A.L.**, Metcalf, E.C, Lubeck, A.A., & Beckman, C. (2020). *Collective factors drive individual contributions to wildlife coexistence.* North American Congress for Conservation Biology. Virtual: July 27-31.

54. Miller, C., McWethy, D., Higuera, P., Metcalf, E.C., Clarke, L., **Metcalf, A.L.** (2019). *Demystifying resilience to wildfire.* Association for Fire Ecology 8th International Fire Ecology and Management Congress, Tuscon, AZ.

53. St. Peter, J., Phelan, N., & **Metcalf, A.L.** 2019. *Big data to prioritize restoration outreach*. Montana Association of Geospatial Information Professionals Annual Meeting, Butte, America.

52. Glikman, J.A., **Metcalf, A.L.**, Sponarski, C., Frank, B., Metcalf, E.C., Lecuyer, M.L., & Ruppert, K. (2018). *Coexistence, tolerance, or acceptance?: Understanding and defining positive human-wildlife interaction* – an interactive session. North American Congress for Conservation Biology. Toronto, CA: July 21-26.

51. *Phelan, C.N., **Metcalf, A.L.**, & Pallai, C. (2018). *Social-ecological landscape prioritization: Orienting conservation toward important places and likely partners*. North American Congress for Conservation Biology. Toronto, CA: July 21-26.

50. *Phelan, C.N., **Metcalf, A.L.**, & Pallai, C. (2018). *A coupled social and ecological approach to prioritizing conservation at the property level and landscape extent*. 24th International Symposium on Society and Resource Management. Salt Lake City, UT: June 17-21.

49. *Phillippe, C., Metcalf, E.C., **Metcalf, A.L.**, Higuera, P., Miller, C., McWethy, D., & Rafferty, R. (2018). *Social-ecological resilience to wildfire: Perspectives from fire-affected communities*.

24th International Symposium on Society and Resource Management. Salt Lake City, UT: June 17-21.

48. *Sketch, M., Dayer, A., & **Metcalf, A.L.** (2018). *Western rancher perspectives on social-ecological services provided by flood irrigation*. 24th International Symposium on Society and Resource Management. Salt Lake City, UT: June 17-21.

47. *Lubeck, A., **Metcalf, A.L.**, & Beckman, C. (2018). *The collective interest behind independent behavior: Quantifying a cross-boundary model of invasive species control in a complex ownership mosaic.* 24th International Symposium on Society and Resource Management. Salt Lake City, UT: June 17-21.

46. Higuera, P., **Metcalf, A.L.**, Metcalf, E.C., McWethy, D., and Miller, C. (2018). *The value in resilience: Integrating objective and subjective dimensions of resilience in fire-prone landscapes.* The Fire Continuum Conference, Missoula, MT: May 21-24.

45. Metcalf, E.C., Metcalf, A.L., Higuera, P., McWethy, D., and Miller, C. (2018). *Social resilience to wildfire: Perspectives from fire-affected communities*. The Fire Continuum Conference, Missoula, MT: May 21-24.

44. Metcalf, E.C., Mohr, J.J., **Metcalf, A.L.**, and Lauer, F.I. (2017). *Understanding the human dimensions of river restoration: Evidence from the Clark Fork River, MT.* Ecological Society of America Annual Meeting, Portland, OR: August 6-11.

43. *McIver, C., **Metcalf, A.L.**, and Dodson, E. (2016). *CFLRP and the mediating influence of federal contract regulations on benefit to local communities*. Society of American Foresters National Convention, Madison, WI: Nov. 2-6.

42. *Ver Plank, N., **Metcalf, A.L.**, Finley, A.O., & Finley, J.C. (2016). *Evaluation of the National Woodland Owner Survey estimators for private forest area and landowners*. Society of American Foresters National Convention, Madison, WI: Nov. 2-6.

41. Muth, B.A., **Metcalf, A.L.**, and Subjin, A. (2016). *Women in the woods*. Society of American Foresters National Convention, Madison, WI: Nov. 2-6.

40. *Battaglia, B., Fredenberg, W., **Metcalf, A.L.**, Eby, L., & Metcalf, E.C. (2016). *A proactive approach to mitigating angler bycatch concerns for Bull Trout in Montana*. The *Salvelinus confluentus* Curiosity Society. Sula, MT: August 4-6.

39. *Lauer, F.I., **Metcalf, A.L.**, Metcalf, E.C., & Mohr, J.J. (2016). *Engaging stakeholders to build resilience: Social justice drivers of restoration success.* (Poster). 22nd International Symposium on Society and Resource Management. Houghton, MI: June 22-26.

38. Essen, M., **Metcalf, A.L.**, and Anderson, N. (2016). *A new era of forest planning: Science and the importance of social networks.* (Presentation). 22nd International Symposium on Society and Resource Management. Houghton, MI: June 22-26.

37. **Metcalf, A.L.**, E.C. Metcalf, K. Kumalo, J. Gude, Q. Kujala, and M. Lewis. (2016). *Public recreation and wildlife on private lands: Reciprocity and vulnerability shape normative beliefs*. National Environmental and Recreation Research Symposium, Annapolis, MD: April 2-4.

36. Metcalf, E.C., F.I. Lauer, and **Metcalf, A.L.** (2016). *Scenes of visionary enchantment: Recreation management at the Missouri River Breaks National Monument*. National Environmental and Recreation Research Symposium, Annapolis, MD: April 2-4.

35. *Lauer, F.I., **Metcalf, A.L.**, and C. Davis. (2015). *Collaborative outcomes: Social monitoring in the Southwest Crown of the Continent Collaborative Forest Landscape Restoration Program.* (Poster). 6th Roundtable on the Crown of the Continent Conference. Missoula, MT: Sept. 16-18.

34. Essen, M., **Metcalf, A.L.**, and N. Anderson. (2015). *Social networks matter: Connecting forest planning to social ecological science*. (Poster). 6th Roundtable on the Crown of the Continent Conference. Missoula, MT: Sept. 16-18.

33. **Metcalf, A.L**., J.C. Finley, A.E. Luloff, and T. Beckley. (2014). *Can parcelization of forestland play a role in preserving private forests?* 20th International Symposium on Society and Resource Management. Hannover, Germany: June 9-13.

32. **Metcalf, A.L.** and E.C. Metcalf. (2014). *Squeaky wheels?: Comment cards and visitor intercept surveys – Big Blackfoot River, MT*. The 26th National Environmental and Recreation Research Symposium. Cooperstown, NY: April 6-8.

31. **Metcalf, A.L.**, Metcalf, E.C., Lewis, M., Kujala, Q., Gude, J., & Mitchell, M. (2014). *Will Fences Make Good Neighbors? Quantifying Acceptability of Brucellosis Management Seroprevelance Reduction in the Southern Greater Yellowstone Ecosystem*. The Pathways to Success Conference: Integrating Human Dimensions into Fish and Wildlife Management Estes Park, CO. Oct. 5th-9th.

30. Metcalf, E. Covelli and **Metcalf, A.L.** (2014). *A river runs through it: Understanding place attachment on the Blackfoot River, Montana.* The 26th Northeastern Recreation Research Symposium. Cooperstown, NY: April 6-8.

29. Metcalf, E. C., **Metcalf, A.L.**, Lewis, M., Kujala, Q., Gude, J., & Mitchell, M. (2014). *From the Ground Up: A collaborative Approach for Understanding the Social Landscape of Elk and Cattle Brucellosis Management in the Greater Yellowstone Ecosystem.* The Pathways to Success Conference: Integrating Human Dimensions into Fish and Wildlife Management Estes Park, CO. Oct. 5th-9th.

28. Lewis, M., Kujala, Q., Gude, J., Charles, A., Weigand, J., Messer, A., Podruzny, K., Metcalf, E. C., & **Metcalf, A.L.** (2014). *Private Lands, Public Wildlife: Comparing and Contrasting resident Hunter and Private Landowner Data and Thoughts regarding Hunting Access in Montana*. The Pathways to Success Conference: Integrating Human Dimensions into Fish and Wildlife Management Estes Park, CO. Oct. 5th-9th.

27. **Metcalf, A.L.**, J.C. Finley, A.E. Luloff, A.B. Muth, and J.B. Gruver. (2013). *Conservation and conservatism: Promoting stewardship among private forest landowners*. 19th International Symposium on Society and Resource Management. Estes Park, CO: June 4-8.

26. Finley, J.C., **Metcalf, A.L.**, J.B. Gruver, A.B. Muth, and A.E. Luloff. (2013). *Addressing forest parcelization through legacy planning.* Society of American Foresters National Conference. Charleston, SCL October 26.

25. Finley, J.C., A.B. Muth, A.E. Luloff, **Metcalf, A.L.**, and J.B. Gruver. (2013). *Private forests and landowners of Pennsylvania.* Galaxy Conference. Pittsburgh, PA: Sept. 18.

24. **Metcalf, A.L.**, J.C. Finley, A.E. Luloff, R.C. Stedman, and D.L. Shumway. (2012). *Sampling and estimation of private forest landowners*. 18th International Symposium on Society and Resource Management. Edmonton, Canada: June 17-21.

23. **Metcalf, A.L.**, J.C. Finley, A.E. Luloff, R.C. Stedman, and D.L. Shumway. (2011). *Sampling and estimation of private forest landowner populations.* 17th International Symposium on Society and Resource Management. Madison, WI: June 5-9.

22. **Metcalf, A.L.** and E.A. Covelli. (2011). *Recreation to stewardship: using owner interests to encourage sound management of private forests*. The 23nd Northeastern Recreation Research Symposium. Bolton Landing, NY: April 10-12.

21. **Metcalf, A.L.**, J.C. Finley, and A.E. Luloff. (2010). *Commercial harvesting decision among private forest landowners: perceptions, parcelization, and predicting supply.* 16th International Symposium on Society and Resource Management. Corpus Christi, TX: June 6-10.

20. **Metcalf, A.L.**, J.C. Finley, A.E., Luloff, and R.C. Stedman. (2009). *Shifting the discussion toward recreation: Outreach opportunities with private forest landowners.* Northeastern Recreation Research Symposium. Bolton Landing, NY: March 29-31.

19. Finley, J.C., A.E. Luloff, and **Metcalf, A.L.** (2009). *Forest biomass and energy: The role of social science in addressing supply side questions*. 15th International Symposium on Society and Resource Management. Vienna, Austria: July 6-8.

18. Longmire, C.L., **Metcalf, A.L.**, A.E. Luloff, and J.C. Finley. (2009). *Exploring the spatial context for harvesting non-timber forest products on Pennsylvania private forestlands*. 15th International Symposium on Society and Resource Management. Vienna, Austria: July 6-8.

17. Covelli, E.A., A.R. Graefe, **Metcalf, A.L.**, and D.B.K. English. (2009). *Spatial analysis of use patterns on the Tiadaghton and Tioga state forests, Pennsylvania.* Northeastern Recreation Research Symposium. Bolton Landing, NY: March 29-31.

16. **Metcalf, A.L.**, J.C. Finley, A.E. Luloff, and R.C. Stedman. (2008). *Where's the wood?: A spatial assessment of biophysical and social constraints on timber access in suburban and rural Pennsylvania*. 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14.

15. **Metcalf, A.L.** (2008). *Recreation as a catalyst for cooperation among private forest landowners.* 20th Northeastern Recreation Research Symposium. Bolton Landing, NY: March 30 – April 1

14. Gruver, J., J.C. Finley, A.E. Luloff, and **Metcalf, A.L.**. (2008). *Forest parcelization and the future of Penn's Woods*. 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14.

13. Stedman, R.C., **Metcalf, A.L.**, J.C. Finley, and A.E. Luloff. (2008). *In the eye of the beholder: comparing landowner and forester perspectives on forest health and sustainability*. 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14

12. Finley, J.C., **Metcalf, A.L.**, A.E. Luloff, and R.C. Stedman. (2008). *Estimating the population of private forest landowners in Pennsylvania: Implications for outreach, management, and stewardship of private forestlands.* 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14.

11. Muth, A.B., **Metcalf, A.L.**, J.B. Gruver, and J.C. Finley. (2008). *Putting people in a natural resource management curriculum: Facilitating natural resources decision course*. 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14.

10. Longmire, C., J.C. Finley, A.E. Luloff, and **Metcalf, A.L.**. (2008). *Cross-boundary cooperation among private forest landowners: A comparison of survey results from Pennsylvania and*

Tennessee. 14th International Symposium on Society and Resource Management. Burlington, VT: June 9-14.

9. **Metcalf, A.L.**, J.C. Finley, A.E. Luloff, and R.C. Stedman. (2007). *Exploring the private forestlands of Pennsylvania: Methodology for a statewide survey of private forestland and landowners*. 13th International Symposium on Society and Resource Management. Park City, Utah: June 17-21.

8. **Metcalf, A.L.** 2007. *Exploring Pennsylvania forestlands: Recreational perspectives of private forest landowners.* 19th Northeastern Recreation Research Symposium. Bolton Landing, NY: April 15-17.

7. Finley, J.C., **Metcalf, A.L.**, A.E. Luloff, and R.C. Stedman. (2007). *Private forest landowners: Revisiting our "myth-perceptions."* 13th International Symposium on Society and Resource Management. Park City, Utah: June 17-21.

6. Stedman, R.C., **Metcalf, A.L.**, A.E. Luloff, and J.C. Finley. (2007). *Working together?: Neighboring behaviors among Pennsylvania's private forest landowners.* 13th International Symposium on Society and Resource Management. Park City, Utah: June 17-21.

5. Luloff, A.E., **Metcalf, A.L.**, and J.C. Finley. (2007). *Measuring and comparing the public's and scientists' perspectives on conservation values.* 13th International Symposium on Society and Resource Management. Park City, Utah: June 17-21.

4. Gruver, J.B., J.C. Finley, A.E. Luloff, and **Metcalf, A.L.** (2007). *Guiding public concern for water resource issues toward engagement.* 13th International Symposium on Society and Resource Management. Park City, Utah: June 17-21.

3. **Metcalf A.L.**, J.C. Finley, A.E. Luloff, and R. Stedman. (2006). *Exploring private forest landowners of Pennsylvania*. Society of American Foresters National Conference. Pittsburgh, PA: October 25-29.

2. **Metcalf A.L.**, J.C. Finley, and A.E. Luloff. (2006). *Mapping conservation values in the Pennsylvania Highlands.* 12th International Symposium on Society and Resource Management. Vancouver, BC, Canada: June 3-8.

1. **Metcalf A.L.**, and D.L. Johnson. (2001). *Enhanced floodplain mapping: GIS-based correction of DFIRM maps in Mifflin County, PA*. Stormwater and Floodplain Managers Annual Conference. Charlotte, NC: May 21-25.

GRADUATE STUDENT SUPERVISION

Supervised

Continuing

13. Baize, Anna. Ph.D., Wildlife Biology. <expected graduation SP2030>
12. Lipp, Brianna. Ph.D., Wildlife Biology. <expected graduation SP2030>
11. Peterson, Kat. Ph.D., Wildlife Biology. <expected graduation SP2030>

Completed

10. Lipp, Brianna. M.S., Wildlife Biology. 2026. Social identity & conspiracy theories in wildlife
9. Baize, Anna. M.S., Wildlife Biology. 2026. Human dimensions of grizzly bear management
8. Nesbitt, Holly. Ph.D., Forestry & Conservation Sciences. 2023. Social ecological systems networks
7. Edmo, Kenneth. M.S., Resource Conservation. 2023. Grizzly bear encounter rules and recommendations
6. Bender, Nathan. M.S., Resource Conservation & MBA. 2022. Conservation marketing & climate action
5. Leonard, Hannah. M.S., Resource Conservation. 2021. Conservation marketing, easement microtargeting

4. Clarke, Lily. M.S., Systems Ecology. 2020. Community resilience to wildfire
3. Pendergraph, Daniel. M.S., Resource Conservation. 2019. Contamination in wilderness waterways
2. Lubeck, Alice. M.S., Resource Conservation. 2018. Weed control as a collective action problem
1. Lauer, Frederick. M.S., Systems Ecology. 2017. Social justice in social-ecological systems management

Committee membership

Completed

21. Terwillinger, Chelle. Ph.D., Forestry & Cons. Sciences (advisor: E.Metcalf). *Team science*
20. Whitney, Peter. M.S., Parks, Tourism, Recreation Management 2023. (advisor: W.Rice). *Rec. behavior*
19. Damon, Madeline. M.S., Resource Conservation. 2022. (advisor: E.Metcalf). *Gender bias in wildlife*
18. Moore, Megan. Ph.D., Forestry & Cons. Sciences. 2022. (advisor: E.Metcalf). *Community memory.*
17. Smith, Ada. Ph.D., Forestry & Cons. Sciences. 2022. (advisor: E.Metcalf). *Rangeland adaptive capacity.*
16. Mudford, Taylor. M.S., Resource Cons. 2021. (advisor: J.Thomsen). *Collaborative management.*
15. Offer, Joseph. M.S., Geography. 2021. (advisor: D.Shively). *Private lands conservation.*
14. Hodge, Haley. M.S. 2020. Resource Conservation. (advisor: E.Metcalf). *Wildfire management.*
13. Wilson, Hannah. M.S. 2020. Resource Conservation. (advisor: L.Yung). *Collaborative conservation.*
12. Halm, Sara. M.S. 2020. HD of Wildlife. (advisor: M.Burnham, ISU). *Grizzly bear conflict.*
11. Henderson, Charles. Ph.D. 2019. Wildlife Biology. (advisor: P.Lukacs). *Wildlife decision support.*
10. Sketch, Mary. M.S. 2018. Wildlife Conservation. (advisor: A.Dayer, VTech). *HD of wildlife.*
9. Koller, Craig. M.A. 2018. Geography. (advisor: D. Shively). *Coordinating US cadastral geospatial data.*
8. Datta, Amber. M.S. 2018. Resource Conservation, ICD. (advisor: B.Chaffin). F*isheries governance*.
7. Nagle, Madison. M.S. 2018. Economics. (advisor: M.Taylor). *Wildfire risk perception and behaviors.*
6. Beckman, Crystal. 2017. Masters of Public Admin. (advisor: E.Shanahan, MSU). *Wildfire behaviors.*
5. Henners, Verena. 2016. M.S., Geography. (advisor: U.Kamp). *Conservation history: Swan & Blackfoot.*
4. Rial, Ellie. 2015. M.S., Resource Conservation. (advisor: E.Metcalf). *Public-private water conservation.*
3. Hemphill, Cassandra. 2015. Ph.D., Forest & Conservation Sciences. (advisor: J.Burchfield). *Implementation and institutionalization of stewardship contracting by units of the US Forest Service.*
2. McIver, Chelsea. 2015. M.S., Forestry. (advisor: E.Dodson). *Local capture of forest restoration benefits.*
1. Muller, Alia. 2014. M.S., Environmental Studies. (advisor: L.Broberg). *Impacts of public wolf hunting.*

Other graduate student supervision

5. Cummins, Tina. (2019-2025). Ph.D. student, Forestry & Conservation Sciences. Advanced to candidacy.
4. Phelan, Conor. (FA16-SU18). M.S. research assistant (fully funded). *Spatial analysis in SES.*
3. Ver Plank, Neil. (SP15-FA15). Ph.D. research assistant (Univ. of Michigan). *PFL estimation.*
2. Tinsley, Bridget. (SP14). M.S. research assistant (partially funded). *Socioeconomic monitoring.*
1. Miftari, Shefije. (FA13). M.S. research assistant (partially funded). *CFC alumni employment.*

Research associate and post-doctoral scholar supervision

2. Essen, M. (FA2014-SP16). Research Associate (funded). *Human dimensions of forest planning.*
1. Kumalo, K. (FA2014-SP2015). Post-doc (funded). *Human dimensions of elk management.*

TEACHING

Course	Title	Cr.	Semesters taught
University of Montana — Graduate courses			
NRSM/PTRM 574	Human Dimensions of Natural Resources Theory	3	FA16, FA18, FA19, SP21, SP22, SP23, SP25, SP26
NRSM 595	Special Topics: Human Dimensions of Wildlife	2	FA14, SP23
NRSM 595	Special Topics: Social Data Analysis	1	FA19
University of Montana — Undergraduate courses			
WILD 274	Human Dimensions of Wildlife (previously WILD 291, special topics)	3	SP22, SP23, SP25, SP26
NRSM 121	Introduction to Environmental Science & Sustainability (previously "Nature of Montana")	3	FA15, FA16, FA17, FA18, FA19, FA20, FA21, FA22

NRSM 379	Collaboration in Natural Resource Decisions	3	SP12, SP13, SP14, FA14, FA15, SP17, SP18, SP19
NRSM 215	Field Studies in Conservation (field based)	1	FA16, FA17
FORS 130	Forestry Field Skills (field based)	2	FA14
NRSM 191	Natural Resource Field Techniques (field based)	1	SP14
FORS 391	Field Forestry Skills at Lubrecht Experimental Forest (field based)	3	SP13
NRSM 298/398/498	Natural Resource Internships	1–6	SP14 to FA22
Penn State University			
FOR/WFS 497	Facilitating Natural Resource Decisions	3	SP07
FOR 203	Dendrology (w/ Lab)	3	SP06
FOR 366	Forest Mensuration (w/ Lab) — Teaching Assistant	4	FA05
Juniata College			
ESS 100	Earth and Environmental Science	3	FA10, SP11
EES/RFS 330	Geographic Information Systems (w/ Lab)	3	SP08, FA08, SP11

AWARDS & HONORS

- Second-highest Altmetric score of any article published in *Conservation Biology* (2025)
- Rachel Carson Prize article runner-up for 2024 by Editors at *People and Nature*
- Top 25 Social Science and Human Behaviour Articles of 2022 by *Nature Communications*
- College of Forestry & Conservation Steve Running Outstanding Research Award (2020)
- UM Davidson Honors College, Undergraduate Research Support Recognition (2020)
- Rabel J. Burdge & Donald R. Field 2018 Outstanding Article Award, *Society and Natural Resources* (2019)
- Article selected as Editor's Choice for Volume 69, Issue 5, *BioScience* (2019)
- UM Student Wellness Advocate (2017)
- UM Division of Student Affairs, Faculty Recognition Award (2016)
- Montana Druids Society (2013)
- Xi Sigma Pi Honor Society (2004)
- Competitive Teaching/Research Assistantships (2003-2010), Penn State University
- Competitive Research Travel Awards (2006, 2007, 2008), Penn State University
- William von Liebig Student Research Award (2001), Juniata College
- FEMA Region III Achievement Award for GIS floodplain mapping advancement (2001)
- Presidential Scholarship (1997-2001), Juniata College
- National Honor Society (inducted 1997)

SERVICE

To the department, college, and university

- University of Montana Faculty Senate, Chair-Elect (2026-2027)
- University of Montana Assessment and Accreditation Committee (2026-present)
- CFC Tenure Track Search Committee (AY26/27)
- University of Montana Faculty Senate (2024-present)
- University of Montana Faculty Evaluation Committee (2025)
- Environmental Science & Sustainability Degree Program faculty (2020-present)
- University of Montana Executive Committee of Senate (2025-present)
- Dept. of Forest Management Teaching Faculty Search Committee (2024-2025)
- WBIO Faculty mentor committee (2020-2023)
- CFC Tenure Track Search Committee, chair (AY21/22)
- CFC Ad-hoc, Strategic Planning Committee, co-chair (SP21)

- CFC Scholarship Committee (2020-present)
- CFC Recruitment and Retention Committee (2018, Chair 2019-2020)
- CFC Environmental Science & Sustainability, Ad-hoc Committee (2018-2019)
- CFC Graduate Affairs Committee (2016-2019)
- Faculty Advisor to UM Student Chapter of Backcountry Hunters & Anglers (2016-2023)
- UM Student Wellness Coalition (2017-2023)
- UM Undergraduate Research Committee (2016-2020)
- Judge at UM's Undergraduate Research Symposium (2016-2018)
- UM Academic Conduct Board (2015-2020)
- Resource Conservation Degree Program (2015-2020)
- Resource Conservation Degree Program Internship Committee, (Chair, 2015-2020)
- Wildlife Biology Communications Committee, Chair (2015-2020)
- Wildlife Biology Degree Program (2014-present)
- Systems Ecology Graduate Degree Program (2014-present)
- Systems Ecology Graduate Admissions Committee (2014-2017, Chair 2018-2023)
- Montana Institute on the Environment (2014-present)
- ASCRC General Education Social Science Curriculum Review Committee (2016-2017)
- Wyss Scholarship Review Committee (2015; 2018)
- UM Graduate Student Research Symposium, Organizing Committee (2013-2015)
- Lubrecht Advisory Committee (2014-2016)
- Assistant Director, Bolle Center for People and Forests (2013-2015)
- Forestry Degree Program (2013-2015)
- FCFC Properties Committee (2013-2014; 2020-2022)
- FCFC Undergraduate Affairs (2013-2014)

To the field

- Associate Editor, *Human Dimensions of Wildlife* (2020-present)
- External tenure reviewer (n=6)
- External reviewer for The Foundation for Food and Agriculture Research grants (2024)
- Reviewer, *Society and Natural Resources, Journal of Forestry, Forests, Northern Journal of Applied Forestry, Energy and Social Science, Journal of Rural Studies, Human Dimensions of Wildlife, Wildlife Society Bulletin, Ecology and Society, Conservation Biology, Land Use Policy, & Landscape and Urban Planning, Fisheries Research, Biological Invasions, Animal Conservation, Conservation Science & Practice, Global Environmental Change*
- External reviewer for the Delta Stewardship Council, Social Science Task Force (2019)
- Congressional and USDA briefing team, Wildfire Resilience (2019).
- Member, American Association for the Advancement of Science (2017-present)
- Society for Conservation Biology Conservation Marketing Working Group (2018-present)
- Society for Conservation Biology Social Science Working Group (2017-present)
- Society for Conservation Biology (2017-present)
- Member, International Association for Society and Resource Management (2006-present)
- Co-Founder & Affiliate Faculty, Penn State Center for Private Forests (2010-present)
- Member, Society of American Foresters, Allegheny and Missoula Chapters (2003-2015)
- Member, Pennsylvania Forestry Association (2003-2012)
- Member, Steering Committee for the Penn State Human Dimensions of Natural Resources and the Environment Dual Degree Program (2008-2012)
- Member, Northeast Forest Resource Extension Committee (2003-2011)
- Member, Pennsylvania Biomass Working Group (2008-2011)

- President & Founder, Penn State Student Organization for Society & Natural Resources (2006-2010)
- Vice President, Xi Sigma Pi Honor Society (2004-2006)

To the community

- Holland Lake Lodge Advisory Board (2025-present)
- Swan Valley Connections, Education Committee Chair (2020-2021)
- Swan Valley Connection, Executive Committee (2020-2021)
- Swan Valley Connections, Treasurer/Executive (2018-2020)
- Swan Valley Connections, Board of Directors (2016-2021)
- Swan Ecosystem Center & Northwest Connections Merger Committee legal liaison (2015-2017)
- Northwest Connections, Board of Directors (2014-2017), executive committee 2014-2016)
- Southwest Crown of the Continent, Socio-Economic Working Group (2013-2020)
- MT Natural Resources Collaborative Working Group (2013-2016)
- Community organization (e.g., local elections, Northside neighborhood community development)

UNDERGRADUATE STUDENT SUPERVISION

- McAtee, Claire, DHC Senior Thesis (2025)
- Comstock, Riley, DHC Senior Thesis (2026)
- HD of Wildlife UG Research Team: Malakahi Spint, Jaxion Caufield, Gracie Henrie & Taylor Ferguson (2025)
- Damon, Madeline, DHC Senior Thesis Committee (SP21)
- Shouse, Rachel, Undergraduate research assistant (FA19-SP20)
- Lang, Lily, DHC Student Senior Capstone, Social Resilience to Wildfire (FA19-SP20)
- French, Sophia, Human dimensions lab participant (FA18-SP19)
- Metcalf, Julius, Human dimensions of wildlife intern (Summer 2016) & senior thesis (SP17-18)
    - Research awarded the Irene Evers Scholarship for Undergraduate Research ($5,000)
- Barr, Ryan, Social ecological systems restoration intern (FA 2015, SP 2016)
- Hansen, Reid, Forest planning intern (FA 2015, SP 2016)
- Brown, Jessica, Recreation management intern (FA 2014, SP 2015)
- Hopkins, Seong, Forest management intern, Lubrecht (Summer 2014)
- Wentz, Charles, Forest management intern, Lubrecht (Summer 2014)
- Ramirez, Bryan, Facilities marketing & management intern, Lubrecht (Summer 2014)
- Sketch, Mary, Visiting Human Dimensions Research Assistant, Brown University (Sum. 2014)
- James, Elizabeth, Practicum: Ecological Restoration of Private Forestland (2013-2014)