Lindsey K. Albertson

My pronouns are: she/her/hers Associate Professor Montana State University Department of Ecology Bozeman, MT 59717 lindsey.albertson@montana.edu 406.994.3725 www.montana.edu/alindsey

EDUCATION

2013 Ph.D. in Ecology, Evolution, & Marine Biology, University of California-Santa Barbara2006 B.Sc. in Geology-Biology with Honors, Brown University

RESEARCH & TEACHING APPOINTMENTS

7/21-present	Associate Professor, Ecology Department, Montana State University, Bozeman MT
2/23-5/23	Fulbright Scholar, Loughborough University, United Kingdom
8/15-6/21	Assistant Professor, Ecology Department, Montana State University, Bozeman MT
4/14-7/15	Postdoctoral Researcher, Geomorphology, Stroud Water Research Center, Avondale PA
12/14-5/15	<i>Lecturer</i> for Introduction to Freshwater Ecology, University of Pennsylvania, Philadelphia PA (30 undergraduates)
1/14-4/14	<i>Science Faculty</i> , 10 th Grade Biology, Jackson Hole Community School, Jackson WY (30 high school sophomores)
5/13-12/13	Wildlife Biologist and Educator, Teton Science Schools, Jackson WY
9/07-12/13	<i>Graduate Research Assistant</i> , Salmon restoration and biophysical interactions, Department of Ecology, Evolution, and Marine Biology, UC-Santa Barbara, Santa Barbara CA
9/07-4/13	<i>Graduate Teaching Assistant</i> for Lakes and Wetlands, Introductory Biology, Applied Freshwater Biology, Introductory Ecology, and River Ecology, UC-Santa Barbara, Santa Barbara CA
8/06-6/07	<i>Research Technician</i> , Salt marsh community ecology, Zoology Department, University of Florida, Gainesville FL
6/06-8/06	Frontiers In Biological Research (FIBR) Technician, Local adaptation of Arabidopsis along a climate gradient, The Max Planck Institute, Cologne Germany

- 9/05-12/05 *Teaching Assistant* for Sedimentation and Stratigraphy, Geology Department, Brown University, Providence RI
- 6/05-8/05 *Research Experience for Undergraduates (REU) Intern*, Microbial population ecology in cave ecosystems, Geosciences Department, Pennsylvania State University, State College PA
- 6/04-8/04 Undergraduate Teaching and Research Assistant (UTRA), Salt marsh community ecology and seed bank dynamics along a salinity gradient, Ecology Department, Brown University, Providence RI

FUNDING AWARDED

(Albertson sole PI unless otherwise noted)

- 2024 Teaching grant, Montana State University Equipment Funds. "Wading equipment for diverse body sizes." Amount: \$1,312.
- 2024 Research grant, Montana State University McNair Scholarship for undergraduates. "Caddisflies in aquatic insect communities." Amount: \$2,900.
- 2024 Research grant, Montana State University Ron and Jane Rada Scholarship for undergraduates. "Evaluating drivers of aquatic invertebrate community assembly: The interplay of predation and facilitation in streams." Amount: \$2,000.
- 2024 Research grant, Madison Gallatin Trout Unlimited and the Madison River Foundation. "Monitoring populations of culturally important salmonflies to inform conservation." Amount: \$3,078
- 2024 Research grant, Madison River Foundation. "Salmonfly preference for riparian habitat and temperature during the hatch." Amount: \$6,500.
- 2023 Research Grant, Montana Fish, Wildlife, and Parks; "Patterns of crayfish disease and its effects on behavior;" Award: \$133,595
- 2023 Research Grant, USA Olympics and Paralympics Committee; PI **Albertson**, Co-PI French. "Ecosystem engineering animals regulate nutrient cycling in rivers." Award: \$4,500.
- 2023 *Research Grant*, Madison River Foundation; "Salmonfly hatches on the Madison River: Long-term patterns in phenology and consequences for birds;" Award: \$2,000.
- 2023 *Murdock Trust Partners in Science Grant*; PI **Albertson**, Co-PI King. "An iconic invertebrate in peril? Detecting changes to the salmonfly hatch and bird predation to inform river conservation in the Rocky Mountains;" Award: \$19,000.
- 2022 *Open Access Author Fund Grant*, PI **Albertson**, Co-PI Briggs. Montana State University; Aquaculture, Fish and Fisheries journal. Award: \$2,000.
- 2022 *SITKA Ecosystem Research Grant*; PI **Albertson**, Co-PI Roche. "Cross-Boundary Temperature Regimes and Their Influence on Aquatic Insect Emergence, Fitness, and

Survival;" Award: \$2,000.

- 2022 *Fulbright Visiting Scholars Program Grant*, Loughborough University, United Kingdom. "Ecosystem Engineering Animals Regulate Biodiversity and Function Across Disturbance Gradients." Award: \$11,028
- 2022 *Research Grant,* National Science Foundation Division of Environmental Biology Ecosystems; "RAPID: Effects of drying disturbance on energy flux across the aquaticterrestrial boundary: Dam malfunction influences aquatic insect emergence quantity and phenology." Award: \$189,528
- 2021 *Research Grant*, College of Letters & Science, Montana State University; PI **Albertson**, Co-PIs Bertagnolli, Poole, and Stewart. "Ecosystem engineers in a riverbed alter microbial functional diversity." Award: \$13,780
- 2021 *MadTAC Northwestern Energy Grant*; "Impacts of flushing flows on macroinvertebrate populations." Award: \$5,000
- 2021 *Open Access Author Fund Grant*, PI **Albertson**, Co-PIs Reinert and Junker. Montana State University; Ecosphere journal. Award: \$1,925
- 2021 *Open Access Author Fund Grant*, PI Verhille, Co-PI **Albertson**. Montana State University; Conservation Physiology journal. Award: \$1,900
- 2021 *Madison River Foundation Grant*, "Evaluating the influence of tributary confluences and efficacy of long-term monitoring datasets for understanding drivers of macroinvertebrates and trout in the Madison River, Montana" Award: \$3,000.
- 2021 *Sitka Ecosystem Research Grant*; PI **Albertson**, Co-PI Fritz. "How do ecosystem engineers in a river alter microbial diversity and nutrient cycling?" Award: \$5,000.
- 2021 Society for Freshwater Science Strategic Funds Grant. "SFS Annual Meeting Watch Gathering at Flathead Lake Biological Station." Award: \$1,500.
- 2021 *MSU Strategic Investment Plan Grant*, PI Verhille, Co-PI **Albertson**. "Expanding knowledge of culturally and economically important freshwater resources in southwestern Montana: Conservation physiology of the giant salmonfly in the Madison River;" Award: \$10,490.
- 2020 *Open Access Author Fund Grant*, PI **Albertson**, Co-PI Tumolo, Montana State University; Ecology and Evolution journal. Award: \$1,760
- 2020 *SITKA Ecosystem Research Grant*; PI **Albertson**, Co-PIs Maguire and Verhille. "Comparing the physiological responses of giant salmonflies (Plecoptera: *Pteronarcys californica*) from different populations to warming water temperature;" Award: \$3,000.
- 2020 Research Experience for Teachers (RET) Grant, Western Transportation Institute, PI Plymesser, Co-PI **Albertson**; "Impact of Culverts on Freshwater Macroinvertebrate Drift." Award: \$4,000

- 2020 *Research Grant*, National Science Foundation Division of Environmental Biology Ecosystems, PI **Albertson**, Co-PI Poole; "Macroinvertebrate Ecosystem Engineers Mediate Whole-Stream Metabolism and Nutrient Uptake." Award: \$1,166,841
- 2019 *MadTAC Northwestern Energy Grant*; "Impacts of changing macroinvertebrate populations on Madison River salmonids." Award: \$40,000
- 2019 *Open Access Author Fund Grant*, PI **Albertson**, Co-PI Anderson, Montana State University; Ecosphere journal. Award: \$1,750
- 2019 *Postdoctoral Research Fellowship in Biology Grant*, National Science Foundation, PI Larson, Co-PI **Albertson**; "Community assembly in space and time: What are the roles of co-occurring ecosystem engineers and engineering traits?" Award: \$138,000; Declined
- 2019 Research Experience for Teachers (RET) Grant, Western Transportation Institute, PI Plymesser, Co-PI **Albertson**; "Ecosystem Engineers: Quantifying the Habitat Preferences of Net-Spinning Caddisflies;" Award: \$7,500
- 2019 *Research Grant*, USGS Montana Water Center, PI Tumolo, Co-PI **Albertson**; "Aquatic Insect Ecosystem Engineering Creates Resource Hot Spots in Montana Streams;" Award: \$2,000
- 2018 *Open Access Author Fund Grant*, PI **Albertson**, Co-PI Tumolo, Montana State University; Ecosphere journal. Award: \$1,595
- 2018 Research Grant, Montana Academy of Sciences, PI Tumolo, Co-PI Albertson; "Aquatic Insect Ecosystem Engineering Creates Resource Hot Spots in Montana Streams;" Award: \$1,500
- 2017 *Research Grant*, Department of the Interior and Yellowstone National Park Service; "Amphipods of Yellowstone Lake;" Award: \$125,615
- 2017 *Thorson Excellence in Engineering Research (TEER) Grant,* College of Engineering, MSU, PI Johnson, Co-PIs **Albertson** and Plymesser; "Quantifying the flow resistance of a net-spinning caddisfly silk structure using particle image velocimetry;" Award: \$25,000
- 2017 *Graduate Student Recruitment Grant*, College of Letters & Sciences, MSU, PI Albertson, Co-PI Poole; "Caddisfly Ecosystem Engineers Control Whole-Stream Hydrologic Exchange;" Award: \$6,635
- 2016 Research Grant, National Science Foundation Division of Environmental Biology Ecosystems, PI Albertson, Co-PIs Cross, Daniels and Sklar; "Collaborative research: Sediment stabilization by animals in stream ecosystems: consequences for erosion, ecosystem processes, and biodiversity;" Total award: \$737,248; MSU portion: \$465,081
- 2016 *Faculty Seed Grant*, Montana Water Center; "Impacts of river flow and temperature on salmonfly productivity and terrestrial subsidy;" Award: \$15,000
- 2016 *Research Grant*, Rocky Mountain Biological Laboratory; "Distribution of caddisfly larvae in streams across gradients in elevation and shear stress;" Award: \$750

- 2014 Visitor's Travel Grant, Rocky Mountain Biological Laboratory; Award: \$700
- 2013 *Graduate Student Fellowship*, Department of Ecology, Evolution & Marine Biology, UC-Santa Barbara. Semester funding for excellence in research. Award: \$9,000
- 2013 Coastal Fund Grant, UC-Santa Barbara Associated Students; Award: \$1,000
- 2013 Valentine Eastern Sierra Reserve Graduate Student Grant, UC-Santa Barbara Natural Reserves; Award: \$1,000; Declined
- 2012 *Graduate Student Block Grant*, UC-Santa Barbara Ecology, Evolution, and Marine Biology; Award: \$2,000
- 2011 *Doctoral Dissertation Improvement Grant*, National Science Foundation Division of Environmental Biology, PI Cardinale, Co-PI **Albertson**; Award: \$15,000
- 2010 *Mathias Graduate Student Grant*, University of California Natural Reserve System; Award: \$2,100
- 2010 Valentine Eastern Sierra Reserve Graduate Student Grant, UC-Santa Barbara Natural Reserves; Award: \$1,050
- 2010 *Visitor's Program Grant,* National Center for Earth Surface Dynamics (NCED); Award: \$18,000
- 2009 *Travel Grant* to The Ecological Society of America 94th annual conference in Albuquerque NM, Strategic Environmental Research and Development Program (SERDP); Award: \$500
- 2009-present 16 additional travel grants to Albertson totaling \$9,153

PUBLICATIONS

(^Δgraduate student; *undergraduate student; ⁼equal contribution)

46. Glassic^{Δ,} H. C., J. R. Junker, C. S. Guy, D. R. Lujan^Δ, L. M. Tronstad, M. A Briggs^Δ, L. K. Albertson, T. O. Brendan, T. Walsworth, and T. M. Koel. 2024. An invasive predator substantially alters energy flux without changing food web functional state or stability. *Aquatic Conservation: Marine and Freshwater Ecosystems* 34:e4240.

45. Verhille, C. E., M. J. MacDonald, B. Noble, G. Demorest, A. Roche, K. Frazier*, and **L. K. Albertson**. 2024. Thermal tolerance of giant salmonflies (*Pteronarcys californica*) varies across populations in a regulated river. *Conservation Physiology*.

44. Johnson, M. F., **L. K. Albertson**, N. P. Everall, R. Mason, A. Pledger, S. P. Rice and C. R. Thorne. 2024. Accounting for the power of Nature: Using flume and field studies to compare the capacities of bio-energy and fluvial energy to move surficial gravels. *Earth Surface Processes and Landforms* 49: 2612-2627.

43. Johnson, M. F., **L. K. Albertson**, A. C. Algar, S. Dugdale, P. Edwards, J. England, C. Gibbins, S. Kazama, D. Komori, A. D. C. Maccoll, E. A. Scholl, F. O. Roque, R. Wilby, and P. Wood. 2024. Rising water temperature in rivers: Ecological impacts and future resilience. *WIREs Water* 11:e1724.

42. **Albertson, L. K.**, L. S. Sklar, B. B. Tumolo^Δ, W. F. Cross, S. F. Collins, and H. A. Woods. 2024. The ghosts of ecosystem engineers: Legacy effects of biogenic modifications. *Functional Ecology* 38:52-72.

41. Tronstad, L.M., D. R. Lujan^Δ, M. A Briggs^Δ, **L. K. Albertson**, H. C. Glassic^Δ, C. S. Guy, and T. M. Koel. 2024. Novel technique for suppressing an apex invasive predator minimally alters nitrogen dynamics in Yellowstone Lake, Wyoming, USA. *Hydrobiologia*.

40. Glassic^{Δ,} H. C., D. Chagaris, C. S. Guy, L. M. Tronstad, D. R. Lujan^Δ, M. A Briggs^Δ, L. K. Albertson, T. O. Brendan, T. Walsworth, and T. M. Koel. 2024. Yellowstone cutthroat trout recovery in Yellowstone Lake: Complex interactions among invasive species suppression, disease, and climate change. *Fisheries*.

39. Bertagnolli, A. D., A. J. Maritan^Δ, B. B. Tumolo^Δ, S. F. Fritz^Δ, H. C. Oakland^Δ, E. J. Mohr^Δ, G. C. Poole, **L. K. Albertson**, and F. J. Stewart. 2023. Net-spinning caddisflies create denitrifierenriched niches in the stream microbiome. *ISME Communications* 3:111.

38. Tumolo[△], B. B., **L. K. Albertson**, M. D. Daniels, L. S. Sklar, and W. F. Cross. 2023. Facilitation strength across environmental and beneficiary trait gradients in stream communities. *Journal of Animal Ecology* 92:2005-2015.

37. Glassic^{Δ}, H. C., C. S. Guy, L. M. Tronstad, M. A Briggs^{Δ}, **L. K. Albertson**, D. R. Lujan^{Δ}, and T. M. Koel. 2023. Decomposition rates of suppression-produced fish carcasses in a large, deep, high elevation lake in North America. *Fishes* 8(8):385.

36. Sanders^A, C., S. P. Rice, P. Wood, and **L. K. Albertson**. 2023. River bank burrowing is innate in native and invasive signal crayfish (*Pacifastacus leniusculus*) and is driven by biotic and abiotic cues. *Biological Invasions* 25:3425–3442.

35. Tumolo[△], B. B., **L. K. Albertson**, W. F. Cross, G. C. Poole, G. Davenport^{*}, M. D. Daniels, and L. S. Sklar. 2023. Resource modification by ecosystem engineers generates hotspots of stream community assembly and ecosystem function. *Ecology* 104:e4052.

34. Fritz^{Δ}, S., **L. K. Albertson**, J. Hobgood^{*}, G. C. Poole, H. Oakland^{Δ}, and E. Mohr^{Δ}. 2023. Macroinvertebrate ecosystem engineering affects streambed retention of microplastics. *Freshwater Science* 42:133-145.

33. Cox^{*}, T., M. Lance^{Δ}, **L. K. Albertson**, M. A. Briggs, A. Dutton^{Δ}, and A. Zale. 2023. Diet composition and resource overlap of sympatric native and introduced salmonids across neighboring streams during a peak discharge event. *PLoS ONE* 18:e0280833.

32. Glassic^{Δ}, H. C., C. S. Guy, D. R. Lujan^{Δ}, L. M. Tronstad, M. A Briggs^{Δ}, L. K. Albertson, and T. M. Koel. 2023. Invasive predator diet plasticity has implications for native fish conservation and invasive species suppression. *PLoS ONE* 18:e0279099.

31. Briggs^{Δ}, M. A., **L. K. Albertson**, D. R. Lujan^{Δ}, L. M. Tronstad, H. C. Glassic^{Δ}, C. S. Guy, T. M. Koel. 2022. Fish carcass deposition to suppress invasive lake trout through hypoxia causes limited, non-target effects on benthic invertebrates in Yellowstone Lake. *Aquaculture, Fish and Fisheries* 2:470-483.

30. McCarty^Δ, J., W. F. Cross, **L. K. Albertson**, B. B. Tumolo^Δ, and L. S. Sklar. 2022. Life histories and production of three Rocky Mountain aquatic insects along an elevation-driven temperature gradient. *Hydrobiologia* 849:3633-3652.

29. **Albertson, L. K.**, V. Ouellet, J. H. Reinert^A, N. Korb, and M. Jaeger. 2022. Influence of beaver mimicry restoration on habitat availability for fishes, including Arctic grayling (*Thymallus arcticus*). *Aquaculture, Fish, and Fisheries* 2:104-115.

28. Lujan[△], D. R., L. M. Tronstad, M. A Briggs[△], **L. K. Albertson**, H. C. Glassic[△], C. S. Guy, and T. M. Koel. 2022. Response of nutrient limitation to invasive fish suppression: How carcasses and analog pellets alter periphyton. *Freshwater Science* 41:88-99.

27. **Albertson, L. K.**, M. A. Briggs, Z. Maguire^Δ, S. Swart^{*}, W. F. Cross, C. W. Twining, J. S. Wesner, C. Baxter, and D. M. Walters. 2022. Dietary composition and fatty acid content of giant salmonflies (*Pteronarcys californica*) in two Rocky Mountain rivers. *Ecosphere* 13:e3904.

26. Reinert^Δ, J. H., **L. K. Albertson**, and J. R. Junker^Δ. 2022. Influence of biomimicry structures on ecosystem function in a Rocky Mountain incised stream. *Ecosphere* 13:e3897.

25. MacDonald^Δ, M. J., L. K. Albertson, and G. C. Poole. 2021. Ecosystem engineering in the streambed: Net-spinning caddisflies influence hydraulic properties. *Ecohydrology* 14:e2266.

24. **Albertson**, **L. K.**, M. J. MacDonald^A, B. B. Tumolo^A, M. A. Briggs^A, Z. Maguire^A, S. Quinn^A, J. A. Sanchez-Ruiz^A, J. Veneros^A and L. A. Burkle. 2021. Uncovering patterns of freshwater positive interactions using meta-analysis: Identifying the roles of common participants, invasive species, and environmental context. *Ecology Letters* 24:594-607.

23. Briggs^Δ, M. A., **L. K. Albertson**, D. R. Lujan^Δ, L. M. Tronstad, H. C. Glassic^Δ, C. S. Guy, T. M. Koel. 2021. Carcass deposition to suppress invasive lake trout causes differential mortality of two common benthic invertebrates in Yellowstone Lake, Wyoming. *Fundamental and Applied Limnology* 194:285-295.

22. Tumolo^Δ, B. B., L. Calle^Δ, H. E. Anderson^Δ, M. A. Briggs^Δ, S. Carlson^Δ, M. J. MacDonald, J. H. Reinert^Δ, and **L. K. Albertson**. 2020. Toward spatio-temporal delineation of positive interactions in ecology. *Ecology and Evolution* 10:9026-9036.

21. Maguire^{*}, Z., B. B. Tumolo^Δ, and **L. K. Albertson**. 2020. Retreat but no surrender: Caddisfly silk has enduring effects on stream channel hydraulics. *Hydrobiologia* 847(6):1539-1551.

20. Anderson[∆], H. E., **L. K. Albertson**, and D. M. Walters. 2019. Thermal variability drives synchronicity of an aquatic insect resource pulse. *Ecosphere* 10(8):e02852.

19. Anderson[△], H. E., **L. K. Albertson**, and D. M. Walters. 2019. Water temperature drives variability in salmonfly abundance, emergence timing, and body size. *River Research and Applications* 35(7):1013-1022.

18. Tumolo[△], B. B., **L. K. Albertson**, W. F. Cross, M. D. Daniels, and L. S. Sklar. 2019. Occupied and abandoned structures from ecosystem engineering differentially facilitate stream community colonization. *Ecosphere* 10(5):e02734.

17. **Albertson, L. K.**, L. S. Sklar, S. D. Cooper, and B. J. Cardinale. 2019. Aquatic macroinvertebrates stabilize gravel bed sediment: A test using silk net-spinning caddisflies in semi-natural river channels. *PLoS ONE* 14(1):e0209087.

16. **Albertson, L. K.**, and M. D. Daniels. 2018. Crayfish ecosystem engineering effects on riverbed disturbance and topography are mediated by size and behavior. *Freshwater Science* 37:836-844.

15. Juras[△], M., **L. K. Albertson**, J. Cahoon, and E. Johnson. 2018. Incorporating macroinvertebrate biological structures into gravel-bedded fluid dynamics using 3D CFD modeling. *Ecological Engineering* 119:19-28. **Highlighted in MSU's Confluence magazine**

14. **Albertson, L. K.**⁼, V. Ouellet⁼, and M. D. Daniels. 2018. Impacts of stream riparian buffer land use on water temperature and food availability for fish. *Journal of Freshwater Ecology* 33:195-210.

13. **Albertson, L. K.**, and M. D. Daniels. 2016. Resilience of net-spinning caddisfly silk structures to common global stressors. *Freshwater Biology* 61:670-679.

12. **Albertson, L. K.**, and M. D. Daniels. 2016. Effects of invasive crayfish on fine sediment accumulation, gravel movement, and macroinvertebrate communities. *Freshwater Science* 35:644-653.

11. **Albertson, L. K.**, L. S. Sklar, and B. J. Cardinale. 2015. Reply to comment on 'A mechanistic model linking insect (Hydropsychidae) silk nets to incipient sediment motion in gravel-bedded streams.' *Journal of Geophysical Research - Earth Surface* 120:1151-1152.

10. **Albertson, L. K.**, and D. C. Allen. 2015. Meta-analysis: Abundance, behavior, and hydrologic energy shape biotic effects on sediment transport in streams. *Ecology* 96(5):1329-1339.

9. Albertson^Δ, L. K., L. S. Sklar, M. Dow^{*}, P. Pontau^{*}, and B. J. Cardinale. 2014. A mechanistic model linking insect (Hydropsychidae) silk nets to incipient sediment motion in gravel-bedded streams. *Journal of Geophysical Research - Earth Surface* 119(9):1833-1852. Highlighted as an American Geophysical Union Research Spotlight

8. Albertson^{Δ}, L. K., B. J. Cardinale, and L. S. Sklar. 2014. Non-additive increases in sediment stability are generated by macroinvertebrate species interactions in laboratory streams. *PLoS ONE* 9(8):e103417.

7. Utz, R.M., S. C. Zeug, B. J. Cardinale, and **L.K. Albertson**[△]. 2012. Trophic ecology and population attributes of two resident non-game fishes in riverine habitat engineered to enhance salmon spawning success. *California Fish and Game* 98(2):104-124.

6. **Albertson**^A, **L. K.**, L. E. Koenig^{*}, B. L. Lewis^{*}, S. C. Zeug, L. R. Harrison^A, and B. J. Cardinale. 2012. How does restored habitat for Chinook salmon in the Merced River California compare to other Chinook streams? *River Research and Applications* 29(4):469-482.

5. Zeug, S. C., **L. K. Albertson**[∆], B. J. Cardinale, H. S. Lenihan, and J. Hardy*. 2011. Predictors of Chinook salmon extirpation in California's Central Valley. *Fisheries Management and Ecology* 18:61-71.

4. **Albertson**^Δ, **L. K.**, B. J. Cardinale, S. C. Zeug, L. R. Harrison^Δ, H. S. Lenihan, and M. A. Wydzga^Δ. 2011. Impacts of channel reconstruction on invertebrate assemblages in a restored river. *Restoration Ecology* 19(5):627-638.

3. Viola^Δ, D. V., E. A. Mordecai^Δ, A. G. Jaramillo^Δ, S. A. Sistla^Δ, **L. K. Albertson**^Δ, J. S. Gosnell^Δ, B. J. Cardinale, and J. M. Levine. 2010. Does a competition-defense tradeoff maintain producer diversity? *Proceedings of the National Academy of Sciences* 107(40):17217-17222.

2. Crain^Δ, C. M., **L. K. Albertson**^{*}, and M. D. Bertness. 2008. Secondary succession dynamics in estuarine marshes across landscape-scale salinity gradients. *Ecology* 89(10):2889-2899.

1. Macalady, J. L., E. H. Lyon^Δ, B. Koffman^Δ, **L. K. Albertson**^{*}, K. Meyer^Δ, S. Galdenzi, and S. Mariani. 2006. Dominant microbial populations in limestone-corroding stream biofilms, Frasassi cave system, Italy. *Applied and Environmental Microbiology* 72(8):5596-5609.

PUBLICATIONS IN REVIEW

Harvey, G. L., Z. Kahn, **L. K. Albertson**, M. Coombs, M. Johnson, S. Rice, and H. Viles. Accepted. Global diversity and energy of animals shaping the Earth's surface.

Glassic, H.C., L. M. Tronstad, D. R. Lujan, M. A. Briggs^Δ, **L. K. Albertson**, C. S. Guy and T. M. Koel[·]. In review. Suppressing an invasive species using novel methods: isotopic analysis revealed decomposing fish carcasses minimally altered primary producers and consumers.

Fritz^{Δ}, S. F., **L. K. Albertson**, B. B. Tumolo^{Δ}, J. A. Sanchez-Ruiz^{Δ}, A. French^{Δ}, J. Reyes de Merkle^{Δ}, F. Kalakay^{Δ}, H. C. Oakland^{Δ}, A. Roche^{Δ}, G. C. Poole, and C. Baxter. In review. Unveiling context-dependency of positive species interactions and invasion meltdowns.

Albertson, L. K., J. Ortiz, N. Brass^{*}, J. Birrell, and S. F. Fritz^Δ. In review. Effects of warming water temperature on giant salmonflies under simulated stream drying.

HONORS & AWARDS

- 2022 *Institute of Advanced Studies Visiting Fellow Award*; Loughborough University, United Kingdom. Award: \$2,000
- 2012 *Worster Award*. Department of Ecology, Evolution & Marine Biology, UC-Santa Barbara. For mentoring undergraduate student M. Pepping; Award: \$6,000
- 2010 Best Student Oral Presentation in Applied Research. North American Benthological Society (now Society for Freshwater Science) Annual Meeting, Santa Fe, New Mexico
- 2009 *Worster Award*. Department of Ecology, Evolution & Marine Biology, UC-Santa Barbara. For mentoring undergraduate student B. Lewis; Award: \$6,000

- 2008 *Worster Award*. Department of Ecology, Evolution & Marine Biology, UC-Santa Barbara. For mentoring undergraduate student L. Koenig; Award: \$6,000
- 2006 Sarah King Award. Geology Department, Brown University. For excellence in undergraduate research and academics

RESEARCH PRESENTATIONS

(^Δgraduate student; *undergraduate student; **bold** invited; + special recognition)

109. Propios^{*}, C., S. F. Fritz[△], and **L. K. Albertson**. 2024. Effects of Particle Size on Presence of Net-spinning Caddisflies in Stream Ecosystems. McNair Scholars Research Celebration, Bozeman, MT. Poster.

108. Cairns, G. and **L. K. Albertson**. 2024. "Crossing the Ecotone." Official Selection of the Wildlife Conservation Film Festival. Fort Lauderdale, FL.

107. Harvey, G., Z. Khan^Δ, **L. Albertson**, M. Coombes, M. Johnson, S. Rice, H. Viles. 2024. Global diversity and significance of animals shaping the Earth's surface. British Geological Society. London, UK.

+106. Khan^A, Z., G. L. Harvey, **L. K. Albertson**, S. Fritz^A, S. P. Rice, and M. Johnson. 2024. Global signatures of life in landscapes: magnitude and coherence of animal geomorphic effects. British Geological Society. London, UK. Poster. *Winner of best student poster*

105. **Albertson, L. K.** 2024. Entomology of the Madison River: Aquatic insects and what they teach us about global change. Double R Ranch, Ennis MT. <u>Invited Presentation</u>.

104. **Albertson, L. K.** 2024. Are rivers resilient to drought? Using salmonflies to understand responses of freshwater species to drying. Science Seminar Series, Ennis MT. <u>Invited</u> <u>Presentation</u>.

103. **Albertson, L. K.** 2024. Salmonflies on the Madison River: A research directive for conserving an iconic insect that supports trout. Madison River Foundation Board and Madison-Gallatin Trout Unlimited Board. <u>Invited Presentation</u>.

102. Bushey*, L., A. French^Δ, S. Fritz^Δ, and **L. K. Albertson**. 2024. Detecting the biomagnification of perfluorooctanoic acid (PFOA) in stream ecosystems with close proximity to ski trails. Undergraduate Research Celebration. Montana State University Bozeman, MT. Poster.

101. Fritz^A, S., H. Oakland^A. A. French^A, G. C. Poole, and **L. K. Albertson**. 2024. Influence of Ecosystem Engineer Density on Stream Macroinvertebrate Communities. Society for Freshwater Science. Philadelphia, PA.

100. Oakland^{Δ}, H., S. Fritz^{Δ}, A. French^{Δ}, E. Mohr^{Δ}, L. K. Albertson, and G. C. Poole. 2024. Toward more explicit representation of hyporheic hydrology in ecosystem process models. Society for Freshwater Science. Philadelphia, PA. 99. Bushey^{*}, L., A. French^Δ, S. Fritz^Δ, and **L. K. Albertson**. 2024. Detecting the biomagnification of perfluorooctanoic acid (PFOA) in stream ecosystems with close proximity to ski trails. Society for Freshwater Science. Philadelphia, PA. Poster.

98. French^A, A., S. Fritz^A, H. Oakland^A, G. Poole, and **L. K. Albertson**. 2024. Ecosystem engineering effects on microbial processes in streams. Society for Freshwater Science. Philadelphia, PA.

97. **Albertson, L.K**., K. Mathers, P. Wood, M. Johnson, C. Sanders, and Stephen Rice. 2024. Interactions between invasive species and fine sediment loads in rivers reveal complex roles of ecosystem engineers under global change. Society for Freshwater Science. Philadelphia, PA.

96. Schmidt^A, S.A., S. B. Adams, D. A. Schmetterling, J. D. Uribeondo, L. Martin-Torrijos, and **L. K. Albertson**. 2024. Unraveling the Significance of Crayfish Plague Outbreaks in Montana: A National and Global Perspective Unraveling the Significance of Crayfish Plague Outbreaks in Montana: A National and Global Perspective. Society for Freshwater Science. Philadelphia, PA.

95. **Albertson, L. K.** 2024. Can invasive crayfish clean up riverbeds polluted by fines? Montana Aquatic Research Colloquium. Polson, MT.

94. **Albertson, L. K.** 2024. Salmonflies in the Madison and Gallatin Rivers. F3T Fly Fishing Film Tour. Big Sky, MT. **Invited Presentation**.

93. **Albertson, L. K.** 2024. A sabbatical journey about sand. Seminar. Montana State University, Bozeman, MT.

92. King, F. and **L. K. Albertson**. 2024. Finding a place to emerge: Does riparian habitat play a role in giant salmonfly emergence in the Rocky Mountains? Murdock Trust Foundation. San Diego, CA. Poster.

91. Roche[△], A., **L. K. Albertson**, A. A. Shah, and C. Verhille. 2023. Cross Boundary Temperature Regimes and Their Effects on Giant Salmonfly *(Pteronarcys Californica)* Emergence? American Water Resources Association. Missoula, MT. Presentation. Withdrawn.

90. Albertson, L.K. 2023. Salmonflies in the west. Science Seminar Series. Ennis, MT. <u>Invited</u> <u>Presentation</u>.

89. Glassic, H.G., L. M. Tronstad, D. R. Lujan, M. A. Briggs^A, **L. K. Albertson**, C. S. Guy and T. M. Koel. 2023. Food web dynamics minimally altered by fish carcass deposition to suppress invasive lake trout. Lake Trout Science Panel. Bozeman, MT. Presentation.

88. **Albertson, L. K.** 2023. Biotic interactions in freshwater ecosystems: A focus on facilitation. Nottingham University, United Kingdom. <u>Invited Presentation</u>.

87. Albertson, L. K. 2023. How animals shape the environment: Facilitation by ecosystem engineers across stress gradients. Queen Mary University London, United Kingdom. <u>Invited</u> <u>Presentation</u>.

86. Roche^A, A., **L. K. Albertson**, A. A. Shah, and C. Verhille. 2023. Cross Boundary Temperature Regimes and Their Effects on Giant Salmonfly *(Pteronarcys Californica)* Emergence? Society for Freshwater Science. Brisbane, Australia. Presentation. 85. Ortiz, J., **L. K. Albertson**, J. Wesner, A. Roche^A, and Z. Maguire^A. 2023. Investigating Long-Term Trends in Salmonfly Emergence in Two Montana Rivers: Can Pulsed Drought Disturbance Alter Aquatic-Terrestrial Carbon Flux? Society for Freshwater Science. Brisbane, Australia. Presentation.

*84. French^Δ, A. S. Fritz^Δ, H. Oakland^Δ, G. Poole, and **L. K. Albertson**. 2023. Net-spinning caddisflies influence nutrient uptake in streams. Society for Freshwater Science. Brisbane, Australia. Presentation.

Winner of best student presentation

83. Fritz^Δ, S. F., **L. K. Albertson**, B. B. Tumolo^Δ, J. A. Sanchez-Ruiz^Δ, A. French^Δ, J. Reyes de Merkle^Δ, F. Kalakay^Δ, H. C. Oakland^Δ, and A. Roche^Δ. 2023.Relationships of space, time, and invasion status to freshwater species interactions. Society for Freshwater Science. Brisbane, Australia. Presentation.

82. Oakland^Δ, H., S. Fritz^Δ, A. French^Δ, E. Mohr^Δ, **L. K. Albertson,** and G. C. Poole. 2023. Net-Spinning Caddisflies Reduce Hyporheic Exchange in Experimental Stream Mesocosms. Society for Freshwater Science. Brisbane, Australia. Presentation.

81. Tronstad, L.M., H.C. Glassic, D.R. Lujan, M.A. Briggs[△], **L.K. Albertson**, C.S. Guy and T.M. Koel. 2023. Adding lake trout carcasses to spawning sites in Yellowstone Lake minimally altered food web dynamics: insights into invasive species management using stable isotopes. Colorado-Wyoming American Fisheries Society, Fort Collins, CO. Presentation.

80. Glassic, H.C., L. M. Tronstad, D. R. Lujan, M. A. Briggs^Δ, **L. K. Albertson**, C. S. Guy and T. M. Koel. 2023. Adding fish carcasses to spawning sites of invasive species minimally altered food web dynamics: insights using stable isotopes. Montana American Fisheries Society, Butte MT. Presentation.

79. **Albertson, L. K.** 2023. How animals shape the environment: Investigating patterns of ecosystem engineering, positive interactions, and invasive species in rivers. Institute of Advanced Studies. Loughborough University, Loughborough United Kingdom. <u>Invited</u> <u>Presentation</u>.

78. Brass*, N., A. Roche^Δ, and **L. K. Albertson**. 2022. Effects of temperature on salmonfly body size, dispersal, and fecundity. Undergraduate Research Celebration. Montana State University Bozeman, MT. Poster.

77. Roche^A, A., and **L. K. Albertson**. 2022. How will Salmonflies Be Affected By Climate Change? Wild Montana seminar series. Bozeman, MT. <u>Invited Presentation</u>.

76. Glassic^A, H., D. Chagaris, C. S. Guy, M. A. Briggs^A, **L. K. Albertson**, L. M. Tronstad, T. O. Brenden, D. R. Lujan, T. Walsworth, and T. M. Koel. 2022. Realistic Native Fish Conservation Benchmarks: Accounting for Lake Trout Predation and Disease. American Fisheries Society. Spokane, WA. <u>Invited Presentation</u>.

75. Hobgood^{*}, J., Z. Maguire^A, and **L. K. Albertson**. 2022. The effect of flushing flows on macroinvertebrate community structure in the Madison River, Montana. Undergraduate Research Celebration. Montana State University. Bozeman, MT. Poster.

74. **Albertson, L. K.**, L. S. Sklar, B. B. Tumolo^Δ, W. F. Cross, S. Collins, and H. Arthur Woods. 2022. Ghosts of Ecosystem Engineers: Causes and Consequences of Biogenic Legacies in Nature. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

73. Tumolo[△], B. B., **L. K. Albertson**, W. F. Cross, G. Davenport^{*}, and G. C. Poole. 2022. Ecosystem engineers generate ecological heterogeneity by aggregating resources and consumers. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

72. Maguire^Δ, Z., and **L. K. Albertson.** 2022. Tributary confluences in regulated rivers: abiotic conditions that shape habitat in the Madison River, Montana. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

71. Roche^A, A., L. K. Albertson, and C. E. Verhille. 2022. Cross-boundary temperature regimes and their influence on aquatic insect emergence. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Poster.

70. French[∆], A., **L. K. Albertson**, M. T. Trentman. 2022. Effects of ecosystem engineers on microbial processes in stream ecosystems. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Poster.

69. Fritz^Δ, S., J. Hobgood^{*}, E. Mohr^Δ, H. Oakland^Δ, G. Poole, and **L. K. Albertson**. 2022. Macroinvertebrate Ecosystem Engineering Affects Streambed Retention of Microplastics. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

68. Oakland^Δ, H., E. Mohr^Δ, S. Fritz^Δ, A. French^Δ, **L. K. Albertson**, and G. Poole. 2022. Netspinning caddisfly effects on hyporheic hydrology in experimental stream mesocosms. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

67. Mohr^{Δ}, E., H. Oakland^{Δ}, S. Fritz^{Δ}, A. French^{Δ}, **L. K. Albertson**, and G. Poole. 2022. The effect of net-spinning caddisflies on nitrate removal in stream mesocosms. Joint Aquatic Sciences Meeting. Grand Rapids, MI. Presentation.

66. **Albertson, L. K.** 2021. An iconic river invertebrate in peril? Temperature effects on salmonfly phenology, abundance, and physiology. California State University Monterey Bay seminar series. Remote delivery. **Invited presentation.**

65. Glassic[△], H., C. Guy, D. Lujan, L. Tronstad, M. Briggs, **L. Albertson**, and T. Koel. 2021. Diet plasticity in invasive Lake Trout has implications for native species conservation and invasive species suppression. American Fisheries Society Western Division Annual Meeting. Remote delivery.

64. Cook[△], K., A. Zale, D. Stagliano, M. Anderson, C. Barnhart, C. Guy and **L. Albertson**. 2021. Reproductive phenology and life-history traits of western pearlshell mussels in Montana. American Fisheries Society Montana Chapter Annual Meeting. Remote delivery.

63. Cook[△], K., A. Zale, D. Stagliano, M. Anderson, C. Barnhart, C. Guy and **L. Albertson**. 2021. Reproductive phenology and life-history traits of western pearlshell mussels in Montana. Freshwater Mollusk Conservation Society Annual Meeting. Remote delivery.

62. Tumolo[∆], B. B., **L. K. Albertson**, W. F. Cross, G. Davenport*, and G. C. Poole. 2021.

Resource modification by streambed ecosystem engineers facilitates invertebrate community assembly and ecosystem function. Society for Freshwater Science Annual Meeting. Remote delivery. **Invited presentation.**

61. Oakland^Δ, H., E. Mohr^Δ, S. Fritz^Δ, G. Poole, and **L. K. Albertson**. 2021. Hyporheic zone hydrology in experimental annular flumes. Society for Freshwater Science Annual Meeting. Remote delivery. Poster.

60. **Albertson**, **L. K.**, M. MacDonald, B. B. Tumolo^{Δ}, M. Briggs^{Δ}, Z. Maguire^{Δ}, S. Quinn^{Δ}, J. Sanchez^{Δ}, J. Veneros^{Δ} and L. A. Burkle. 2021. Meta-analysis of freshwater positive interactions reveals the role of common participants, invasive species, and stress. Society for Freshwater Science Annual Meeting. Remote delivery. <u>Invited presentation</u>.

59. **Albertson, L. K**. 2021. Critical roles of animals in shaping their physical environment: Investigating ecosystem engineering and facilitation using meta-analysis and aquatic invertebrates. Clemson University Seminar Series, Remote delivery. **Invited presentation**.

58. Lujan[△], D., L. Tronstad, T. Koel, M. Briggs[△], **L. K. Albertson**, H. Glassic[△], C. Guy. 2020. The effects of lake trout suppression methods on lower trophic levels in Yellowstone Lake. Society for Freshwater Science Annual Meeting. Madison, WI. Presentation. Canceled due to COVID-19.

57. Long^{*}, J. S., B. B. Tumolo^Δ, **L. K. Albertson**, W. F. Cross, L. S. Sklar, and M. D. Daniels. 2020. Does sediment Size Distribution and Conspecific Density Drive Habitat Selection of Ecosystem Engineers in Rivers? Society for Freshwater Science Annual Meeting. Madison, WI. Poster. Canceled due to COVID-19.

56. Maguire^Δ, Z., and **L. K. Albertson**. 2020. Evaluating long-term changes in macroinvertebrate and trout populations on the iconic Madison River, Montana. Society for Freshwater Science Annual Meeting. Madison, WI. Poster. Canceled due to COVID-19.

55. Tumolo^Δ, B. B., L. Calle^Δ, H. E. Anderson^Δ, M. Briggs^Δ, S. Carlson^Δ, M. MacDonald, ^Δ J. H. Reinert^Δ, S. Collins, and **L. K. Albertson**. 2020. Spatio-temporal delineation of positive interactions in aquatic ecosystems: Synthesis, future trajectories and application. Society for Freshwater Science Annual Meeting. Madison, WI. Presentation. Canceled due to COVID-19.

54. **Albertson**, **L. K.**, M. MacDonald^A, B. B. Tumolo^A, M. Briggs^A, Z. Maguire^A, S. Quinn^A, J. Sanchez^A, J. Veneros^A and L. A. Burkle. 2020. Meta-analysis of positive interactions in freshwater ecosystems reveals they are common and context dependent. Society for Freshwater Science Annual Meeting. Madison, WI. Presentation. Canceled due to COVID-19.

53. Briggs^Δ, M., **L. K. Albertson**, D. Lujan^Δ, L. Tronstad, H. Glassic^Δ, C. Guy, T. Koel. 2020. Effects of Lake Trout Carcass Treatment on Benthic Invertebrates in Yellowstone Lake. Society for Freshwater Science Annual Meeting. Madison, WI. Presentation. Canceled due to COVID-19.

52. Wesner, J., **L. K. Albertson**, W. F. Cross, C. Twining, K. McCarthy*, D. M. Walters, and C. Baxter. 2020. The HUFA-pulse: Variation in the quantity, quality, and phenology of river-riparian resource pulses due to salmonflies (*Pteronarcys californica*). Society for Freshwater Science Annual Meeting. Madison, WI. Presentation. Canceled due to COVID-19.

51. Long^{*}, J. S., B. B. Tumolo^A, **L. K. Albertson**, W. F. Cross, L. S. Sklar, and M. D. Daniels. 2020. Does sediment Size Distribution and Conspecific Density Drive Habitat Selection of Ecosystem Engineers in Rivers? National Conference for Undergraduate Research. Bozeman, MT. Poster. Canceled due to COVID-19.

50. **Albertson, L. K.** Water and Ecosystems. 2020. Montana Water Summit. Helena, MT. **Invited presentation**.

49. Cook^Δ, K., A. Zale, D. Stagliano, M. Anderson, C. Guy, **L. K. Albertson**, and C. Barnhart. 2020. Reproductive Timing of Western Pearlshell Mussels in Montana. American Fisheries Society Montana Chapter. Kalispell, MT. Presentation.

48. Glassic[△], H., C. Guy, M. Briggs[△], **L. K. Albertson**, D. Lujan[△], L. Tronstad, and T. Koel. 2020. Comparative historical feeding ecology of native and nonnative salmonids during the suppression of a nonnative apex predator in Yellowstone Lake, Wyoming. American Fisheries Society Montana Chapter. Kalispell, MT. Presentation.

⁺47. Briggs^Δ, M, **L. K. Albertson**, H. Glassic^Δ, C. Guy, T. Koel, D. Lujan^Δ, L. Tronstad. 2020. Effects of Lake Trout Carcass Deposition on Benthic Invertebrates in Yellowstone Lake. American Fisheries Society Montana Chapter. Kalispell, MT. Presentation. *Winner of best student presentation.*

46. LaRue^{*}, M., J. H. Reinert[∆], and **L. K. Albertson**. 2019. Effects of beaver mimicry structures on macroinvertebrate communities in Centennial Valley, Montana. Undergraduate Scholars Research Colloquium. Bozeman, MT. Poster.

45. Muenz, T. K., **L. K. Albertson**, and M. D. Daniels. 2019. Rock out! Lessons in stream ecosystem engineering through the rock pack experiment. North American Association for Environmental Education Annual Meeting. Lexington, KY. Poster.

44. **Albertson, L. K.** 2019. The Spidermen of streams: Silk-spinning caddisflies facilitate macroinvertebrates by altering sediment and flow. University of Birmingham, Birmingham, United Kingdom. <u>Invited presentation.</u>

43. Sanders[△], H., S. P. Rice, **L. K. Albertson**, and P. J. Wood. 2019. Biotic and Abiotic Drivers of the Burrowing Behaviour of Invasive Signal Crayfish (*Pacifastacus leniusculus*): Mesocosm Experiments. American Geophysical Union Annual Meeting, San Francisco CA. Presentation.

42. Albertson, L. K. 2019. Temperature effects on iconic Madison River salmonflies. Montana Water Center's Water School. Bozeman, MT. <u>Invited presentation</u>.

41. Tumolo[△], B. B., and **L. K. Albertson.** 2019. Facilitation by ecosystem engineers differentially influences invertebrate size structure across an environmental gradient. Montana Aquatic Research Colloquium. Flathead Lake, MT. Presentation.

40. Briggs[△], M., **L. K. Albertson**, H. Glassic[△], C. Guy, T. Koel, D. Lujan[△], and L. Tronstad. 2019. Effects of Lake Trout Suppression Methods on Amphipods in Yellowstone Lake. Montana Aquatic Research Colloquium. Flathead Lake, MT. Poster.

39. **Albertson, L. K.**, H. E. Anderson^Δ, and D. M. Walters. 2019. Large-scale drivers of resource pulse phenology: Salmonfly emergence patterns differ between human dominated and natural rivers. Montana Aquatic Research Colloquium. Flathead Lake, MT. Presentation.

38. Maguire^{*}, Z., B. B. Tumolo[∆], and **L. K. Albertson**. 2019. Legacy effects of abandoned ecosystem engineering structures on stream hydraulics. Montana Academy of Science Annual Meeting. Butte, MT. Poster.

37. Tumolo^Δ, B. B., **L. K. Albertson**, and M. D. Daniels. 2019. Aquatic invertebrate ecosystem engineers influence invertebrate size structure across a stress gradient. Montana Academy of Science Annual Meeting. Butte, MT. Presentation.

36. Reinert[△], J. H., and **L. K. Albertson**. 2019. Biotic responses to beaver dam analog installation in a low-gradient, incised stream. Society for Freshwater Science Annual Meeting. Salt Lake City, UT. Presentation.

35. MacDonald[△], M., **L. K. Albertson**, and G. Poole. 2019. Net-spinning caddisflies reduce streambed hydraulic conductivity. Society for Freshwater Science Annual Meeting. Salt Lake City, UT. <u>Invited presentation</u>.

34. Briggs[△], M., **L. K. Albertson**, H. Glassic[△], C. Guy, T. Koel, D. Lujan[△], and L. Tronstad. 2019. Effects of Lake Trout Suppression Methods on Amphipods in Yellowstone Lake. Society for Freshwater Science Annual Meeting. Salt Lake City, UT. Presentation.

33. Tumolo[△], B.B., **L. K. Albertson**, and M. D. Daniels. 2019. Facilitation by ecosystem engineers differentially influences invertebrate size structure across a stress gradient. Society for Freshwater Science Annual Meeting. Salt Lake City, UT. <u>Invited presentation</u>.

32. Lujan[△], D. L. Tronstad, T. Koel, M. Briggs[△], **L. K. Albertson**, H. Glassic[△], and C. Guy. 2019. Bottom-up effects of lake trout suppression in Yellowstone Lake. Society for Freshwater Science Annual Meeting. Salt Lake City, UT. Presentation.

31. Lujan[△], D. L. Tronstad, T. Koel, M. Briggs[△], **L. K. Albertson**, H. Glassic[△], and C. Guy. 2019. Bottom-up effects of lake trout suppression in Yellowstone Lake. Colorado/Wyoming Chapter of the American Fisheries Society. Fort Collins, CO. Poster.

30. Briggs^Δ, M., **L. K. Albertson**, H. Glassic^Δ, C. Guy, T. Koel, D. Lujan^Δ, and L. Tronstad. 2019. Effects of Lake Trout Suppression Methods on Amphipods in Yellowstone Lake. Montana Chapter of the American Fisheries Society. Billings, MT. Poster.

29. **Albertson, L. K.**, H. E. Anderson^A, and D. Walters. 2019. An iconic macroinvertebrate in peril? Salmonfly emergence patterns and climate-driven range contraction. Institute on Ecosystems Rough Cut Seminar Series. Bozeman, MT. <u>Invited presentation</u>.

28. Daniels, M.D., **Albertson, L.K.**, Sklar, L., Tumolo^Δ, B., M.K. Mclaughlin^Δ, Cross, W. and J. McCarty^Δ. 2018. Fluvial gravel stabilization by net-spinning Hydropsychid caddisflies: exploring the magnitude and geographic scope of grain-scale ecosystem engineering effects. American Association of Geographers Annual Meeting, New Orleans, LA. Presentation.

27. Albertson, L. K. 2018. Small aquatic insects can teach us big things: Ecological indicators and community facilitators in streams. University of South Dakota Seminar Series, Vermillion, SD. <u>Invited presentation.</u>

26. **Albertson, L. K.**, H. E. Anderson^Δ, and D. M. Walters. 2018. An iconic macroinvertebrate in peril? Salmonfly emergence patterns and climate-driven range contraction. Scientific Conference of the Greater Yellowstone Ecosystem. Big Sky, MT. Presentation.

25. **Albertson, L. K.** 2018. The Spidermen of Streams: Silk-Spinning Caddisflies Influence Macroinvertebrate Communities by Altering Geomorphology and Hydrology. Rocky Mountain Biological Laboratory Seminar Series, Gothic, CO. <u>Invited presentation.</u>

24. **Albertson, L. K.** 2018. Small aquatic insects can teach us big things: Ecological indicators and community facilitators in streams. University of Montana Seminar Series, Missoula, MT. **Invited presentation.**

23. Maguire*, Z., B. B. Tumolo^Δ, and **L. K. Albertson**. 2018. Legacy effects of abandoned ecosystem engineering structures on stream hydraulics. Society for Freshwater Science Annual Meeting, Detroit, MI. Poster.

22. Anderson[△], H. E., and **L. K. Albertson**. 2018. Large-scale drivers of resource pulse phenology: Salmonfly emergence patterns differ between human dominated and natural rivers. Society for Freshwater Science Annual Meeting, Detroit, MI. Presentation.

21. Tumolo^Δ, B. B., **L. K. Albertson**, and M. D. Daniels. 2018. Engineer density, not environmental harshness, modulates invertebrate community facilitation across a montane gradient. Society for Freshwater Science Annual Meeting, Detroit, MI. Presentation.

20. McCarty^Δ, J., W. F. Cross, and **L. K. Albertson**. 2018. Influence of thermal regime on the life history and energetics of Rocky Mountain aquatic insects: a field test of the thermal equilibrium hypothesis. Society for Freshwater Science Annual Meeting, Detroit, MI. Presentation.

19. Daniels, M. D., **L. K. Albertson**, L. S. Sklar, B. B. Tumolo^Δ, M. McLaughlin^Δ, J. McCarty^Δ, and W. F. Cross. 2017. Fluvial gravel stabilization by net-spinning hydropsychid caddisflies: Exploring the magnitude and geographic scope of ecosystem engineering effect and evaluating the resistance to anthropogenic stresses. American Geophysical Union Annual Meeting, New Orleans, LA. Invited Presentation.

18. McLaughlin^Δ, M., L. S. Sklar, M. D. Daniels, B. B. Tumolo^Δ, W. F. Cross, and **L. K. Albertson**. 2017. How small bugs tie down big rocks: Measuring and modeling the forces acting between nets spun by caddisfly larvae (Hydropsychidae) and gravel particles at the onset of motion. American Geophysical Union Annual Meeting, New Orleans, LA. Poster.

17. Tumolo^A, B. B., **L. K. Albertson**, W. F. Cross, M. D. Daniels, and L. S. Sklar. 2017. What you leave behind counts: Abandoned ecosystem engineering structures facilitate colonization in a headwater stream. Society for Freshwater Science Annual Meeting, Raleigh, NC. Presentation.

16. Anderson^Δ, H. E., and L. K. Albertson. 2017. An iconic macroinvertebrate in peril: Impacts of increasing water temperatures on *Pteronarcys californica* in southwestern Montana. Society for Freshwater Science Annual Meeting, Raleigh, NC. Poster.

15. Clancy^{*}, N., H. E. Anderson^Δ, and **L. K. Albertson**. 2017. Unique emergence of salmonflies on the Gallatin and Madison Rivers of Montana. Undergraduate Scholars Research Colloquium. Bozeman, MT. Poster.

14. Cox*, T., A. Dutton^Δ, M. Lance^Δ, and **L. K. Albertson**. 2017. Springtime migration by Mountain Whitefish: a journey for food? Undergraduate Scholars Research Colloquium. Bozeman, MT. Poster.

13. Philmon^{*}, C., H. E. Anderson[∆], and **L. K. Albertson**. 2017. Relating Non-Destructive Measurements of Growth to Biomass of Salmonfly Larvae (*Pteronarcys californica*). Undergraduate Scholars Research Colloquium. Bozeman, MT. Poster.

12. **Albertson, L. K.** 2017. Animals and sediment disturbance in streams. Montana Aquatic Research Colloquium, Polson, MT. Presentation.

11. McMahon, T. E., **L. K. Albertson**, B. Kerans, and P. Taylor. 2016. Teaching the Teachers: A Trout Stream Ecology Field Course for High School Science Teachers. The World of Trout International Congress, Bozeman, MT. Presentation.

10. Ouellet, V. O., **L. K. Albertson**, and M. D. Daniels. 2016. Summer food abundance and thermal regime: The implications for trout. The World of Trout 1st International Congress, Bozeman, MT. Presentation.

9. Albertson, L. K., and M. D. Daniels. 2015. Are engineering effects of crayfish on gravel bed morphology and macroinvertebrate communities mediated by species identity, behavior, and body size? Society for Freshwater Science Annual Meeting, Milwaukee, WI. Presentation.

8. Daniels, M. D., C. M. Ruffing^Δ, B. Marston^Δ, and **L. K. Albertson**. 2015. Reconstructing river and watershed restoration: Physical geography and a new restoration design science. Association of American Geographers Annual Meeting, Chicago, IL. <u>Invited Presentation</u>.

7. Shen*, K., **L. K. Albertson**, V. Ouellet, and M. D. Daniels. 2015. A Delicate Balance: Aquatic-Terrestrial Invertebrate Flux Across a Forested Riparian Buffer Gradient. Stroud Water Research Center Student Celebration. Poster.

6. **Albertson^Δ**, **L. K.**, B. J. Cardinale, and L. S. Sklar. 2012. Impacts of biological diversity on sediment transport in streams. Ecological Society of America 97th Annual Conference. Portland, OR. Presentation.

5. **Albertson**^Δ, **L. K.** 2012. Impacts of biological diversity on sediment transport in streams: Research at the Sierra Nevada Aquatic Research Laboratory. 6th Biennial Mathias Graduate Student Symposium, Bodega Bay, CA. Presentation.

⁺4. **Albertson**[△], **L. K.**, and B. J. Cardinale. 2010. Impacts of biological diversity on sediment transport in streams. North American Benthological Society annual meeting, Santa Fe, NM. *Winner of best student presentation.*

3. Albertson[△], L. K., and B. J. Cardinale. 2009. Impacts of biological diversity on sediment transport in streams. American Geophysical Union Fall Meeting, San Francisco, CA. <u>Invited</u> <u>presentation.</u>

2. **Albertson**^Δ, **L. K.**, S. C. Zeug, H. Lenihan, and B. J. Cardinale. 2009. Impacts of gravel augmentation on invertebrates in a restored river. Ecological Society of America 94th Annual Conference, Albuquerque NM. Presentation.

1. **Albertson**^Δ, **L. K.**, S. C. Zeug, B. J. Cardinale, H. S. Lenihan, A. M. Wydzga^Δ, L. Harrison^Δ, and T. Dunne. 2008. Geomorphic constraints on the restoration of macroinvertebrate assemblages in the Merced River, CA. 5th Biennial CALFED Science Conference, Sacramento, CA. Presentation.

UNIVERSITY CLASSROOM TEACHING

2021-present	Fall & Spring Semesters	Freshwater Ecology, Montana State University, 100 total undergraduates
2016-present	Even Summer Semesters	<i>Ecology of Trout Streams</i> , Montana State University, 15 graduates
2016-present	Even Spring Semesters	<i>Topics in Biodiversity and Ecosystem Services,</i> Montana State University, 8 graduates
2016-2020	Fall Semesters	<i>Freshwater Ecology</i> , Montana State University, 72 undergraduates
2016-2019	Fall Semesters	<i>General Ecology</i> , Montana State University, 115 undergraduates
2015	Spring Semester	Introduction to Freshwater Ecology, University of Pennsylvania, Philadelphia PA, 30 undergraduates

POSTDOCTORAL SCHOLAR MENTORING

2022-2023 Jade Ortiz, MSU, Ecology

GRADUATE STUDENT RESEARCH MENTORING

2024-present Committee member, Sam Larkin, Master's student, MSU, Ecology

- 2024-present Committee member, Ally Sutcliffe, Master's student, MSU, Ecology
- 2023-present Advisor, Stacy Schmidt, Master's student, MSU, Ecology
- 2023-present Committee member, Russell Conti, Master's student, MSU, Ecology
- 2021-present Advisor, Anna French, PhD student, MSU, Ecology

2021-present Committee Member, Hayley Oakland, PhD student, MSU, Land Resources and Environmental Sciences

- 2020-present Advisor, Samuel Fritz, PhD student, MSU, Ecology
- 2022-2024 Committee Member, Katie Furey, Master's student, MSU, Ecology
- 2021-2024 Committee Member, Robert Ecklebecker, PhD, MSU, Ecology
- 2022-2024 Committee Member, Nate Heili, M.S., MSU, Ecology

- 2021-2023 Committee Member, Jose Sanchez-Ruiz, PhD in honorarium, MSU, Ecology
- 2021-2023 Advisor, Alzada Roche, M.S., MSU, Ecology
- 2020-2023 Advisor, Zachary Maguire, M.S., MSU, Ecology
- 2018-2022 Committee Member, Kristen Cook, M.S., MSU, Ecology
- 2018-2022 Committee Member, Hayley Glassic, PhD, MSU, Ecology
- 2016-2022 Advisor, Benjamin Tumolo, PhD, MSU, Ecology
- 2017-2022 Committee Member, Mary Levandowski, M.S., MSU, Ecology
- 2020-2021 Committee Member, Adrian Massey, no degree, MSU, Entomology
- 2018-2020 Advisor, Michelle Briggs, M.S., MSU, Ecology
- 2015-2020 Committee Member, Kate Henderson, no degree, MSU, Ecology
- 2018-2020 Dissertation project sponsor, Catherine Sanders, PhD, Loughborough University, Geosciences
- 2017-2020 Advisor, Michael MacDonald, M.S., MSU, Ecology
- 2017-2020 Advisor, J. Holden Reinert, M.S., MSU, Ecology
- 2017-2019 Committee Member, Molly McLaughlin, M.S., San Francisco State University, Geosciences
- 2017-2019 Committee Member, Brad Hoefer, M.S., MSU, Civil Engineering
- 2016-2019 Committee Member, Jennifer McCarty, M.S., MSU, Ecology
- 2016-2018 Advisor, Heidi Anderson, M.S., MSU, Ecology
- 2016-2017 Thesis project sponsor, M. Andrew Horvath, M.S., St. Edwards University, Environmental Management and Sustainability
- 2015-2017 Committee Member, Mark Juras, M.S., MSU, Civil Engineering

UNDERGRADUATE STUDENT MENTORING

•	Undergraduate Research Assistant, Emily Hagengruber			
•	Undergraduate Research Assistant, Cadence Propios			
•	Undergraduate Research Assistant, Ethan Brown			
2023-present	Undergraduate Research Assistant, Elizabeth Herres			
2021-present	Undergraduate Research Assistant, Lydia Bushey			
2023-2024	Undergraduate Research Assistant, Zack Danielson			
2022	Undergraduate Research Assistant, Agustus Armijo			
2021-2022	Undergraduate Scholar's Program, Niah Brass			
2021-2022	Undergraduate Scholar's Program, John Hobgood			
2021	Undergraduate TA, Dillon Yamani			
2020-2021	Undergraduate Research Assistant, Grace Davenport			
2019-2020	Undergraduate Scholar's Program, Sophia Swart			
2020	Undergraduate Research Assistant, Emma Heydenberk			
2020	Undergraduate Research Assistant, Levi Umland			
2019-2020	Undergraduate Scholar's Program, Chad Shelton			
2018-2020	Undergraduate Scholar's Program and TA, Ji Sean Long			
2019-2020	Undergraduate Research Assistant, Sarah Bean			
2019-2020	Undergraduate Research Assistant, Josh Wallace			
2018-2019	Undergraduate Scholar's Program, Maggie LaRue			
2018-2019	Undergraduate Research Assistant, Hailey Gelzer			
2018	Undergraduate TA, Kate Winters			
2018	Undergraduate Research Assistant, Chet Stefan			
2017-2018	Undergraduate Scholar's Program, Zachary Maguire			
2016-2017	Undergraduate Scholar's Program, Tanner Cox			
2016-2017	Undergraduate Scholar's Program, Cailey Philmon			

- 2016 Undergraduate Scholar's Program, Niall Clancy
- 2016 Undergraduate Scholar's Program, Chelsey Rasmussen
- 2016 Undergraduate Scholar's Program, Spencer Bruce
- 2015-2016 Undergraduate Scholar's Program, Kirra Paulus

PROFESSIONAL ACTIVITIES & SERVICE

- 2024-present Committee member, Options and Curriculum, Ecology Department, Montana State University
- 2024-present Committee member, Retention, Tenure and Promotion, Ecology Department, Montana State University
- 2023-present Mentor-mentee networking workshop, Society for Freshwater Science Annual Meeting, Brisbane Australia, Philadelphia PA
- 2021-present Committee member, Conflict of Interest, Office of Research Compliance, Montana State University
- 2020-present Committee chair, Ecology Department student scholarships, Montana State University
- 2018-present Student presentation judge, Society for Freshwater Science annual meeting
- 2015-present Proposal reviewer, Undergraduate Scholars Grant Program, Montana State University
- 2009-present Manuscript reviewer (~7 per year) for Canadian Journal of Fisheries and Aquatic Sciences, Earth Surface Processes and Landforms, Ecography, Ecohydrology, Ecological Modelling, Ecology, Ecosphere, Environmental Pollution, Freshwater Biology, Freshwater Science, Functional Ecology, Global Ecology and Biogeography, Hydrobiologia, Hydrological Processes, Journal of Geophysical Research Earth Surface, Journal of Ecohydraulics, Journal of Freshwater Ecology, Marine Ecological Progress Series, Plant Ecology, PLoS ONE, River Research and Applications, Science of the Total Environment, Scientific Reports, The Southeastern Naturalist, Springer Nature Applied Sciences, and Transactions of the American Fisheries Society
- 2023-2024 Co-Organizer, Montana Aquatic Research Colloquium Biennial Conference, Flathead Lake Biological Station
- 2021-2022 Committee chair, Search for tenure-track faculty member in Coldwater Fish Ecology and Management, Ecology Department
- 2018-2022 Faculty advisor, Ecology Department seminar series, Montana State University
- 2022 Ad Hoc proposal reviewer, National Science Foundation, Division of Environmental Biology, Remote participation

2020-2021 Co-organizer, Montana & Idaho 2021 Society of Freshwater Science Annual Meeting, Flathead Lake Biological Station 2021 Ad Hoc proposal reviewer, National Science Foundation, Division of Environmental Biology, Remote participation 2020 Ad Hoc proposal reviewer, National Science Foundation, Geomorphology and Land Use Dynamics, Remote participation 2020 Proposal reviewer and panel member, National Science Foundation, Ecosystems Panel. Remote attendance 2019 Committee member, Search for Departmental Affairs Coordinator, Ecology Department, Montana State University 2018-2019 Committee member, Search for Tenure-Track Faculty member in Plant Physiological Ecology, Ecology Department, Montana State University 2018-2019 Special session co-organizer, "Biogeomorphic agents: Role of organisms in propagating change in fluvial ecosystems," Society for Freshwater Science 2019 Annual Meeting, Salt Lake City UT 2017 Proposal reviewer and panel member, National Science Foundation Ecosystems Panel, Arlington VA 2016-2017 Committee member, Search for Tenure-Track Faculty Member in Fisheries Ecophysiology, Ecology Department, Montana State University 2015-2017 Working group member, Sustaining Wildland Ecosystems Through Monitoring and Communication to Stakeholders, Western United States Region 2014-2015 Special session lead organizer, Advancing biophysical research: Integrating species interactions into ecohydrology and ecogeomorphology, Society for Freshwater Science 2015 Annual Meeting, Milwaukee WI 2012-2013 Lead organizer, UC-Santa Barbara Natural Reserves 1st Biennial Research Symposium 2011-2013 Graduate student representative, UC-Santa Barbara Natural Reserves Advisory Committee 2002-2006 Women in Science and Engineering (WISE) Biology group leader, Brown University

OUTREACH & INTEGRATION ACTIVIES

2022-present Visiting scientist speaker, Gallatin Valley High School, A.P. Biology, 80 students each year, October 2023, October 2024, Bozeman MT

- 2017-present Educational instructor, Continuing Education Workshop "The Rock Pack," 35 total participants, September 2017 Bozeman MT, August 2018 Bozeman MT, October 2018 Billings MT, October 2019 Belgrade MT
- 2016-present Visiting scientist speaker for Montana Outdoor Science School (MOSS) summer programs, 30 students each year, July 2016, 2018, 2019, 2022, 2023 Bozeman MT
- 2022-2024 Educational video (6:00 minutes) writer and narrator, <u>Crossing the Ecotone</u>, Directed by Cairns Film; https://vimeo.com/894714119; 20+ views
- 2017-2021 Visiting scientist speaker, Sleeping Giant Middle School, 5th grade, 100 students each year, November 2017, November 2018, October 2020, October 2021, Livingston MT
- 2021 Speaker, Research in Action panel, Montana Science Summer Institute, 42 participants, August 2021, Remote participation
- 2020 Development of STEM educational tools and activities website for "The Rock Pack Experiment; https://leafpacknetwork.org/rock-pack/
- 2020 Science comic Instagram feature, under-appreciated stories from the natural world, <u>Caddisflies</u>, written by Laurel Hamers, drawn by JoAnna Wendel https://www.instagram.com/p/CAN2e-bga6Z/?igshid=u6rwmhimmkig
- 2019 Visiting scientist speaker for Western Transportation Institute STEM Middle School Camp, 20 total students, July 2019 Bozeman MT
- 2019 Visiting scientist speaker for Women in Fly Fishing Workshop, 20 participants, July 2019 Bozeman MT
- 2018 Educational video (4:33 minutes) writer and narrator, <u>Caddisflies, Engineering an</u> <u>Ecosystem</u>, Directed by Cairns Film; https://vimeo.com/273597362; 3,400+ views
- 2016-2017 Educational video (3:22 minutes) featured research, <u>Caddisflies</u>, Stroud Water Research Center; https://www.youtube.com/watch?v=y667-u2n5JM
- 2015-2016 Educational video (6:33 minutes) consultant, <u>Cold Feet</u>, MSU School of Science and Natural History Life on Terra Feature; http://lifeonterra.com/terra-1110-coldfeet/
- 2009-2013 Outdoor Education Assistant, Sierra Nevada Aquatic Research Lab, Mammoth Lakes CA
- 2009-2010 Outdoor Education Field Trip Instructor, La Cumbre Middle School, Santa Barbara CA
- 2003-2004 Education Assistant, Richard Cronin National Salmon Station, Sunderland MA

PROFESSIONAL SOCIETIES

Current Society for Freshwater Science (SFS) Sigma Xi, Brown University Chapter

Past

American Geophysical Union (AGU) Ecological Society of America (ESA) Graduate Women in Science (GWIS) Women in Science and Engineering (WISE), Brown University Section

CERTIFICATIONS

2023 Certificate of Teaching Enhancement, Center for Faculty Excellence, Montana State University

- 2020 SafeZone LGBTQ+ Ally, Montana State University
- 2019 Diversity Development Levels 1 and 2, Montana State University
- 2013-2018 Wilderness First Responder, Wilderness Medical Associates International

2005-2013 Scientific SCUBA Diver, SSI and PADI