David A. Lytle

December 2018

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EDUCATION

2000	**Cornell University,** Ph.D. in Ecology & Evolutionary Biology
1992	**University of Michigan,** B.Sc. with Distinction in Resource Ecology & Management

POSITIONS HELD

2002-present	**Oregon State University,** Assistant/Associate/Full Professor
2001-2002	**University of Arizona,** D.H. Smith Postdoctoral Fellow
2000	**University of Chicago,** Postdoctoral Associate

RECENT PEER-REVIEWED PUBLICATIONS

2018. Tonkin, J.D., D.M. Merritt, J.D. Olden, L.V. Reynolds, & D.A. Lytle. Flow regime alteration degrades ecological networks in riparian ecosystems. **Nature Ecology & Evolution** 2(1): 86-93.

2018. Tonkin, J.D., F. Altermatt, D.S. Finn, J. Heino, J.D. Olden, S.U. Pauls, D.A. Lytle. The role of dispersal in structuring riverine metacommunities: patterns, processes, and pathways. **Freshwater Biology** 63(1): 141-163.

2018. Tonkin, J.D., R.G. Death, T. Moutka, A. Astorga, D.A. Lytle. Do latitudinal gradients exist in New Zealand stream invertebrate metacommunities? **PeerJ** 6:e4898 https://doi.org/10.7717/peerj.4898.

2018. Mims, M.C., E.E. Hartfield Kirk, D.A. Lytle, J.D. Olden. Traits-based approaches support the conservation relevance of landscape genetics. **Conservation Genetics** 19(1): 17-26.

2018. Ohms, H.A., A.I. Gitelman, C.E. Jordan, D.A. Lytle. Quantifying partial migration with sex ratio balancing. **Canadian Journal of Zoology**, doi.org/10.1139/cjz-2018-0014.

2018. Ohms, H.A., A. Mohapatra, D.A. Lytle, & P. De Leenheer. The evolutionary stability of partial migration under different forms of competition. **Theoretical Ecology**, doi.org/10.1007/s12080-018-0400-5.

(in press). Boersma, K.S. & D.A. Lytle. Novel drought regimes restructure aquatic invertebrate communities in arid-land streams. In. Bestgen, K.R. et al., Eds., **Standing Between Life and Extinction: Ethics and Ecology of Conserving Aquatic Species in the American Southwest**.

(in revision). Schriever, T.A., and D.A. Lytle. Energy flow and isotopic niche variation in a desert stream top predator.

2017. McMullen, L.E., P. De Leenheer, & D.A. Lytle. High mortality and enhanced recovery: modeling the countervailing effects of disturbance on population dynamics. **Ecology Letters** 20(12): 1566-1575. *profiled in Faculty1000

2017. Tonkin, J.D., M.T. Bogan, N. Bonada, B. Rios-Touma, D.A. Lytle. Seasonality and predictability shape temporal species diversity. **Ecology** 98(5): 1201-1216.

2017. Lytle, D.A., D.M. Merritt, J.D. Tonkin, J.D. Olden, L.V. Reynolds. Linking river flow regimes to riparian plant guilds: a community-wide modeling approach. **Ecological Applications** 27(4): 1338-1350.

2017. Dong, X., D.A. Lytle, J.D. Olden, T.A. Schriever, & R. Muneepeerakul. Importance of neutral processes varies in time and space: Evidence from dryland stream ecosystems. **PLoS ONE** 12(5): e0176949.

2017. De Leenheer, P., A. Mohapatra, H.A. Ohms, D.A. Lytle, and J.M. Cushing. 2017. The puzzle of partial migration: Adaptive dynamics and evolutionary game theory perspectives. **Journal of Theoretical Biology** 412: 172-185.

2017. Leibold, M.A., S.R. Hall, V.H. Smith, D.A. Lytle. Herbivory and the diversity of primary producers in pond ecosystems. **Ecology** DOI:10.1002/ecy.1636.

2017. Giam, X., W. Chen, T.A. Schriever, R. Van Driesche, R. Muneepeerakul, D.A. Lytle, J.D. Olden. Hydrology drives seasonal variation in dryland stream macroinvertebrate communities. **Aquatic Sciences** 79(3): 705-717.

2017. Bonada, N., S.M. Carlson, T. Datry, D.S. Finn, C. Leigh, D.A. Lytle, M.T. Monaghan, P.A. Tedesco. Genetic, evolutionary, and biogeographical processes in intermittent rivers and ephemeral streams. pp. 405-421 In: T. Datry et al., **Intermittent Rivers and Ephemeral Streams**. Academic Press, London.

2016. Schriever, T.A., and D.A. Lytle. Convergent diversity and trait composition in temporary streams and ponds. **Ecosphere** 7(5). DOI: 10.1002/ecs2.1350

2016. Kennedy, T.A., Muehlbauer, J.D., Yackulic, C.B., Lytle, D.A., Miller, S.W., Dibble, K.L., Kortenhoeven, E.W., Metcalfe, A.N. and Baxter, C.V. Flow Management for Hydropower Extirpates Aquatic Insects, Undermining River Food Webs. **BioScience**, p.biw059.

2016. Cañedo-Argüelles, M., M.T. Bogan, D.A. Lytle, & N. Prat. Are Chironomidae (Diptera) good indicators of water scarcity? Dryland streams as a case study. **Ecological Indicators** 71: 155-162

RECENT INVITED SEMINARS

2018 Virginia Tech
2017 SERDP Symposium, Washington DC (plenary speaker)
2017 IRSTEA National Research Inst. of Science and Technology for Environment and Agric., Lyon, France
2017 U. Barcelona, Spain

RECENT GRANTS & CONTRACTS (for shared awards, portion to Lytle lab shown in parentheses)

Active awards:

2018-2021	$30,000	**USFS** – Fossil Creek ecological study (sole PI)
2017-2020	$109,239	**USFS** – Verde River flow dynamics (sole PI)
2015-2020	$2,623,682	**USGS** – Grand Canyon aquatic insect population dynamics (co-PI; $125K)
2015-2019	$1,660,441	**DoD** – Flow-population models (lead PI; $856K)

Completed awards:

2013-2018	$168,731	**USFS** – Modeling life history strategies (sole PI)
2012-2016	$1,630,734	**DoD** – Predicting, measuring, and monitoring aquatic diversity (lead PI; $985K)
2010-2015	$1,480,126	**DoD** – Hydroecology of intermittent and ephemeral streams (co-PI; $668K)

SERVICE - PROFESSION

Associate Editor, *Ecological Applications* (2014-)

Manuscript or proposal reviewer – *American Naturalist*, *Annals of the ESA, Archiv für Hydrobiologie*, *Arthropod Structure & Development, Biological Conservation, Biology Letters, Ecography*, *Ecological Applications, Ecological Entomology*, *Ecological Modelling*, *Ecological Monographs*, *Ecology*, *Ecosphere, Freshwater Biology*, *Freshwater Science, Frontiers in Ecology & the Environment*, *Global Change Biology, Hydrobiologia*, *J. American Water Resources Association*, *J. Animal Ecology, J. Applied Ecology*, *J. Morphology, J. North American Benthological Society*, *J. Theoretical Biology*, *J. Zoology*, *Limnology & Oceanography*, *Oikos*, *Restoration Ecology*, *River Research & Applications, Southwestern Naturalist*, *Theoretical Ecology, Theoretical Population Biology*, *Water Resources Research*, Israel Science Foundation, Kendall/Hunt Publishing, National Science Foundation (USA), OSU Agricultural Experiment Station, State of California, Society for Conservation Biology, The Nature Conservancy

Student award judge at SFS meetings: 2006-present

External Promotion & Tenure reviewer (UC – Santa Barbara)

D.H. Smith Postdoctoral Fellowship reviewer – 2005-present