



CHRONOLOGICAL RECORD OF HBS SCIENTIFIC PAPERS REPORTS, & BOOKS, 2000 – 2025

2025

- Kalki, Y. and T. W. Pierson. 2025. A genetic polymorphism underlying alternative reproductive tactics in *Eurycea* salamanders. *Molecular Ecology* 34: e17621.
- Hwang, B. C., C. P. Giardina, M. N. Barrios-Garcia, H. Diao, V. G. Duboscq-Carra, A. Hemp, et al. 2025. Insect herbivory releases more nutrients in warmer and drier forests. *Global Biogeochemical Cycles* 39: e2024GB008367.

2024

- Bruce, R. C. 2024. Life-History complementarity in the miniaturized salamanders *Desmognathus aeneus* and *Desmognathus wrighti*. *Ichthyology & Herpetology* 112(2): 229–237. DOI: 10.1643/h2023081
- Guffey, S., E. Haight, J. Love, K. McCaskill, B. McLarney, L. Penland, C. Porter, K. Price, and D. Woodward. 2024. Macon County Water Supply Watershed Protection Ordinance – Proposed Changes. Report to Macon County Board of Commissioners. September 10, 2024. 22 pp.
- Hwang, B. C., C. P. Giardina, S. Adu-Bredu, M. N. Barrios-Garcia, et al. 2024. The impact of insect herbivory on biogeochemical cycling in broadleaved forests varies with temperature. *Nature Communications* 15: 6011.
<https://doi.org/10.1038/s41467-024-50245-9>
- Love, J. P., R. E. Stanek, and R. E. Jarrett. 2024. Agonistic tool use? A Northern Cardinal (*Cardinalis cardinalis*) uses pebbles to strike its reflection. *Wilson Journal of Ornithology* 136(4): 492–497. DOI: 10.1676/24-00059.
- Miller, J., N. Barrett, J. Love, A. Gray, R. Youker, C. Hall, N. Meiri, M. Gaesser, G. Randall, R. Jarrett, and J. Spafford. 2024. Temporal and spatial variations in microplastic concentrations in small, headwater basins in the southern Blue Ridge Mountains, North Carolina, USA. *Environments* 11(11): 240.
<https://doi.org/10.3390/environments11110240>

Paulsen, J., J. L. Allen, N. Morris, J. Dorey, J. B. Walke, and S. E. Alter, S.E. 2024. Geography, climate, and habitat shape the microbiome of the endangered Rock Gnome Lichen (*Cetradonia linearis*). *Diversity* 16: 178. <https://doi.org/10.3390/d16030178>.

Schill, M. L., S. Brown, A. Veach, and R. E. Baird. 2024. Wildfire severity alters soil microbial exoenzyme production and fungal abundances in the Southern Appalachian Mountains. *Pedosphere* 34(5): 865–878. <https://doi.org/10.1016/j.pedsph.2023.05.008>

2023

Brown, S. P., S. L. Clark, E. Ford, N. Mirza, A. Odeh, S. E. Schlarbaum, A. Jumpponen, and R. Baird. 2023. Convergent shifts in soil fungal communities associated with Fagaceae reforestation in the Southern Appalachian Mountains. *Forest Ecology & Management* 531: 120805 DOI: 10.1016/j.foreco.2023.120805.

Clark, S., S. Schlarbaum, A. Saxton, and R. E. Baird. 2023. Eight-year field performance of backcross American chestnut (*Castanea dentata*) seedlings planted in the southern Appalachians, USA. *Forest Ecology and Management* 532: 120820.

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Costa, J. T. and B. Angell. 2023. *Darwin and the Art of Botany: Observations on the Curious World of Plants*. Portland, OR: Timber Press.

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Petric, R. and M. Kalcounis-Rueppell. 2023. Anthropogenic noise decreases activity and calling behavior in wild mice. *PeerJ* 11: e15297 <https://doi.org/10.7717/peerj.15297>

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Viviani, V. R. 2023. Biophosphorescence in fluorescent millipedes (Diplopoda: Xystodesmidae) and its relationships with bioluminescence. *Nature Scientific Reports* 13: 22171. DOI: 10.1038/s41598-023-47860-9.

Whitenack, L. E., S. J. Snell Taylor, A. Tomcho, & A. H. Hurlbert. 2023. Comparing multiscale, presence-only habitat suitability models created with structured survey data and community science data for a rare warbler species at the southern range margin. *PLoS ONE* 18(4): e0275556. DOI: 10.1371/journal.pone.0275556.

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Brown, S. P., M. Shahrtash, A. E. Tucker, J. Knoepp, C. E. Stokes, and R. E., Baird. 2022. Seasonal disconnects between saprobic and mycorrhizal fruiting body communities in the Southern Appalachian Mountains. *Fungal Ecology* 55: 1–11.

Brown, S. P., S. L. Clark, E. Ford, A. Jumpponen, A. M. Saxton, S. E. Schlarbaum, and R. Baird. 2022. Comparisons of interspecies field performance of Fagaceae (Castanea and Quercus) planted in the southeastern United States with attention to soil fungal impacts on plant performance. *Forest Ecology & Management* 525 (2022): 120569 DOI: 10.1016/j.foreco.2022.120569.

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Warren II, R. J., J. T. Costa, and M. Bradford. 2022. Seeing shapes in clouds: the fallacy of deriving ecological hypotheses from statistical distributions. *Oikos* 2022: e09315. DOI: 10.1111/oik.09315.

Wilburn, D. B., C. L. Kunkel, R. C. Feldhoff, P. W. Feldhoff, and B. C. Searle. 2022. Recurrent co-option and recombination of cytokine and three finger proteins in multiple reproductive tissues throughout salamander evolution. *Frontiers in Cell and Developmental Biology* 10: 828947.

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Allen, J. L., R. T. McMullin, Y. F. Wiersma, and C. Scheidegger. 2021. Population genetics and biogeography of the Lungwort Lichen in North America support distinct Eastern and Western gene pools. *American Journal of Botany* 108(12): 2416–2424. DOI: 10.1002/ajb2.1774.

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Lentz, T., M. C. Allender, et al. 2021. Prevalence of *Ranavirus*, *Batrachochytrium dendrobatidis*, *B. salamandrivorans*, and *Ophidiomyces ophiodiicola* in amphibians and reptiles of North Carolina, USA. *Herpetological Review* 52(2): 285–293.

2020

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Barden, L. S. and J. T. Costa. 2020. Four decades of Table Mountain pine demography on Looking Glass Rock, Transylvania Co., NC, USA. *Castanea* 85(1): 23–31.

Doll, J. C., L. Etchison, and D. Owensby. 2020. Population estimate of the State and Federally threatened Spotfin Chub using underwater observations. *North American Journal of Fisheries Management* 40(2): 342–353. DOI: 10.1002/nafm.10414.

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- Brown, S., A. Veach, J. Horton, E. Ford, A. Jumpponen, & R. E. Baird. 2019. Context dependent fungal and bacterial soil communities shift in response to recent wildfires in Southern Appalachia. *Forest Ecology and Management* 451: 117520.
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- Gade, M. R. and W. E. Peterman. 2019. Multiple environmental gradients influence the distribution and abundance of a key forest-health indicator species in the Southern Appalachian Mountains, USA. *Landscape Ecology* 34 (3): 569–582. DOI: 10.1007/s10980-019-00792-0.
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2018

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2017

**** Papers stemming from the August 2016
Special Highlands Conference on Plethodontid Salamander Biology! ****

Herpetological Review, volume 48(3) 2017

[https://ssarherps.org/herpetological-review-pdfs/Herpetological History](https://ssarherps.org/herpetological-review-pdfs/Herpetological%20History)

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Lungless in Highlands: A Brief History of Research and Education on Plethodontid Salamanders at Highlands Biological Station: Richard C. Bruce (pp. 576–581)

Herpetologica, volume 73(3) 2017

<http://www.hljournals.org.proxy195.nclive.org/toc/herp/73/3?code=herl-site>



Introduction to the Special Highlands Conference on Plethodontid Salamander Biology: Sarah K. Woodley, James T. Costa and Richard C. Bruce (pp. 177–179)

Eastern Red-backed Salamanders Regulate Top-Down Effects in a Temperate Forest-Floor Community: Cari-Ann M. Hickerson, Carl D. Anthony and B. Michael Walton (pp. 180–189)

The Evolution of Courtship Behavior in Plethodontid Salamanders: Contrasting Patterns of Stasis and Diversification: Stevan J. Arnold, Karen M. Kiemnec-Tyburczy and Lynne D. Houck (pp. 190–205)

Gene Duplication, Co-option, Structural Evolution, and Phenotypic Tango in the Courtship Pheromones of Plethodontid Salamanders: Damien B. Wilburn, Stevan J. Arnold, Lynne D. Houck, Pamela W. Feldhoff and Richard C. Feldhoff (pp. 206–219)

What Drives Variation in Plethodontid Salamander Species Richness over Space and Time?: Kenneth H. Kozak (pp. 220–228)

The Geography of Speciation in Neotropical Salamanders: Sean M. Rovito (pp. 229–241)

Persistent Plethodontid Themes: Species, Phylogenies, and Biogeography: David B. Wake (pp. 242–251)

How Metamorphosis Is Different in Plethodontids: Larval Life History Perspectives on Life-Cycle Evolution: Christopher K. Beachy, Travis J. Ryan and Ronald M. Bonett (pp. 252–258)

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Life in the Slow Lane: Stress Responses in Plethodontid Salamanders: Sarah K. Woodley (pp. 259–268)

- Brannon, M. P., J. K. H. Brannon, and R. E. Baird. 2017. Educational applications of small mammal skeletal remains found in discarded bottles. *Southeastern Naturalist* 16(Special Issue 10): 4–10.
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