



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.

Costa, J. T. 2023. *Radical by Nature: The Revolutionary Life of Alfred Russel Wallace*. Princeton, NJ: Princeton University Press.

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

Costa, J. T. and G. Beccaloni. 2023. Alfred Russel Wallace's unrealized last book: Insights from the plan for *Darwin & Wallace. Notes and Records of the Royal Society* DOI: 10.1098/rsnr.2022.0053.

Hedin, M. and M. Milne. 2023. New species in old mountains: integrative taxonomy reveals ten new species and extensive short-range endemism in *Nesticus* spiders (Araneae, Nesticidae) from the southern Appalachian Mountains. *ZooKeys* 1145: 1–130 DOI: 10.3897/zookeys.1145.96724.

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>

Smith, B., S. P. Brown, J. Frampton, A.-M. Braham, C. E. Stokes, and R. Baird. 2023. Optimizing select Fraser Fir (*Abies fraseri*) reforestation methods within an artificial bald at Mount Buckley, Great Smoky Mountains National Park. *Southeastern Naturalist* 22(3): 333–351.

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

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margin. *PLoS ONE* 18(4): e0275556. DOI: 10.1371/journal.pone.0275556.

2022

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.

Gade, M. R., Q. Zhao, and W. E. Peterman. 2022. Spatial variation in demographic processes and the potential role of hybridization for the future. *Landscape Ecology* DOI: 10.1007/s10980-022-01503-y.

Gould, P. R., M. R. Gade, A. J. Wilk, and W. E. Peterman. 2022. Short-term responses of riparian salamander populations to wildfire in the southern Appalachians. *Journal of Wildlife Management* DOI: 10.1002/jwmg.22282.

Schultz, M., R. J. Warren II, J. T. Costa, B. Collins, and M. Bradford. 2022. Myrmecochorous plants and their ant seed dispersers through successional stages in temperate cove forests. *Ecological Entomology* DOI: 10.1111/een.13159.

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.

2021

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.

Costa, J. T. 2021. 'There is Hardly Any Question in Biology of More Importance' – Charles Darwin and the nature of variation. pp. 25–54 In: D. Pfennig (ed.), *Phenotypic Plasticity and Evolution: Causes, Consequences, Controversies*. Boca Raton: CRC Press.

Gould, P. L. and W. E. Peterman. 2021. Life history mediates the effects of habitat

Updated 08/2025

variation on salamander abundance: a multiscale assessment. *Landscape Ecology* 36: 749–761. DOI: 10.1007/s10980-020-01167-6.

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

Ash, A. 2020. Temporal partitioning of foraging in *Plethodon metcalfi*. *Herpetological Conservation & Biology* 15(1): 61–68.

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.

Gade, M. R., G. M. Connette, J. A. Crawford, D. J. Hocking, J. C. Maerz, J. M. Milanovich, and W.E. Peterman. 2020. Predicted alteration of terrestrial salamander surface activity as a consequence of climate change. *Ecology*. DOI: 10.1002/ecy.3154

Hale, R., E. Powell, L. Beikmohamadi, and M. L. Alexander. 2020. Effects of arthropod inquilines on growth and reproductive effort among metacommunities of the purple pitcher plant (*Sarracenia purpurea* var. *montana*). *PLoS One* 15(5): e0232835. DOI: 10.1371/journal.pone.0232835.

Lytle, A. J., J. T. Costa, and R. J. Warren. 2020. Invasion and high-elevation acclimation of the red imported fire ant, *Solenopsis invicta*, in the southern Blue Ridge escarpment region of North America. *Plos One* 15(5): e0232264. DOI: 10.1371/journal.pone.0232264.

O'Donnell, M. K. and S. M. Deban. 2020. Cling performance and surface area of attachment in plethodontid salamanders. *Journal of Experimental Biology* 223: jeb211706.

Riddell, E. A. and M. W. Sears. 2020. Terrestrial salamanders maintain habitat suitability under climate change despite trade-offs between water loss and gas exchange. *Physiological and Biochemical Zoology* 93(4): 310–319.

Viviani, V. R., J. R. Silva, D. T. Amaral, V. R. Bevilaqua, F. C. Abdalla, B. R. Branchini, & C. H. Johnson. 2020. A new brilliantly blue-emitting luciferin-luciferase system from *Orfelia fultoni* and Keroplatinae (Diptera). *Nature Communications* 10: 9608 DOI: 10.1038/s41598-020-66286-1.

2019

Brown, S., A. Veach, J. Horton, E. Ford, A. Jumpponen, & R. E. Baird. 2019. Context

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- dependent fungal and bacterial soil communities shift in response to recent wildfires in Southern Appalachia. *Forest Ecology and Management* 451: 117520.
- Bruce, R. C. 2019. Life history evolution in plethodontid salamanders and the evolutionary ecology of direct development in Dusky Salamanders (*Desmognathus*). *Herpetological Review* 50(4): 673–682.
- 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.
- Gade, M. R., P. R. Gould, and W. E. Peterman. 2019. Habitat-dependent responses of terrestrial salamanders to wildfire in the short-term. *Forest Ecology and Management* 449: 117479.
- Lendemer, J. C. and J. L. Allen. 2019. *Hypotrachyna oprah* (Parmeliaceae, Lichenized Ascomycota), a new foliose lichen with lichexanthone from southeastern North America. *Castanea* 84(1): 24–32.
- Miniat, C. F., P. P. Clinton, and L. K. Everage. 2019. The effects of off-highway vehicle trails and use on stream water quality in the North Fork of the Broad River. *Transactions of the American Society of Agricultural and Biological Engineers* 62(2): 1–10. DOI: 10.13031/trans.13098.
- Reazin, C., R.E. Baird, S. Clark, & A. Jumpponen. 2019. Chestnut bred for blight resistance recruit distinct fungal rhizobiomes from common nursery soils. *Mycorrhiza* 29(4): 313–323.
- Riddell, E. A., E. Y. Roback, C. E. Wells, K. R. Zamudio, and M. W. Sears. 2019. Thermal cues drive plasticity of desiccation resistance in montane salamanders with implications for climate change. *Nature Communications* 10: 4091.
- Sears, M. W., E. A. Riddell, T. W. Rusch, and M. J. Angilletta Jr. 2019. The world still is not flat: Lessons learned from organismal interactions with environmental heterogeneity in terrestrial environments. *Integrative and Comparative Biology* 59: 1049–1058.
- Wilburn, D. B. and R. C. Feldhoff. 2019. An annual cycle of gene regulation in the red-legged salamander mental gland: From hypertrophy to expression of rapidly evolving pheromones. *BMC Developmental Biology* 19:10.

2018

- Augustine, K. E. and J. G. Kingsolver. 2018. Biogeography and phenology of oviposition preference and larval performance of *Pieris virginiensis* butterflies on native and invasive host plants. *Biological Invasions* 20: 413–422.

- Costa, J. T. 2018. The other insect societies: Overview and new directions. *Current Opinion in Insect Science*. Special Issue on Social Evolution. 28: 40–49.
- Costa, J. T. 2018. The impish side of evolution's icon. *American Scientist* 106: 104–111.
- Jones, K. S. and D. W. Weisrock. 2018. Genomic data reject the hypothesis of sympatric ecological speciation in a clade of *Desmognathus* salamanders. *Evolution* 72(11): 2378–2393.
- Lihoreau, M., T. Gómez-Moracho, C. Pasquaretta, J. T. Costa, and J. Buhl. 2018. Social nutrition: An emerging field in insect science. *Current Opinion in Insect Science*. Special Issue on Social Evolution. 28: 73–80.
- Milne, M. A. and D. A. Waller. 2018. Carnivorous pitcher plants eat a diet of certain spiders, regardless of what's on the menu. *Ecosphere* 9(11): 1–10 [Article e02504]
- Riddell, E. A., J. P. Odom, J. D. Damm, and M. W. Sears. 2018. Plasticity reveals hidden resistance to extinction under climate change in the global hotspot of salamander diversity. *Science Advances* 4: eaar5471.
- Riddell, E. A., J. McPhail, J. D. Damm, and M. W. Sears. 2018. Trade-offs between water loss and gas exchange influence habitat suitability of a woodland salamander. *Functional Ecology* 2018: 1–10. DOI: 10.1111/1365-2435.13030.
- Veach, A. M., C. E. Stokes, J. Knoepp, A. Jumpponen, & R. E. Baird. 2018. Fungal communities and functional guilds shift along an elevational gradient in the southern Appalachian mountains. *Microbial Ecology* 76: 156–168.
- Viviani, V. R., D. T. Amaral, V. R. Bevilaquab, and R. L. Falaschi. 2018. *Orfelia*-type luciferin and its associated storage protein in the non-luminescent cave worm *Neoditomyia* sp. (Diptera: Keroplatidae) from the Atlantic rainforest: Biological and evolutionary implications. *Photochemical and Photobiological Sciences* 17: 1282–1288.
- Weaver, N. and K. Barrett. 2018. In-stream habitat predicts salamander occupancy and abundance better than landscape-scale factors within exurban watersheds in a global diversity hotspot. *Urban Ecosystems* 21: 97–105.

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)

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

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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)

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.
- Bruce, R. C. 2017. A provisional model of demography in *Desmognathus ocoee* (Amphibia, Plethodontidae). *Copeia* 105(4): 634–639.
- Bruce, R. C. 2017. A provisional model of demography in *Desmognathus ocoee* (Amphibia, Plethodontidae). *Copeia* 105(4): 634–639.
- Costa, J. T. 2017. *Darwin's Backyard: How Small Experiments Led to a Big Theory*. New York: W. W. Norton.
- Lendemer, J. C., C. R. Anderson Stewart, B. Besal, J. Goldsmith, H. Griffith, J. R. Hoffman, B. Kraus, P. LaPoint, L. Li, Z. Muscavitch, J. Schultz, R. Schultz, and J. L. Allen. 2017. The lichens and allied fungi of Mount Mitchell State Park, North Carolina: A first checklist with comprehensive keys and comparison to historical data. *Castanea* 82: 69–97.
- Riddell, E. A., E. K. Apanovitch, J. P. Odom, and M. W. Sears. 2017. Physical calculations of resistance to water loss improve predictions of species range models. *Ecological Monographs* 87(1): 21–33.
- Veach, A. M., C. E. Stokes, J. Knoepp, A. Jumpponen, and R. Baird. 2017. Fungal communities and functional guilds shift along an elevational gradient in the southern Appalachian Mountains. *Microbial Ecology* 76:156–168; <https://doi.org/10.1007/s00248-017-1116-6>
- Weaver, N., K. Barrett, and D. L. Hagan. 2017. The influence of exurban landscapes and local site characteristics on riparian vegetation. *Urban Ecosystems* 20: 1141–1150.
- Wilburn, D. and W. J. Swanson. 2016. The “ZP domain” is not one, but likely two independent domains. *Molecular Reproduction and Development* 84(4): 284–285. doi: 10.1002/mrd.22781.
- Wilburn, D. B., K. A. Doty, A. J. Chouinard, S. L. Eddy, S. K. Woodley, L. D. Houck, and R. C. Feldhoff. 2017. Olfactory effects of a hypervariable multicomponent pheromone in the red-legged salamander, *Plethodon shermani*. *PLoS ONE* 12(3): e0174370.
- Workman, S.W., B. Barlow, and J. Fike. 2017. Southeast and Caribbean Regional Summary. pp. 189-202 In: Schoeneberger M.M., Bentrup G., Patel-Weynand T. (eds) 2017. Agroforestry: Enhancing Resiliency in U.S. Agricultural Landscapes under Changing Conditions. General Technical Report WO-96. USDA-FS, Washington DC.

2016

- Allen, J. L and J. C. Lendemer. 2016. Climate change impacts on endemic, high-elevation lichens in a biodiversity hotspot. *Biodiversity and Conservation* 25(3): 555–568. doi: 10.1007/s10531-016-1071-4.
- Bruce, R. C. 2016a. Application of the Gompertz function in studies of growth in dusky salamanders (Plethodontidae: *Desmognathus*). *Copeia* 104(1): 94–100.
- Bruce, R. C. 2016b. Relative growth rates in three species of *Desmognathus* (Amphibia: Plethodontidae). *Herpetologica* 72(3): 174–180.
- Connette, G. M., M. S. Osbourn, and W. E. Peterman. 2016. The distribution of a stream-breeding salamander, *Desmognathus ocoee*, in terrestrial habitat suggests the ecological importance of loworder streams. *Copeia* 104: 149–156.
- Doty, K. A., D. B. Wilburn, K. E. Bowen, P. W. Feldhoff, and R. C. Feldhoff. 2016. Co-option and evolution of non-olfactory proteinaceous pheromones in a terrestrial lungless salamander. *Journal of Proteomics*, special issue: “omics” in evolutionary ecology. 135: 101–111. DOI:10.1016/j.jprot.2015.09.019
- Eddy, S. L., D. B. Wilburn, A. J. Chouinard, K. A. Doty, K. M. Kiemnec-Tyburczy, and L. D. Houck. 2016. Male terrestrial salamanders demonstrate sequential mate choice based on female gravidity and size. *Animal Behaviour* 113: 23–29.
- Warren, R. J. II. 2016. Ghosts of cultivation past - Native American dispersal legacy persists in tree distribution. *PLoS One* 11(3): e0150707. DOI: 10.1371/journal.pone.0150707.
- Warren, R.J. II, L. D. Chick, B. DeMarco, A. McMillan, V. DeStefano, R. Gibson and P. Pinzone. 2016. Climate-driven range shift prompts species replacement. *Insectes Sociaux* 63: 593–601. DOI: 10.1007/s00040-016-0504-0.
- Wilburn, D. B. and W. J. Swanson. 2016. From molecules to mating: Rapid evolution and biochemical studies of reproductive proteins. *Journal of Proteomics* 135: 12–25. DOI: 10.1016/j.jprot.2015.06.007.

2015

- Connette, G. M. and R. D. Semlitsch. 2015. A multistate mark–recapture approach to estimating survival of PIT-tagged salamanders following timber harvest. *Journal of Applied Ecology* 52(5): 1316–1324. DOI: 10.1111/1365-2664.12472.
- Connette, G. M., J. A. Crawford, and R. D. Semlitsch. 2015. Climate change and shrinking salamanders: alternative mechanisms for changes in plethodontid salamander body size. *Global Change Biology* 21: 2834–2843.
- Costa, J. T. 2015. Sailing the backyard *Beagle*: Darwin-inspired voyages of discovery in

- backyard and schoolyard. pp. 131–146 *In*: C. Boulter, D. Sanders, and M. Reiss (eds.), *Darwin-Inspired Learning*. Rotterdam and Boston: Sense Publishers.
- Manos, P. and J. E. Meireles. 2015. Biogeographic analysis of the woody plants of the southern Appalachians: Implications for the origins of a regional flora. *American Journal of Botany* 102(5): 1–25.
- Morris, J. R., J. T. Costa, and A. Berry. 2015. Adaptations: Using Darwin's *Origin* to teach biology and writing. *Evolution* 69: 2556–2560.
- Riddell, E. A. and M. W. Sears. 2015. Geographic variation of resistance to water loss within two species of lungless salamanders: implications for activity. *Ecosphere* 6(5): 1–16.
- Sinn, B. T., L. M. Kelly, and J. V. Freudenstein. 2015a. Putative floral brood-site mimicry, loss of autonomous selfing, and reduced vegetative growth are significantly correlated with increased diversification in *Asarum* (Aristolochiaceae). *Molecular Phylogenetics and Evolution* 89: 194–204.
- Sinn, B. T., L. M. Kelly, and J. V. Freudenstein. 2015b. Phylogenetic relationships in *Asarum* (Aristolochiaceae): Effect of data partitioning and a revised classification. *American Journal of Botany* 102(5): 765–779.
- Surasinghe, T. D. and R. F. Baldwin. 2015. Importance of riparian forest buffers in conservation of stream biodiversity: Responses to land uses by stream-associated salamanders across two southeastern temperate ecoregions. *Journal of Herpetology* 49(1): 83–94.
- Warren II, R. J., A. McMillan, J. R. King, L. Chick, and M. A. Bradford. 2015. Forest invader replaces predation but not dispersal services by a keystone species. *Biological Invasions* 17: 3153–3162. DOI: 10.1007/s10530-015-0942-z.
- Wilburn, D. B., S. L. Eddy, A. J. Chouinard, S. J. Arnold, R. C. Feldhoff, and L. D. Houck. 2015. Pheromone isoform composition differentially affects female behavior in the red-legged salamander, *Plethodon shermani*. *Animal Behaviour* 100: 1–7.

2014

- Baird, R., C. E. Stokes, J. Frampton, B. Smith, C. Watson, C. Pilgrim, and M. Scruggs. 2014. Diversity and density of the EM fungal community present in high elevation Fraser fir forests of Great Smoky Mountains National Park. *North American Fungi* 9(1): 1–21.
- Baird, R., E. Wood-Jones, J. Varco, C. Watson, W. Starrett, G. Taylor, and K. Johnson. 2014. *Rhododendron* decline in the Great Smoky Mountains and surrounding areas: intensive site study of biotic and abiotic parameters associated with the decline. *Southeastern Naturalist* 13(1): 1–25.

- Baird, R., C. E. Stokes, A. Wood-Jones, C. Watson, M. Alexander, G. Taylor, K. Johnson, P. Threadgill, and S. Diehl. 2014. A molecular clone and culture inventory of the root fungal community associated with eastern hemlock in Great Smoky Mountains National Park. *Southeastern Naturalist* 13(special issue 6): 219–237.
- Baird, R., C. E. Stokes, A. Wood-Jones, C. Watson, M. Alexander, C. Watson, G. Taylor, K. Johnson, T. Remaley, and S. Diehl. 2014. Fleshy saprobic and ectomycorrhizal fungal communities associated with healthy and declining eastern hemlock stands in Great Smoky Mountains National Park. *Southeastern Naturalist* 13(special issue 6): 192–218.
- Brannon, M. P., E. C. Allan, and M. C. Silinski. 2014. Terrestrial salamander abundances along and within an electric power line right-of-way. *Journal of the North Carolina Academy of Science* 130(2): 40–45.
- Bruce, R. C. 2014. Reproductive allometry in three species of dusky salamanders. *Copeia* 2014(3): 419–427.
- Costa, J. T. 2014a. *Wallace, Darwin, and the Origin of Species*. Cambridge, Mass: Harvard University Press.
- Costa, J. T. 2014b. Sailing the backyard *Beagle*: Darwin-inspired voyages of discovery in backyard and schoolyard. pp. 131–146 In: C. Boulter, D. Sanders, and M. Reiss (eds.), *Darwin-Inspired Learning*. Rotterdam and Boston: Sense Publishers.
- Jeffries, S. B. and T. R. Wentworth. 2014. *Exploring Southern Appalachian Forests: An Ecological Guide to 30 Great Hikes in the Carolinas, Georgia, Tennessee, and Virginia*. Chapel Hill: University of North Carolina Press, 336 pp.
- Lewis, J. D., G. M. Connette, M. A. Deyrup, J. E. Carrel, and R. D. Semlitsch. 2014. Relationship between diet and microhabitat use of red-legged salamanders (*Plethodon shermani*) in southwestern North Carolina. *Copeia* 2014: 201–205.
- Mackey, M. J., G. M. Connette, W. E. Peterman, and R. D. Semlitsch. 2014. Do golf courses reduce the ecological value of headwater streams for salamanders in the southern Appalachian Mountains? *Landscape and Urban Planning* 125: 17–27.
- Wilburn, D. B., K. E. Bowen, P. W. Feldhoff, and R. C. Feldhoff. 2014. Proteomic analyses of courtship pheromones in the Redback salamander, *Plethodon cinereus*. *Journal of Chemical Ecology* 40(8): 928–939.
- Wilburn, D. B., K. E. Bowen, K. A. Doty, S. Arumugam, A. N. Lane, P. W. Feldhoff, and R. C. Feldhoff. 2014. Structural insights into the evolution of a sexy protein: Novel topology and restricted backbone flexibility in a hypervariable pheromone from the Red-legged Salamander, *Plethodon shermani*. *PLoS One* 9(5): e96975.

2013

- Baird, R., L. E. Wallace, G. Baker, and M. Scruggs. 2013. Stipitate hydroid fungi of the temperate southeastern United States. *Fungal Diversity* 62(1): 41–114.
- Brannon, M. P. and L. B. Bargelt. 2013. Discarded bottles as a mortality threat to shrews and other small mammals in the southern Appalachian Mountains. *Journal of the North Carolina Academy of Sciences* 129: 126–129.
- Bruce, R. C. 2013. Size-mediated tradeoffs in life-history traits in dusky salamanders. *Copeia* 2013(2): 262–267.
- Chouinard, A. J., D. B. Wilburn, L. D. Houck, and R. C. Feldhoff. 2013. Individual variation in pheromone isoform ratios of the Red-legged salamander, *Plethodon shermani*. *Chemical Signals in Vertebrates* 12: 99–115.
- Connette, G. M. and R. D. Semlitsch. 2013a. Life history as a predictor of salamander recovery rate from timber harvest in southern Appalachian forests, U.S.A. *Conservation Biology* 27(6): 1399–1409.
- Connette, G. M. and R. D. Semlitsch. 2013b. Context-dependent movement behavior of woodland salamanders (*Plethodon*) in two habitat types. *Zoology* 116(6): 325–330.
- Costa, J. T. 2013a. *On the Organic Law of Change: A Facsimile Edition and Annotated Transcription of Alfred Russel Wallace's Species Notebook of 1855–1859*. Cambridge, Mass: Harvard University Press.
- Costa, J. T. 2013b. Hamiltonian inclusive fitness: A fitter fitness concept. *Biology Letters* 9(6): 20130335.
- Costa, J. T. 2013c. Engaging with Lyell: Alfred Russel Wallace's Sarawak Law and Ternate papers as reactions to Charles Lyell's *Principles of Geology*. *Theory in Biosciences* 132(4): 225–237.
- Costa, J. T. 2013d. Synonymy and its discontents: Alfred Russel Wallace's nomenclatural proposals from the 'Species Notebook' of 1855–1859. *Bulletin of Zoological Nomenclature* 70: 131–148.
- Costa, J. T. 2013e. Wallace on the evolutionary trail. *Current Biology* 23(24): R1069–R1071.
- Dipple, K. M., G. M. Connette, and R. D. Semlitsch. 2013. Behavior of *Plethodon metcalfi* following anesthetization with Tricaine Methanesulfonate (MS-222). *Herpetological Review* 44: 215–218.
- McCormick, M. A., M. A. Cubeta, and L. F. Grand. 2013. Geography and hosts of the wood decay fungi *Fomes fasciatus* and *Fomes fomentarius* in the United States. *North American Fungi* 8(2): 1–53.

Warren, R. J. II and L. Chick. 2013. Upward ant distribution shift corresponds with minimum, not maximum, temperature tolerance. *Global Change Biology* 19: 2082-2088.

2012

Costa, J. T. 2012. New landscapes and new eyes: The many voyages of Charles Darwin. pp. 42-55 In: S. G. da Silva et al. (eds.) *(Dis)Entangling Darwin: Cross-Disciplinary Reflections on the Man and His Legacy*. Newcastle, UK: Cambridge Scholars Publishing.

Glenn, A. and M. S. Bodri. 2012. Fungal endophyte diversity in *Sarracenia*. *PLoS One* 7(3): e32980.

Kerney, R. R., D. C. Blackburn, H. Müller, and J. Hanken. 2012. Do larval traits re-evolve? Evidence from the embryogenesis of a direct-developing salamander, *Plethodon cinereus*. *Evolution* 66: 252-262.

Kiemnec-Tyburczy, K. M., S. K. Woodley, R. A. Watts, S. J. Arnold, and L. D. Houck. 2012. Expression of vomeronasal receptors and related signaling molecules in the nasal cavity of a caudate amphibian (*Plethodon shermani*). *Chemical Senses* 37(4): 335-346.

Lamphere, B. A. and M. J. Blum. 2012. Genetic estimates of population structure and dispersal in a benthic stream fish. *Ecology of Freshwater Fish* 21: 75-86.

Milne, M. A. 2012. The purple pitcher plant as a spider oviposition site. *Southeastern Naturalist* 11(4): 567-574.

Semlitsch, R.D., S. Ecrement, A. Fuller, K. Hammer, J. Howard, C. Krager, J. Mozeley, J. Ogle, N. Shipman, J. Speier, M. Walker, and B. Walters. 2012. Natural and anthropogenic substrates affect movement behavior of the Southern Graycheek Salamander (*Plethodon metcalfei*). *Canadian Journal of Zoology* 90: 1128-1135.

Tran, T. and K. Elliott. 2012. Estimating *Rhododendron maximum* L. (Ericaceae) canopy cover using GPS/GIS technology. *Castanea* 77(4): 303-317.

Wack, C. L., S. E. DuRant, W. A. Hopkins, M. B. Lovern, R. C. Feldhoff, and S. K. Woodley. 2012. Elevated plasma corticosterone increases metabolic rate in a terrestrial salamander. *Comparative Biochemistry & Physiology A: Molecular & Integrative Physiology* 161(2): 153-158.

Wilburn, D. B., K. E. Bowen, R. G. Gregg, J. Cai, P. W. Feldhoff, L. D. Houck, and R. C. Feldhoff. 2012. Proteomic and UTR analyses of a rapidly evolving hypervariable family of vertebrate pheromones. *Evolution* 66(7): 2227-2239.

2011

- Bruce, R. C. 2011. Community assembly in the salamander genus *Desmognathus*. *Herpetological Monographs* 25: 1-24.
- Cashner, M. F., K. R. Piller, H. L. Bart. 2011. Phylogenetic relationships of the North American cyprinid subgenus *Hydrophlox*. *Molecular Phylogenetics and Evolution* 59: 725-735.
- Connette, G. M. and R. D. Semlitsch. 2011. Successful use of a passive integrated transponder (PIT) system for below-ground detection of plethodontid salamanders. *Wildlife Research* 39: 1-6.
- Kiemnec-Tyburczy, K. M., S. K. Woodley, P. W. Feldhoff, R. C. Feldhoff, and L. D. Houck. 2011. Dermal application of courtship pheromones does not influence receptivity in female red-legged salamanders (*Plethodon shermani*). *Journal of Herpetology* 45: 169-173.
- Peterman, W. E., J. A. Crawford, and R. D. Semlitsch. 2011. Effects of even-aged timber harvest on stream salamanders: Support for the evacuation hypothesis. *Forest Ecology and Management* 262: 2344-2353.
- Servick, S. V., P. S. Soltis, and D. E. Soltis. 2011. Microsatellite marker development for *Galax urceolata* (Diapensiaceae). *American Journal of Botany* 98: 48-50.

2010

- Brannon, M. P., M. A. Burt, D. M. Bost, M. C. Caswell. 2010. Discarded bottles as a source of shrew species distributional data along an elevational gradient in the southern Appalachians. *Southeastern Naturalist* 9: 781-794.
- Bruce, R. C. 2010. Proximate contributions to adult body size in two species of dusky salamanders (Plethodontidae: *Desmognathus*). *Herpetologica* 66: 393-402.
- Costa, J. T. 2010. Social evolution in 'other' insects and arachnids. In: Breed M.D. and Moore J. (eds.) *Encyclopedia of Animal Behavior*, pp. 231-241. Oxford, UK: Academic Press.
- Diederich, P., D. Ertz, and J. Etaylo. 2010. An enlarged concept of *Llimoniella* (lichenicolous Helatiales), with a revised key to the species and notes on related genera. *The Lichenologist* 42: 253-269.
- Krusche, P., C. Uller, and U. Dicke. 2010. Quantity discrimination in salamanders. *Journal of Experimental Biology* 213: 1822-1828.
- Lichstein, J. W., J. Dushoff, K. Ogle, A. Chen, D. W. Purves, J. P. Caspersen, and S. W. Pacala. 2010. Unlocking the forest inventory data: relating individual tree performance to unmeasured environmental factors. *Ecological Applications* 20: 684-699.

Mackey, M. J., G. W. Connette, and R. D. Semlitsch. 2010. Monitoring of stream salamanders: The utility of two techniques and the influence of stream substrate complexity. *Herpetological Review* 41: 163-166.

Pairon, M., B. Petitpierre, M. Campbell, A. Guisan, O. Broennimann, P.V. Baret, A. Jacquemart, and G. Besnard. 2010. Multiple introductions boosted genetic diversity in the invasive range of black cherry (*Prunus serotina*; Rosaceae). *Annals of Botany* 105: 881-890.

Vaccaro, E. A., P. W. Feldhoff, R. C. Feldhoff, L. D. Houck. 2010. A pheromone mechanism for swaying female mate choice: enhanced affinity for a sexual stimulus in a woodland salamander. *Animal Behaviour* 80: 983-989.

Wack, C. L., M. B. Lovern, and S. K. Woodley. 2010. Transdermal delivery of corticosterone in terrestrial amphibians. *General and Comparative Endocrinology* 169: 269-275.

2009

Baird, R. E., S. Woolfolk, and C.E. Watson. 2009. Microfungi of forest litter of healthy American beech, Fraser fir, and Eastern hemlock stands from forests in Great Smoky Mountains National Park. *Southeastern Naturalist* 8: 609–630.

Brannon, M. P. 2009. An additional record of the least shrew, *Cryptotis parva*, from Macon County, North Carolina. *Journal of the North Carolina Academy of Science* 125: 85–86.

Bruce, R. C. 2009. Life-history contributions to miniaturization in the salamander genus *Desmognathus* (Urodela: Plethodontidae). *Copeia* 2009: 714–723.

Camp, C. D., W. E. Peterman, J. R. Milanovich, T. Lamb, J. C. Maerz, and D. B. Wake. 2009. A new genus and species of lungless salamander (family Plethodontidae) from the Appalachian highlands of the southeastern United States. *Journal of Zoology* 279: 86–94.

Costa, J. T. 2009a. *The Annotated Origin*. Cambridge, Mass.: Belknap/Harvard University Press, 576 pp.

Costa, J. T. 2009b. The Darwinian revelation: Tracing the origin and evolution of an idea. *BioScience* 59: 886–894.

Kiemnec-Tyburczy, K. M., R. A. Watts, R. G. Gregg, D. von Borstel, and S. J. Arnold. 2009. Evolutionary shifts in courtship pheromone composition revealed by EST analysis of plethodontid salamander mental glands. *Gene* 432: 75–81.

Peterman, W. E. and R. D. Semlitsch. 2009. Efficacy of riparian buffers in mitigating local population declines and the effects of even-aged timber harvest on larval

salamanders. *Forest Ecology and Management* 257: 8–14.

Petitpierre, B., M. Pairon, O. Broennimann, A.L. Jacquemart, A. Guisan, and G. Besnard. 2009. Plastid DNA variation in *Prunus serotina* var. *serotina* (Rosaceae), a North American tree invading Europe. *European Journal of Forest Research* 128: 431–436.

Schubert, S. N., C. L. Wack, L. D. Houck, P. W. Feldhoff, R. C. Feldhoff, and S. K. Woodley. 2009. Exposure to pheromones increases plasma corticosterone concentrations in a terrestrial salamander. *General and Comparative Endocrinology* 161: 271–275.

Semlitsch, R. D., B. D. Todd, S. M. Blomquist, A. J. K. Calhoun, J. W. Gibbons, J. P. Gibbs, G. J. Graeter, E. B. Harper, J. Hocking, M. L. Hunter, Jr., D. A. Patrick, T. A. G. Rittenhouse, B. B. Rothermel. 2009. Effects of timber harvest on amphibian populations: Understanding mechanisms from forest experiments. *Bioscience* 59: 853–862.

Vaccaro E. A., P. W. Feldhoff, R. C. Feldhoff, and L. D. Houck. 2009. Male Courtship pheromones suppress female tendency to feed but not to flee in a plethodontid salamander. *Animal Behavior* 78: 1421–1425.

2008

Bruce, R. C. 2008. Intraguild interactions and population regulation in plethodontid salamanders. *Herpetological Monographs* 22: 31–53.

Crawford, J. A. and R. D. Semlitsch. 2008a. Abiotic factors influencing abundance and microhabitat use of stream salamanders in southern Appalachian Forests. *Forest Ecology and Management* 255: 1841–1847.

Crawford, J. A. and R. D. Semlitsch. 2008b. Post-disturbance effects of even-aged timber harvest on stream salamanders in southern Appalachian forests. *Animal Conservation* 11: 369–376.

Grand, L.F. and C.S. Vernia. 2008. Biogeography and hosts of poroid wood decay fungi in North Carolina: species of *Trametes* and *Trichaptum*. *Mycotaxon* 106: 243–246.

Houck, L. D., R. A. Watts, S. J. Arnold, K. E. Bowen, K. M. Kiemnec, H. A. Godwin, P. W. Feldhoff and R. C. Feldhoff. 2008. A recombinant courtship pheromone affects sexual receptivity in a plethodontid salamander. *Chemical Senses* 33: 623–631.

Houck, L. D., R. A. Watts, L. M. Mead, C. A. Palmer, S. J. Arnold, P. W. Feldhoff, and R. C. Feldhoff. 2008. A candidate vertebrate pheromone, SPF, increases receptivity in female salamanders. pp. 213–221 *In: Chemical Signals in Vertebrates*, vol. 11. J. Hurst, R. Beynon and D. Muller-Schwarze, eds. New York: Springer-Verlag.

Laberge, F., R. C. Feldhoff, P. W. Feldhoff, and L. D. Houck. 2008. Courtship pheromone-induced c- Fos-like immunolabeling in the female salamander brain. *Neuroscience* 151: 329-339.

Schubert, S. N., L. D. Houck, P. W. Feldhoff, R. C. Feldhoff, and S. K. Woodley. 2008. The effects of sex and female reproductive condition on chemosensory communication in a terrestrial salamander (*Plethodon shermani*). *Hormones and Behavior* 54: 270-277.

2007

Crawford, J. A. 2007. *Desmognathus quadramaculatus* (Black-bellied salamander) predation. *Herpetological Review* 38: 432-433.

Crawford, J. A. and R. D. Semlitsch. 2007. Estimation of core terrestrial habitat for stream-breeding salamanders and delineation of riparian buffers for protection of biodiversity. *Conservation Biology* 21: 152-158.

Grand, L.F. and C.S. Vernia. 2007. Biogeography and hosts of poroid wood decay fungi in North Carolina: species of *Abortiporus*, *Bondarzewia*, *Grifola*, *Heterobasidion*, *Laetiporus* and *Meripilus*. *Mycotaxon* 99: 99-102.

Houck, L. D., C. A. Palmer, R. A. Watts, S. J. Arnold, P. W. Feldhoff, and R. C. Feldhoff. 2007. A new vertebrate courtship pheromone, PMF, affects female receptivity in a terrestrial salamander. *Animal Behaviour* 73: 315-320.

Nation, T. H. 2007. The influence of flowering dogwood (*Cornus florida*) on land snail diversity in a southern mixed hardwood forest. *American Midland Naturalist* 157: 137-148.

Palmer, C. A., D. M. Hollis, R. A. Watts, L. D. Houck, M. A. McCall, R. G. Gregg, P. W. Feldhoff, R. C. Feldhoff, and S. J. Arnold. 2007. Plethodontid modulating factor, a hypervariable salamander courtship pheromone in the three-finger protein superfamily. *FEBS Journal* 274: 2300-2310.

Palmer, C., R. A. Watts, L. D. Houck, A. L. Picard, and S. J. Arnold. 2007. Evolutionary replacement of pheromone components in a salamander signaling complex: more evidence for phenotypic- molecular decoupling. *Evolution* 61: 202-215.

Peterman, W. E., J. A. Crawford, and R. D. Semlitsch. 2007. Productivity and significance of headwater streams: population structure and biomass of the black-bellied salamander (*Desmognathus quadramaculatus*). *Freshwater Biology* 53: 347-357.

Semlitsch, R. D., T. J. Ryan, K. Hamed, M. Chatfield, B. Drehman, N. Pekarek, M. Spath, and A. Watland. 2007. Salamander abundance along road edges and within abandoned logging roads in Appalachian forests. *Conservation Biology* 21: 159-167.

Woodley, S. K. 2007. Sex steroid hormones and sexual dimorphism of chemosensory structures in a terrestrial salamander (*Plethodon shermani*). *Brain Research* 1138: 95-103.

2006

Brannon, M. P. 2006. *Bufo A. americanus* (eastern American toad) leucism. *Herpetological Review* 37: 333-334.

Costa, J. T. 2006. *The Other Insect Societies*. Cambridge, Mass.: Belknap/Harvard University Press, 812 pp.

Jones, M. T., S. R. Voss, M. B. Ptacek, D. W. Weisrock, and D. W. Tonkyn. 2006. River drainages and phylogeography: an evolutionary significant lineage of shovel-nosed salamander (*Desmognathus marmoratus*) in the southern Appalachians. *Molecular Phylogenetics and Evolution* 38: 280-287.

Kozak, K. H., R. A. Blaine, and A. Larson. 2006. Gene lineages and eastern North American palaeodrainage basins: phylogeography and speciation in salamanders of the *Eurycea bislineata* species complex. *Molecular Ecology* 15: 191-207.

Kozak, K. H., D. W. Weisrock, and A. Larson. 2006. Rapid lineage accumulation in a non-adaptive radiation: phylogenetic analysis of diversification rates in eastern North American woodland salamanders (Plethodontidae: *Plethodon*). *Proceedings of the Royal Society of London (B)* 273: 539-546.

Peterman, W. E. and R. D. Semlitsch. 2006. Effects of tricaine methanesulfonate (MS-222) concentration on anesthetization and recovery in four plethodontid salamanders. *Herpetological Review* 37: 303-304.

Schubert, S. N., L. D. Houck, P. W. Feldhoff, R. C. Feldhoff, and S. K. Woodley. 2006. Effects of androgens on behavioral and vomeronasal responses to chemosensory cues in male terrestrial salamanders (*Plethodon shermani*). *Hormones and Behavior* 50: 469-476.

Shure, D. J., D. L. Phillips, and P. E. Bostick. 2006. Gap size and succession in cutover southern Appalachian forests: an 18-year study of vegetation dynamics. *Plant Ecology* 185: 299-318.

Wirsig-Wiechmann, C. R., L. D. Houck, J. M. Wood, P. W. Feldhoff, and R. C. Feldhoff. 2006. Male pheromone protein components activate female vomeronasal neurons in the salamander *Plethodon shermani*. *BMC Neuroscience* 7: 26.

2005

- Brannon, M. P. 2005. Distribution and microhabitat of the woodland jumping mouse, *Napaeozapus insignis*, and the white-footed mouse, *Peromyscus leucopus*, in the southern Appalachians. *Southeastern Naturalist* 4: 479-486.
- Brannon, M. P., and S. R. Rogers. 2005. Effects of canopy thinning by hemlock woolly adelgids on the local abundance of terrestrial salamanders. *Journal of the North Carolina Academy of Science* 121: 151-156.
- Bruce, R. C. 2005a. Did *Desmognathus* salamanders reinvent the larval stage? *Herpetological Review* 36: 107-112.
- Bruce, R. C. 2005b. Theory of complex life cycles: application in plethodontid salamanders. *Herpetological Monographs* 19: 180-207.
- Grand, L. F. and C. S. Vernia. 2005a. Biogeography and hosts of poroid wood decay fungi in North Carolina: Species of *Coltricia*, *Coltriciella* and *Inonotus*. *Mycotaxon* 91: 35-38.
- Grand, L. F. and C. S. Vernia. 2005b. Biogeography and hosts of poroid wood decay fungi in North Carolina: Species of *Fomes*, *Fomitopsis*, *Fomitella* and *Ganoderma*. *Mycotaxon* 94: 231-234.
- Kozak, K. H., A. Larson, R. M. Bonett, and L. J. Harmon. 2005. Phylogenetic analysis of ecomorphological divergence, community structure, and diversification rates in dusky salamanders (Plethodontidae: *Desmognathus*). *Evolution* 59: 2000-2016.
- Palmer, C., R. A. Watts, R. Gregg, M. McCall, L. D. Houck, R. Highton, and S. J. Arnold. 2005. Lineage-specific differences in evolutionary mode in a salamander courtship pheromone. *Molecular Biology and Evolution* 22: 2243-2256.
- Reinhart, K. O., A. A. Royo, W. H. Van der Putten, and K. Clay. 2005. Soil feedback and pathogen activity in *Prunus serotina* throughout its native range. *Journal of Ecology* 93: 890-898.
- Robinson J. L. and P. S. Rand. 2005. Discontinuity in fish assemblages across an elevation gradient in a southern Appalachian watershed, USA. *Ecology of Freshwater Fish* 14: 14-23.

2004

- Adler, L. S. and J. L. Bronstein. 2004. Attracting antagonists: Does floral nectar increase leaf herbivory? *Ecology* 85: 1519-1526.
- Eckert, C. G. and C. R. Herlihy. 2004. Using a cost-benefit approach to understand the evolution of self- fertilization in plants: the perplexing case of *Aquilegia canadensis* (Ranunculaceae). *Plant Species Biology* 19: 150-173.

- Grand, L.F. 2004. Diversity and distribution of poroid wood decay fungi in the southern Appalachian Mountains. *Inoculum Supplement to Mycologia* 55(4):14 Abstr.
- Grand, L. F. and C. S. Vernia. 2004a. Biogeography and hosts of wood decay fungi in North Carolina: species of *Ceriporia*, *Ceriporiopsis* and *Perenniporia*. *Mycotaxon* 90: 307-309.
- Grand, L. F. and C. S. Vernia. 2004b. Biogeography and hosts of poroid wood decay fungi in North Carolina species of *Phellinus* and *Schizopora*. *Mycotaxon* 89: 181-184.
- Grand, L. F., C. S. Vernia, and J. Perry. 2004a. Noteworthy collections, North Carolina, *Phylloporia frutica* (Berk. & M.A. Curtis) Ryvarden. *Castanea* 69: 237-238.
- Grand, L. F., C. S. Vernia, and J. Perry. 2004b. Noteworthy collections, North Carolina, *Phylloporia frutica* (Berk. & M. A. Curtis) Ryvarden. *Castanea* 69: 237-238.
- Herlihy, C. R. and C. G. Eckert. 2004a. Evolution of self-fertilization at geographical range margins? A comparison of demographic, floral and mating system variables in central versus peripheral populations of *Aquilegia canadensis* (Ranunculaceae). *American Journal of Botany* 92: 744-751.
- Herlihy, C. R. and C. G. Eckert. 2004b. Experimental dissection of inbreeding and its adaptive significance in a flowering plant, *Aquilegia canadensis* (Ranunculaceae). *Evolution* 58: 2693- 2703.
- Himes, S. L. and R. Wyatt. 2004. Costs and benefits of self-fertility in *Asclepias exaltata* (Apocynaceae). *Journal of the Torrey Botanical Society* 132: 24-32.
- Mabry, M., and P. A. Verrell. 2004. Stifled sex in sympatry: patterns of sexual incompatibility among desmognathine salamanders. *Biological Journal of the Linnean Society* 82: 367-375.
- Mendelson, T. C., B. D. Inouye, and M. D. Rausher. 2004. Patterns in the evolution of reproductive isolation and the genetics of speciation. *Evolution* 58: 1424-1433.
- Mendelson, T. C., A. M. Siegel, and K. L. Shaw. 2004. Testing geographic pathways of speciation in a recent island radiation. *Molecular Ecology* 13: 3787-3796.
- Palmer, C. A. and L. D. Houck. 2004. Responses to sex- and species-specific chemical signals in allopatric and sympatric salamander species. pp. 32-41 *In: Chemical Signals in Vertebrates*, vol. 10. R. T. Mason, M. P. LeMaster, and D. Muller-Schwarze, eds. New York: Kluwer Academic/Plenum Publishers.
- Poff, J. M. and C. F. Rodell. 2004. Biology of the southeast: a learning community. *Journal of College Science Teaching* 33: 40-44.
- Roth, G. and D. B. Wake. 2004. The structure of the brainstem and cervical spinal cord

in lungless salamanders (family Plethodontidae) and its relation to feeding. *Journal of Comparative Neurology* 241: 99-110.

Sipe, T. W. and R. A. Browne. 2004. Intra-specific phylogeography of the masked shrew (*Sorex cinereus*) and smoky shrews (*S. fumeus*) in the southern Appalachians. *Journal of Mammalogy* 84: 161-175.

Watts, R. A., C. A. Palmer, R. C. Feldhoff, P. W. Feldhoff, L. D. Houck, A. G. Jones, M. E. Pfrender, S. M. Rollmann, and S. J. Arnold. 2004. Stabilizing selection on behavior and morphology masks positive selection on the signal in a salamander pheromone signaling complex. *Molecular Biology and Evolution* 21: 1032-1041.

2003

Anderson, J. and S. G. Tilley. 2003. Systematics of the *Desmognathus ochrophaeus* complex in the Cumberland Plateau of Tennessee. *Herpetological Monographs* 17: 75-110.

Ash, A. N., R. C. Bruce, J. Castanet, and H. Francillon-Vieillot. 2003. Population parameters of *Plethodon metcalfi* on a ten-year-old clearcut and in nearby forest in the southern Blue Ridge Mountains. *Journal of Herpetology* 37: 445-452.

Bruce, R. C. 2003. Ecological distribution of the salamanders *Gyrinophilus* and *Pseudotriton* in a southern Appalachian watershed. *Herpetologica* 59: 301-310.

Crespi, E. J., L. J. Rissler, and R. A. Browne. 2003. Testing Pleistocene refugia theory: phylogeographic analysis of *Desmognathus wrighti*, a high-elevation salamander in the southern Appalachians. *Molecular Ecology* 12: 969-984.

Derda, G. S. and R. Wyatt. 2003. Genetic variation and population structure in *Polytrichum juniperinum* and *P. strictum* (Polytrichaceae). *Lindbergia* 28: 23-40.

Grand, L. F. and C. S. Vernia. 2003. Noteworthy collections, North Carolina, *Cryptoporus volvatus* (Peck) Shear. *Castanea* 68: 88-89.

Holland, J. N., R. Wyatt, J. L. Bronstein, and J. H. Ness. 2003. Relating the biology of flower-to-fruit survivorship to the ecology and evolution of flower-to-fruit ratios. *Recent Research Developments in Plant Science* 1: 75-84.

Houck, L. D. and S. J. Arnold. 2003. Courtship and mating. In: *Phylogeny and Reproductive Biology of Urodela (Amphibia)*. D. M. Sever, ed. Enfield, New Hampshire: Science Publishers.

Ivey, C. T., P. Martinez, and R. Wyatt. 2003. Variation in pollinator effectiveness in swamp milkweed, *Asclepias incarnata* (Apocynaceae). *American Journal of Botany* 90: 214-225.

Kozak, K. H. 2003. Sexual isolation and courtship behavior in salamanders of the

Eurycea bislineata species complex, with comments on the evolution of the mental gland and pheromone delivery behavior in the Plethodontidae. *Southeastern Naturalist* 2: 281-292.

- Larson, A., D. W. Weisrock, and K. H. Kozak. 2003. Phylogenetic systematics of salamanders (Amphibia: Urodela), a review. pp. 31- 108 *In: Phylogeny and Reproductive Biology of Urodela (Amphibia)*. D. M. Sever, ed. Enfield, New Hampshire: Science Publishers.
- Mabry, M., and P. A. Verrell. 2003. All are one and one is all: Sexual uniformity among widely separated populations of the North American seal salamander, *Desmognathus monticula*. *Biological Journal of the Linnean Society* 78: 1-10.
- Mendelson, T. C. 2003a. Sexual isolation evolves faster than hybrid inviability in a diverse and sexually dimorphic genus of fish (Percidae: *Etheostoma*). *Evolution* 57: 317-327.
- Mendelson, T. C. 2003b. Evidence of intermediate and asymmetrical behavioral isolation between Orangethroat and Orangebelly darters (Teleostei: Percidae). *American Midland Naturalist* 150: 343-347.
- Rollmann, S. M., L. D. Houck, and R. C. Feldhoff. 2003. Conspecific and heterospecific pheromone effects on female receptivity. *Animal Behaviour* 66: 857-861.
- Verrell, P. 2003. Population and species divergence of chemical cues that influence male recognition of females in desmognathine salamanders. *Ethology* 109: 577-586.
- Verrell, P. and M. Mabry. 2003. Sexual behaviour of the Black Mountain dusky salamander, *Desmognathus welteri*, and the evolutionary history of courtship in the Desmognathinae. *Journal of Zoology* 260: 367-376.

2002

- Adams, J. K. 2002. The moth fauna of the Highlands area and the possible impacts from 1999 Btk spraying: Sampling the non-target moth fauna in 2001. *USDA Forest Service Final Report*, Asheville, NC.
- Bernardo, J. and N. L. Regan-Wallin. 2002. *Plethodontid* salamanders do not conform to “general rules” for ectotherm life histories: Insights from allocation models about why simple models do not make accurate predictions. *Oikos* 97: 398-414.
- Bruce, R. C., J. Castanet, and H. Francillon-Vieillot. 2002. Skeletochronological analysis of variation in age structure, body size, and life history in three species of desmognathine salamanders. *Herpetologica* 58: 181-193.
- Deonier, D. L. 2002a. Mechanisms of competitive coexistence in the sibling species *Hydrellia bilobifera*. *Contributions on Entomology, International* 5: 3-30.

- Deonier, D. L. 2002b. North American ephydrid habitat types and probable ephydrid inhabitants. *Contributions on Entomology, International* 5: 31-47.
- Gershman S. N. and P. A. Verrell. 2002. To persuade or be persuaded: Which sex controls mating in a plethodontid salamander? *Behaviour* 139: 447-462.
- Grand, L. F. and C. S. Vernia. 2002. New taxa and hosts of poroid wood-decay fungi in North Carolina. *Castanea* 67: 193-200.
- Herlihy, C. R. and C. G. Eckert. 2002. Genetic cost of reproductive assurance in a self-fertilizing plant. *Nature* 416: 320-323.
- Keiper, J. B., D. L. Deonier, J. Jiannino, M. Sanford, and W. E. Walton. 2002. Biology, immature stages, and redescrptions of *Hydrellia personata* (Diptera: Ephydridae), a *Lemna* miner. *Proceedings of the Entomological Society of Washington* 104: 458-467.
- Krisai-Greilhuber, I., B. Senn-Irlet, and H. Voglmayr. 2002. Notes on *Crepidotus* from Mexico and the southeastern USA. *Persoonia* 17: 515-539.
- Mead, L. S. and P. A. Verrell. 2002. Evolution of courtship behaviour patterns and reproductive isolation in the *Desmognathus ochrophaeus* complex. *Ethology* 108: 403-427.
- Rose, C. S. 2002. The developmental morphology of salamander skulls. pp. 1686-173 *In: Amphibian Biology, vol. 5: Osteology*. H. Heatwole and M. Davies, eds. Chipping Norton, Australia: Amphibian Surrey Beatty and Sons.
- Viviani, V. R., J. W. Hastings, and T. Wilson. 2002. Two bioluminescent Diptera: The North American *Orfelia fultoni* and the Australian *Arachnocampa flava*: Similar niche, different bioluminescence systems. *Photochemistry and Photobiology* 75: 22-27.
- Wirsig-Wiechmann, C. R., L. D. Houck, P. W. Feldhoff, and R. C. Feldhoff. 2002. Pheromonal activation of vomeronasal neurons in plethodontid salamanders. *Brain Research* 952: 335-344.
- Wyatt, R. 2002. Unique Georgia environments: Granite outcrops. [online] *In: The New Georgia Encyclopedia*. J. C. Enscoe, ed. Athens, Georgia: University of Georgia Press.

2001

- Babcock, S. K. and J. L. Blasis. 2001. Caudal vertebral development and morphology in three salamanders with complex life cycles (*Ambystoma jeffersonianum*, *Hemidactylium scutatum*, and *Desmognathus ocoee*). *Journal of Morphology* 247: 142-159.

- Corser, J. D. 2001. Decline of disjunct green salamander (*Aneides aeneus*) populations in the southern Appalachians. *Biological Conservation* 97: 119-126.
- Grand, L. F. and C. S. Vernia. 2001. New reports and biogeography of poroid wood-decay fungi in North Carolina. *Inoculum, Suppl. to Mycologica* 52: 36.
- Kozak, K. H., and R. R. Montanucci. 2001. Genetic variation across a contact zone between montane and lowland forms of the two-lined salamander (*Eurycea bislineata*) species complex: A test of species limits. *Copeia* 2001: 25-34.
- Mead, L. S., S. G. Tilley, and L. A. Katz. 2001. Genetic structure of the Blue Ridge dusky salamander (*Desmognathus orestes*): Inferences from allozymes, mitochondrial DNA and behavior. *Evolution* 55: 2287-2302.
- Sato, S. and J. Yukawa. 2001. Absence record of *Fagus* gall midges (Diptera: Cecidomyiidae) on Ulleung Island, Korea and in North America. *Esakia* 41: 17-25.
- Simkin, S. M., W. K. Michener, and R. Wyatt. 2001. Soil disturbance elicits resprouting response in a fire-maintained ecosystem. *Journal of the Torrey Botanical Society* 128: 208-218.
- Tilley, S. G. and J. E. Huheey. 2001. *Reptiles and Amphibians of the Smokies*. Gatlinburg, TN: Great Smoky Mountains Natural History Association.
- Zomlefer, W. B., N. H. Williams, W. M. Whitten, and W. S. Judd. 2001. Genetic circumscription and relationships in the tribe Melanthieae (Liliales, Melanthiaceae), with emphasis on *Zigadenus*: Evidence from ITS and *trnL-F* sequence data. *American Journal of Botany* 88: 1657-1669.

2000

- Birchfield, G. L. and R. C. Bruce. 2000. Morphometric variation among larvae of four species of lungless salamanders (Caudata: Plethodontidae). *Herpetologica* 56: 332-342.
- Bruce, R. C., R. G. Jaeger, and L. D. Houck (eds.). 2000. *The Biology of Plethodontid Salamanders*. New York: Kluwer Academic/Plenum Publishers, 488 pp.
- Camp, C. D., J. L. Marshall, K. R. Landau, R. N. M. Austin, and S. G. Tilley. 2000. Sympatric occurrence of two species of the two-lined salamander (*Eurycea bislineata*) complex. *Copeia* 2000: 572-578.
- Derda, G. S. and R. Wyatt. 2000. Isozyme evidence regarding the origins of three allopolyploid species of *Polytrichastrum* (Polytrichaceae, Bryophyta). *Plant Systematics and Evolution* 220: 37-53.
- Donovan, M. F., R. D. Semlitsch, and E. J. Routman. 2000. Biogeography of the southeastern United States: A comparison of salamander phylogeographic studies.

Evolution 54: 1449-1456.

Fronzuto, J. and P. Verrell. 2000. Sampling aquatic salamanders: Tests of the efficiency of two funnel traps. *Journal of Herpetology* 34: 146-147.

Goater, T. M. 2000. The leech *Oligobdella biannulata* (Glossiphoniidae) on desmognathine salamanders: Potential for trypanosome transmission? *American Midland Naturalist* 144: 434-438.

Grand, L. F. and C. S. Vernia. 2000. Distribution of poroid wood-decay fungi in North Carolina. *Inoculum, Suppl. to Mycologia* 51: 32.

Holt, J. P. 2000. Changes in bird populations on the Highlands Plateau, North Carolina (USA), 1946- 1995, with emphasis on Neotropical migrants. *Natural Areas Journal* 20: 119-125.

Marks, S. B. 2000. Skull development in two plethodontid salamanders (genus *Desmognathus*) with different life histories. pp. 261-276 *In: The Biology of Plethodontid Salamanders*. R. C. Bruce, R. G. Jaeger, and L. D. Houck, eds. New York: Kluwer Academic/Plenum Publishers.

Mead, L. S. and S. G. Tilley. 2000. Ethological isolation and variation in allozymes and dorsolateral pattern between parapatric forms in the *Desmognathus ochrophaeus* complex. pp. 181-198 *In: The Biology of Plethodontid Salamanders*. Bruce, R. C., R. G. Jaeger, and L. D. Houck, eds. New York: Kluwer Academic/Plenum Publishers.

Semlitsch, R. D. 2000a. Size does matter: The value of small isolated wetlands. *Conservation Biology* 14: 5-13.

Semlitsch, R. D. 2000b. Principles for management of aquatic-breeding amphibians. *Journal of Wildlife Management* 64: 615-631.

Tilley, S. G. 2000a. *Desmognathus santeetlah*. *Catalog of American Amphibians and Reptiles* 703: 1-3. Tilley, S. G. 2000b. Systematics of *Desmognathus imitator*. pp. 121-147 *In: The Biology of Plethodontid Salamanders*. R. C. Bruce, R. G. Jaeger, and L. D. Houck, eds. New York: Kluwer Academic/Plenum Publishers.

Vernia, C. S., and L. F. Grand. 2000. Polypores of a North Carolina piedmont forest. *Mycotaxon* 74: 153- 159.

Verrell, P. 2000. Methoxychlor increases susceptibility to predation in the salamander *Ambystoma macrodactylum*. *Bulletin of Environmental Contamination and Toxicology* 64: 85-92.

Verrell, P. and M. Mabry. 2000. The courtship of plethodontid salamanders. pp. 371-380 *In: The Biology of Plethodontid Salamanders*. R. C. Bruce, R. G. Jaeger, and L. D. Houck, eds. New York: Kluwer Academic/Plenum Publishers.

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Wyatt, R., S. B. Broyles, and S. L. Lipow. 2000. Pollen-ovule ratios in milkweeds (Asclepiadaceae): An exception that probes the rule. *Systematic Botany* 25: 171-180.
