

Curriculum Vitae

Christine J. Small, Ph.D.

Professor & Interim Chair, Department of Biology
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EDUCATION

Ph.D., Environmental and Plant Biology, *Summa cum laude*. 2001. Ohio University, Athens, Ohio. Dissertation: Herbaceous layer dynamics and disturbance response in mixed mesophytic forests of southeastern Ohio. Advisor: Dr. Brian McCarthy

M.S., Botany, *Summa cum laude*. 1996. North Carolina State University, Raleigh, North Carolina. Minor: Soil Science. Thesis: Characterization of Montane Cedar-Hardwood Woodlands in the Piedmont and southern Blue Ridge Provinces of North Carolina. Advisor: Dr. Thomas Wentworth

B.S., Biology, *Summa cum laude*. 1993. Christopher Newport College, Newport News, Virginia.

Tropical Ecology and Conservation Study Abroad. 1992. Council for International Educational Exchange (CIEE), Monteverde Estación Biológica, Monteverde, Costa Rica

PROFESSIONAL EXPERIENCE

Professor, Department of Biology, Radford University, Radford, VA (2014-present)
Chair, Department of Biology, Radford University, Radford, VA (2014-2016, 2022-present)
Associate Professor, Department of Biology, Radford University, Radford, VA (2007-2014)
Assistant Professor, Department of Biology, Radford University, Radford, VA (2005-2007)
Assistant Professor, Department of Botany, Connecticut College, New London, CT (2001-2005)

TEACHING EXPERIENCE

Radford University (2005-present): Forest & Wetland Ecology, Field Biology & Phenology, Flora of Virginia, Ecology & Adaptation, Communicating Science Seminar, Plants & Society, Tropical Biology Study Abroad (U.S. Virgin Islands, co-instructor), Environmental Biology, Intro Biology Seminar, Biology I & II, Organismal Biology, Human Biology

Connecticut College (2001-2005): Introductory Botany (team-taught), General Ecology, Systematic Botany and Local Flora, Ecology of Terrestrial and Wetland Plant Communities

Ohio University (1997-2001) - Teaching Assistant: Quantitative Methods in Biology, Plant Systematics, Trees and Shrubs, Wildflowers, Plant Biology, Introductory Biology, World of Plants

North Carolina State University (1994-1996) - Teaching Assistant: Botany, Ecology

Duke University (1993) - Teaching Assistant: Advanced Soil Science

Christopher Newport University (1991-1993) – NSF Peer Mentor: Biology, Chemistry, Soil Science

PEER-REVIEWED PUBLICATIONS (*Underline = student research collaborator*)

Small, CJ. 2023. [Medicinal forest herbs: Conservation and economic development in the Appalachian Mountains](#). Bulletin of the Transilvania University of Braşov, Special Issue 15:35-48.

Chamberlain, JL and **Small, CJ.** 2021. [How does harvesting impact wild plant sustainability?](#) Natural Inquirer: Forests & Agriculture Monograph Series, USDA Forest Service 22: 7-39.

Allen, E, Powers, K, **Small, CJ.** 2020. [Noteworthy Collections: County additions to the Virginia flora vouchered at the Radford University Herbarium](#). Castanea 85: 14-22.

Chamberlain, JL, **Small, CJ**, Baumflek, M. 2019. [Sustainable forest management for nontimber products](#). Special Issue: Sustainable Forest Management, Sustainability 11: 2670-2691 (invited).

- Chamberlain, JL, **Small, CJ**, Baumflek, M. 2019. Ch. 20, [Sustainable production of temperate and boreal nontimber forest products: Examples from North America](#). In: JA Stanturf (ed.) *Achieving Sustainable Management of Boreal and Temperate Forests*. Burleigh Dodds Science Publishing (invited). 36 pgs.
- Small, CJ**, Chamberlain, JL. 2018. [Experimental harvest and regrowth in Appalachian black cohosh \(*Actaea racemosa*, Ranunculaceae\) populations: Implications for sustainable management of a medicinal forest herb](#). *Journal of the Torrey Botanical Society* 145: 109-120.
- Small, CJ**, Chamberlain, JL. 2015. [Forest diversity and disturbance: Changing influences and future of Virginia's forests](#). Special Issue: State of Virginia's Environment, *Virginia Journal of Science* 66: 1-21 (invited).
- Bower, JE, Brosi, S, Ammer, F, **Small, CJ**. 2014. Health status of butternut (*Juglans cinerea*) in Maryland. M.S. Thesis, Applied Ecology & Conservation Biology, Frostburg State University, Frostburg, MD.
- Small, CJ**, Chamberlain, JL, Nuckols, CM. 2014. [Failure of black cohosh \(*Actaea racemosa* L.\) rhizome transplants: Potential causes and forest farming implications](#). *Agroforestry Systems* 88: 815-822.
- Chamberlain, JL, Ness, G, **Small, CJ**, Bonner, SJ, Hiebert, E. 2013. [Modeling below-ground biomass to improve sustainable management of *Actaea racemosa*, a globally important medicinal forest product](#). *Forest Ecology and Management* 293: 1-8.
- Francl, KE, **Small, CJ**. 2013. [Temporal changes and prescribed fire effects on vegetation and small mammal communities in central Appalachian forest, creek, and field habitats](#). *Southeastern Naturalist* 12: 11-26.
- Newtoff, KN., **Small, CJ**. 2013. [Enhancing statistical skills in ecology: Quantifying bird feeding behaviors](#). *Tested Studies for Laboratory Teaching* 34: 473-474.
- Small, CJ**, Newtoff, K. 2013. [Integrating quantitative skills in introductory ecology: Investigations of wild bird feeding preferences](#). Emphasis Issue: Mathematical Application in Learning Biology, *The American Biology Teacher* 75: 269-273.
- Small, CJ**, Chamberlain, JL, Mathews, DS. 2011. [Recovery of black cohosh \(*Actaea racemosa* L.\) following experimental harvests](#). *American Midland Naturalist* 166: 339-348.
- Small, CJ**, White, DC, Hargbol, B. 2010. [Allelopathic influences of the invasive tree of heaven \(*Ailanthus altissima*\) on a native and a non-native herb](#). *Journal of the Torrey Botanical Society* 137:366-372.
- Francl, KE, Faidley, CR, **Small, CJ**. 2010. Salamander use of karst sinkholes in Montgomery County, Virginia. *Southeastern Naturalist* 9: 35-46.
- Small, CJ**, McCarthy, BC. 2010. [Seed bank variation under contrasting site quality conditions in mixed oak forests in southeastern Ohio, USA](#). *International Journal of Forestry Research* 2010: 1-13.
- Wojdak, J, Guinan, J, Wirgau, J, Kugler, R, Hammond, G, **Small, C**, et al. 2010. [University facilities as real-world foci of multidisciplinary science learning](#). *Journal of College Science Teaching* 39: 8-16.
- Kelly, A, **Small, CJ**, Dreyer, G. 2009. [Vegetation classification and invasive species distribution in natural areas of southern New England](#). *Journal of the Torrey Botanical Society* 136: 500-519.
- Small, CJ**. 2006. [A comprehensive review of herbaceous layer ecology](#). *Diversity and Distributions* 12: 222-223.
- Small, CJ**, McCarthy, BC. 2005. [Relationship of understory diversity to soil nitrogen, topographic variation, and stand age in an eastern oak forest, USA](#). *Forest Ecology and Management* 217: 229-243.
- Small, MJ, **Small, CJ**, Dreyer, GD. 2005. [Changes in hemlock-dominated forests following woolly adelgid infestation in southern New England](#). *Journal of the Torrey Botanical Society* 132: 458-470.
- Lundgren, M, **Small, CJ**, Dreyer, GD. 2004. [Influence of land use and site characteristics on invasive plant abundance in the Quinebaug Highlands of southern New England](#). *Northeastern Naturalist* 11: 313-332.
- Small, CJ**, McCarthy, BC. 2003. [Spatial and temporal variability of herbaceous vegetation in an eastern deciduous forest](#). *Plant Ecology* 164: 37-48.
- Small, CJ**, McCarthy, BC. 2002. [Effects of simulated post-harvest light availability and soil compaction on deciduous forest herbs](#). *Canadian Journal of Forest Research* 32: 1753-1762.
- Small, CJ**, McCarthy, BC. 2002. [Spatial and temporal variation in the response of understory vegetation to disturbance in a central Appalachian oak forest](#). *Journal of the Torrey Botanical Society* 129: 136-153.
- Small, CJ**, McCarthy, BC. 2001. [Vascular flora of the Waterloo Wildlife Research Station, Athens County, Ohio](#). *Castanea* 66: 363-382.
- McCarthy, B, **Small, CJ**, Rubino, D. 2001. [Composition, structure, and dynamics of Dysart Woods, an old-growth mixed mesophytic forest of southeastern Ohio](#). *Forest Ecology and Management* 140: 193-213.
- Small, CJ**, Wentworth, TR. 1998. [Characterization of Montane Cedar-Hardwood Woodlands in the Piedmont and Southern Blue Ridge Provinces of North Carolina](#). *Castanea* 63: 241-261.

EXTERNAL GRANTS

- 2023-2026. American Herbal Products Association. Phenology and senescence of medicinal forest herbs: Implications for sustainable harvest and management (Co-PI). \$72,340.
- 2021-2026. American Herbal Products Association. Experimental harvest of goldenseal (*Hydrastis canadensis*): Improving sustainable management through research and community partnerships (Co-PI). \$49,933.
- 2020-2024. USDA Natural Resources Conservation Service, Conservation Innovation Grant. Increasing Landscape-Scale Adoption of Agroforestry Systems in Central Appalachia through Market-Based Incentives. (Co-PI. Project Lead: K. Commender, Appalachian Sustainable Development). \$386,539.
- 2019, 2016, 2015, 2014. Enterprise Rent-A-Car Foundation. Reforestation of Appalachian surface-mined lands (co-PIs: R. Roth, T. Burriss). \$3,500.
- 2012-2017. USDA Forest Service, Southern Research Station, Partnership Enhancement Initiative. Experimental harvest and monitoring of select Appalachian Non-Timber Forest Products. \$50,000.
2014. USDA Forest Service, Southern Research Station, Partnership Enhancement Initiative. Integrating Southern Forest Issues into Undergraduate Curricula. \$46,000 (co-PI: S. Maxwell; declined)
- 2011-2014. NSF TUES Grant. SUMS4BIO: Strengthening Undergraduate Mathematics and Statistics Education for Biologists. (PIs: J. Hagen, J. Wojdak, F. Singer, J. Stewart). Senior Personnel.
- 2011, 2010, 2009. USDA Forest Service, Southern Research Station. Sustainable harvest and management of black cohosh (*Actaea racemosa*), a southern Appalachian medicinal plant. \$1,800, \$1,800, \$1,100.
- 2008-2009. VA Academy of Science. Classification of the ecological communities of the Selu Conservancy, Montgomery County, VA. \$1,240.
- 2002-2004. CT Department of Environmental Protection. Use of prescribed burning in the restoration of a regionally rare pitch pine sand plain, Hopeville Pond State Park, Griswold, CT. \$3,000.
2004. Andrew W. Mellon Foundation, Student-Faculty Research Partnership Grant. Vascular flora of the West Farms Land Trust Avery Tract, Waterford, CT. \$3,000.
2004. National Oceanic and Atmospheric Administration. Ecological and physical effects of the removal of two low head dams (co-PI's: M. Carabetta, J. Turek, L. Wildman). \$80,260.
- 2002-2003. CT Chapter, The Nature Conservancy. Impacts of white-tailed deer and invasive non-native plants on natural vegetation of the Burnham Brook Preserve, East Haddam, CT. \$2,000.
2003. RI and CT Chapters, The Nature Conservancy. Impacts of invasive exotic plants in the Pawcatuck Borderlands Natural Management Area. \$5,000.
2000. Ohio Biological Survey. The influence of soil nitrogen on plant species composition and diversity in an oak-hickory forest of southeastern OH. \$500.
1999. Ohio Biological Survey. Survey of seed bank and aboveground vegetation in mature and reorganizing forest stands of southeastern OH. \$250.
1998. Ohio Biological Survey. Vascular flora of Waterloo Wildlife Experiment Station, Athens, OH. \$500.
1998. *Sigma Xi* Grant-in-Aid of Research. Effects of post-harvest light and soil compaction on understory plants in a central Appalachian deciduous forest. \$595.
1995. Charles W. Ash Memorial Scholarship, Highlands Biological Station, NC. Characterization of Montane Cedar-Hardwood Woodlands in Piedmont and southern Blue Ridge Provinces of NC. \$300.
1995. Grant in Aid, Highlands Biological Station, NC. Characterization of Montane Cedar-Hardwood Woodlands in the southern Blue Ridge Provinces of NC. \$2,200.

INTERNAL GRANTS (2006-present)

2018. RU Artis College of Science and Technology Faculty Research Grant. Shifts in seasonal activity and harvest response in a globally important medicinal forest plant. \$3,383.
2016. RU Scholar-Citizen Co-Curricular Grant. Alternative Summer Break – Conservation and Cultural Importance of Appalachian Medicinal Plants. \$1,400.
2015. RU Summer Undergraduate Research Fellowship. Caroline Leggett – Selu Soundscape. \$2,500.
- 2014, 2013, 2012. RU Scholar-Citizen Co-Curricular Grant. Alternative Spring Break – Reclamation of Appalachian forests on mountain-top removal mining sites (co-PIs: R. Roth, T. Burriss). \$2,473, \$1,950.
- 2011-2012. RU Multi-Disciplinary Faculty Research Grant. Terra2B: Development and scenario testing of a GIS-based model of Appalachian agroecosystems management. \$17,700.
2011. RU Faculty Research Grant. Recovery of the medicinal plant black cohosh after harvest. \$7,300.
2010. RU Faculty Research Grant. Southern Appalachian medicinal plants: Investigating the sustainability of current wild harvesting practices. \$7,307.
- 2008-2009. RU Faculty-Student Collaborative Grant. Ecological communities of the Selu Conservancy. \$750.

2008. RU SEED Grant. Learning beyond the classroom: Integrating multidisciplinary natural history investigations into the undergraduate curriculum (co- PI: K. Francl). \$27,946.
2008. RU Faculty Research Grant. Classification of ecological communities of Selu Conservancy, VA. \$5,000.
- 2007-2008. RU Faculty-Student Collaborative Grant. Habitat use by small mammals in natural areas of southwest VA (co- PI: K. Francl). \$750.
2007. RU Faculty Research Grant. Vegetation and small mammals of the Selu Conservancy. \$14,399.
- 2006-2007. RU Faculty-Student Collaborative Grant. Relationship of site conditions and land-use history to the distribution of non-native invasive plant species in southwestern VA. \$750.
2006. RU Faculty Research Grant. Distribution of invasive plants in natural areas of Selu Conservancy. \$5,190.
2006. RU Faculty Research Grant. Geographic Information Systems (GIS) mapping of invasive plant species at the Selu Conservancy. \$3,300.

SELECTED PRESENTATIONS (2010-present) (*Underline = undergraduate research student*)

- Small, CJ.** 2022. Biodiversity and mountain heritage: Conservation, culture, and medicinal forest herbs. Appalachian-Carpathian International Mountain Conference. Transilvania University, Braşov, Romania.
- Commender, K, **Small, C**, Chamberlain, J, Huish, R. 2022. Conservation of at-risk medicinal forest herbs: sustainable harvest and propagation of goldenseal in the Appalachian Mountains. 5th World Congress on Agroforestry: Transitioning to a Viable World, Quebec City, Canada.
- Commender, K, **Small, C**, Chamberlain, J, Huish, R. 2022. Increasing landscape-scale adoption of agroforestry systems in Appalachia. Annual Conference of the Soil and Water Conservation Society. Denver, CO.
- McKenney, P, Passeretti, M, White, L, Simmons, E, **Small, C**. 2021. Effects of the invasive emerald ash borer on forest health in southwest Virginia. Winter Creative Activities and Research Days, Radford University.
- Simmons, E, White, L, McKenney, P, Passeretti, M, **Small, C**. 2021. Conservation of an at-risk medicinal forest herb: Sustainable harvest and propagation of goldenseal in Appalachian forests. Winter Creative Activities and Research Days, Radford University.
- Small, CJ**, Commender, K, Huish, R, Chamberlain, JL. 2021. Regional variation and early senescence of goldenseal: implications for sustainable management. American Herbal Products Association Meeting
- Allen, A, Ditch, S, **Small, C**. 2019. Impacts of the emerald ash borer on ash trees in southwest Virginia forests. Virginia Natural History Society Meeting. Martinsville, VA
- Allen, A, Ditch, B, Ruppert, S, **Small, C**. 2019. Introduction of the invasive emerald ash borer at Wildwood Park, southwest Virginia. Student Engagement Forum, Radford University.
- Chamberlain, J, Frey, G, **Small, C.**, Munsell, J. 2019. Integrating non-timber forest products into forest assessments and management. XXV International Union of Forest Research Organizations World Congress, Curitiba, Brazil.
- Hull, M, **Small, C**. 2018. Conservation of medicinal plants: Light, soil fertility, and harvest response. Artis College Research Celebration, Radford University.
- Small, CJ**. 2018. Seasonal Change in Your Own Backyard. Wildwood Summer Nature Series, Radford, VA.
- Allen, E, **Small, C**. 2017. Keeping forest ecosystems healthy: Determining sustainable harvest levels of blue cohosh, an Appalachian medicinal plant. Student Engagement Forum, Radford University.
- Chamberlain, J, **Small, C**. 2017. Black cohosh: Harvest impacts, population response and implications for sustainable management of medicinal forest products. The Future of Ginseng and Forest Botanicals Symposium, Morgantown, WV.
- Leggett, C, **Small, C**. 2017. Non-timber forest products: Sustainable partnership and harvest. Scholar-Citizen Symposium. Student Engagement Forum, Radford University.
- Small, C**, Phelps-Durr, T, Wojdak, J, O'Brien, S, Mekolichick, J. 2017. Toward student-centered learning and course-embedded research in biology. Partnership for Undergraduate Life Science Education (PULSE) Symposium. Association of Southeastern Biologists, Montgomery, AL.
- Small, CJ**. 2017. Barking up the right tree: Identifying tree bark. Wildwood Summer Nature Series, Radford, VA.
- Blevins, B, Cassar, C, Grandy, E, Harris, R, Wojdak, J, **Small, C**, Fleming-Davies, A. 2016. Snout weevil impacts on *Agave missionum*, St. John, U.S. Virgin Islands. Student Engagement Forum, Radford University.
- Wojdak, J, **Small, C**, Phelps-Durr, T, O'Brien, S, Mekolichick, J. 2016. Modernizing Biology at Radford University. Partnership for Undergraduate Life Science Education, Southeast Institute, Spartanburg, SC.
- Burris, T, Roth, R, **Small, C**. 2015. Place defense and conflicted local resistance in resource extraction economies: Multi-disciplinary analysis of Central Appalachian coalfields. Appalachian-Carpathian International Conference: Researching & Preserving Highland Traditions. Transilvania University, Braşov, Romania.

- Daniels, J, Oliver, J, Small, C. 2015. Using land use history and site conditions to predict invasive plant distribution in central Appalachia. Student Engagement Forum, Radford University.
- Small, CJ.** 2015. Forest diversity and disturbance: Changing influences and the future of Virginia's forests. Virginia Academy of Science, Special Symposium: State of Virginia's Environment. Invited speaker, James Madison University, Harrisonburg, VA.
- Bower, J, Schlarbaum, S, Brosi, E, Brosi, S. 2014. Health status of butternut in Maryland. The Energy of People, Places, and Life. Society of Economic Botany / Society of Ethnobiology Joint Conference, Cherokee, NC.
- Burris, T, Roth, R, Small, C, Hall, N, Angel, P, Wilson, C, LaPrade, T, Curtis, V. 2014. Imagining and acting on possibilities for reforesting abandoned mountaintop removal sites. Appalachian Studies Conference, Marshall University, Huntington, WV.
- Fritz, A, Hamed, M, Ryan, C, Wojdak, J, Small, C. 2014. *Agave missionum* population density and plant condition after introduction of the agave snout weevil. Student Engagement Forum, Radford University.
- Small, CJ.** 2014. Conserving our forest pharmacy: Ecology and sustainability of Non-Timber Forest Products. Invited speaker, Virginia Native Plant Society, Blacksburg, VA.
- Chamberlain, J, Ness, G, Small, CJ, Bonner, S, Hiebert, E. 2013. Modeling below-ground biomass of black cohosh, a medicinal forest product. National Convention of American Foresters, Charleston, SC. *Journal of Forestry* 112:157 (published conference proceedings)
- Donahoe, M, Hutchinson, L, Vaughn, J, Hammond, G, Small, CJ. 2013. Identification of fungi associated with rhizome rot in the medicinal plant, *Actaea racemosa* (black cohosh). American Society for Microbiology, University of VA, Charlottesville.
- Humphreys, A, Small, CJ. 2013. GIS analysis of habitat conditions and land use disturbances that promote invasive plant species in Appalachian natural areas. Student Engagement Forum, Radford University.
- Nuckols, C, Small, CJ, Chamberlain, JL. 2013. Success of rhizome transplants for the medicinal herb black cohosh: Is forest farming a viable option? Student Engagement Forum, Radford University.
- Small, CJ.** 2013. Conserving our forest pharmacy: Wild-harvesting wildflowers. Wildwood Park Summer Nature Series, Radford, VA.
- Azzi, M, Rogers, W, Small, CJ. 2012. Effects of harvesting and tree canopy cover on black cohosh, an Appalachian medicinal plant. Student Engagement Forum, Radford University.
- Chamberlain, J, Small, CJ. 2012. Sustaining *Actaea racemosa* (black cohosh) from Appalachian forests. Society for Economic Botany, Frostburg State University, MD.
- Clelland, I, Small, CJ, Fetter, G, Giles, R. 2012. Rural Systems 1.0: A natural resource-based enterprise platform for sustainable land management. Rural Entrepreneurship Conference, Aberdeen, UK.
- Clelland, I, Small, CJ, Fetter, G, Giles, R. 2012. An entrepreneurial experiment in sustainable management of private land. Annual Sustainability, Ethics & Entrepreneurship Conference, Denver, CO.
- McKenzie, C, Palmquist, E, Small, CJ, Wojdak, J. 2012. Allelopathic effects of gumbo limbo (*Bursera simaruba*) on St. John, US Virgin Islands. Student Engagement Forum, Radford University.
- Ness, G, Chamberlain, J, Bonner, S, Small, CJ. 2012. Modeling the relationship between below ground and above ground biomass of black cohosh. Ecological Society of America, Portland, OR.
- Newtoff, K, Small, CJ. 2012. An interactive online identification key to wildflowers of Wildwood Park, Radford, VA. Student Engagement Forum, Radford University.
- Newtoff, K, Small, CJ. 2012. Enhancing statistical skills in undergraduate ecology: Multi-week lab investigation of bird feeding preferences. Association for Biology Laboratory Education, UNC Chapel Hill.
- Richardson, C, Moore, P, Small, CJ, Wojdak, J. 2012. Effects of the agave snout weevil on century plants in dry tropical forests, US Virgin Islands. Student Engagement Forum, Radford University.
- Small, CJ.** 2012. Conservation and management of black cohosh, a southern Appalachian medicinal plant. 28th Annual Cullowhee Native Plant Conference, Western Carolina University, Cullowhee, NC.
- Chamberlain, J, Small, CJ, Mathews, D. 2011. Sustaining black cohosh (*Actaea racemosa* L.) harvests. Southern Appalachian Man and the Biosphere Conference. Asheville, NC.
- Chamberlain, J, Small, CJ, Mathews, D. 2011. The impact of experimental harvests on black cohosh (*Actaea racemosa* L.). North American Forest Ecology Workshop. Roanoke, VA.
- Creange, KE, Francl, KE, Small, CJ. 2011. Quantifying effects of prescribed fire on small mammals and vegetation at Caldwell Fields, Jefferson National Forest. VA Wildlife Society Meeting, Staunton; Big South Undergraduate Research Symposium, Washington & Lee University, VA.
- Newtoff, K, Rogers, W, Small, CJ. 2011. Habitat susceptibility to invasive plant species at Selu Conservancy, southwest VA. Student Engagement Forum, Radford University.
- Small, CJ.** 2011. Long-term dynamics & disturbance response in an eastern forest. Department of Biology, Appalachian State University, Boone, NC.

- Brennan, MC, Small, CJ. 2010. Effects of experimental harvesting on black cohosh, a southern Appalachian medicinal herb. Big South Undergraduate Research Symposium, Radford University.
- Faulkner, T, Jayne, M, Ness, G, Small, CJ. 2010. The effect of trails on tropical dry forest structure on St. John, US Virgin Islands. Student Engagement Forum, Radford University.
- Meikle, D, Francl, KE, Small, CJ. 2010. Effects of prescribed fire on small mammal communities at Caldwell Fields, Jefferson National Forest. Big South Undergraduate Research Symposium, Radford University.
- Small, CJ, Brennan, M, Chamberlain, J. 2010. Experimental harvesting effects on black cohosh, a southern Appalachian medicinal plant. Association of Southeastern Biologists, Asheville, NC.
- White, D, Small, CJ, Hargbol, B. 2010. Allelopathic influences of invasive *Ailanthus altissima* on native and non-native herbs. Association of Southeastern Biologists, Asheville, NC.

SELECTED POPULAR PUBLICATIONS (*Underline = undergraduate or graduate research student*)

- Small, CJ, et al. 2018. [Forest Health Assessment, Wildwood Park](#), Radford, VA.
- Small, CJ, et al. 2018. [Radford Phenology Monitoring Program](#), Selu Conservancy, Montgomery County, VA
- Chamberlain, JL, Ness, G, Small, CJ, Bonner, SJ, Hiebert, E. 2013. [Modeling below-ground biomass to improve management of globally important medicinal forest product](#). CUR Research Highlights 34: 22.
- Nuckols, C, Christman, J, Cote, G, Small, CJ. 2013. [Key to Trees and Shrubs of Wildwood Park, Radford, VA](#).
- Newtoff, K, Cote, G, Small, CJ. 2012. [Interactive Key to Wildflowers of Wildwood Park, Radford, VA](#).
- USDA Forest Service, National Agroforestry Center, and Radford University. 2010. [Sustaining Harvest of Black Cohosh \(U.S. Forest Service video\)](#).
- White, DC, Small, CJ. 2010. Invaders helping invaders: Does allelopathy favor non-native species? Newsletter of the Association of Education and Research Greenhouse Curators.
- Small, CJ. 2008. Vegetation-Algal Primary Productivity (teaching module). [National Science Foundation CCLI-A&I: Integrating Service-Learning into University Science Curricula](#).
- Small, CJ. 2004. Passion-flower and *Heliconius* butterfly. Connecticut Botanical Society Newsletter 32 (2): 6-8.
- Small, CJ. 2003. What has become of Scrophulariaceae? Connecticut Botanical Society Newsletter 31 (2): 8-9.
- Small, CJ. 2002. A new link to the origins of Angiosperms. [Connecticut Botanical Society Newsletter 30: 11](#).
- Small, CJ. 2002. A new link to the origins of Angiosperms. [Chinquapin 10 \(4\): 29](#).
- Small, CJ. 2002. An editorial review of the Flora of the Northeast: A Manual of the Vascular Flora of New England and Adjacent New York. Connecticut Botanical Society Newsletter 30 (1-2): 9.
- Small, CJ. 2002. Dynamic fields and forests: reflections on summer research. [Newsletter of the Goodwin-Niering Center for Conservation Biology and Environmental Studies at Connecticut College](#). Fall: 1,3.
- Small, CJ. 2002. Giant hogweed in Connecticut. [Chinquapin 10\(4\): 28](#).
- Small, CJ. and undergraduate co-authors ([32 student-authored](#) species accounts published on Animal Diversity Web, University of Michigan. <https://AnimalDiversity.org>. **RU Winesett Library Research Awards*. Examples: Townsend, K, Berry, B. 2012. Ribbon seal (*Histiophoca fasciata*)*; Crawford, C. 2011. Green anole (*Anolis carolinensis*)*; McHugh, T, Small, CJ. 2013. Water Opossum (*Chironectes minimus*); Weber, M, Small, CJ. 2012. Cayenne tick (*Amblyomma cajennense*); Cooper, L. 2011. Little file snake (*Acrochordus granulatus*); Padgett, L, Small, CJ. 2011. Himalayan marmot (*Marmota himalayana*)

SELECTED HONORS & AWARDS

2022. The Garden Club of America, Fellowship in Conservation Horticulture. Awarded to research student Lucas White for student-faculty summer research. \$5,000
2018. USA National Phenology Network, Certified Local Phenology Leader (10-week professional development)
2013. Sigma Xi International Research Society, Full Member (Associate Member 1998)
2011. Donald N. Dedmon Distinguished Teaching Professor Award, Radford University (2011)
2008. National Tropical Botanical Garden Fellowship for College Biology Professors, The Kampong, FL
- 1998-1999. Donald Clippenger Graduate Research Fellowship, Ohio University
1997. Eugene Odum Outstanding Presentation, Honorable Mention. Ecological Society of America
1996. Phi Kappa Phi National Honor Society, invited member
1995. Charles Ash Memorial Scholarship, Highlands Biological Foundation, NC
1993. Dean's Award, College of Science and Technology, Christopher Newport University, VA
1993. Departmental Honors, Biology, Chemistry & Environmental Science, Christopher Newport University

PROFESSIONAL DEVELOPMENT & SERVICE

- 2018-2022. Council for Undergraduate Research (CUR) Transformations Project: Integrating and Scaffolding Research into Undergraduate STEM Curricula, Biology Leadership Team, Radford University
- 2018-2022. HHMI Inclusive Excellence Initiative, REALising Inclusive Science Excellence in Biology, Chemistry, and Physics (REALISE), Faculty Implementation Team, Radford University
2020. ComSciCon-VA Tech2020. Communicating Science Conference. Virginia Tech, Blacksburg, VA.
2020. Science Communication Workshop Series. Alda-Kavli Foundation Center for Communicating Science.
2017. Improving Scientific Communication: Crafting Your Message; Improving Scientific Communication: Adding Enthusiasm (Workshops). Association of Southeastern Biologists, Montgomery, AL
- 2016-2018. Biology Students Math Attitudes and Anxiety Program (BIOMAAP)
2016. Southeast Regional Partnership for Undergraduate Life Sciences Education (SERP-PULSE), Vision and Change Institute for Curriculum Reform
2015. Judge, Blue Ridge Highlands Regional Science Fair, Radford University, Radford, VA
2015. Science judge, Mountain Academic Competition Conference (SuperMACC) Academic Competition
2015. Virginia Master Naturalist training program, Forest Ecology & Management Curriculum Contributor
- 2012-2014. M.S. Graduate Committee Member, Department of Applied Ecology and Conservation Biology, Frostburg State University, Frostburg, MD
2012. Southwest Virginia Governor's School for Science, Mathematics & Technology, Selu Conservancy
- 2010-2012. Southern Appalachian Botanical Society, Executive Council
- 2006-2012. Southeastern Naturalist, Editorial Board Member / Guest Editor
2011. Committee for digital publication of Castanea, Journal of Southern Appalachian Botanical Society
2011. Quality Enhancement Plan Writing Team (Scholar-Citizen Initiative), Radford University
2011. Strengthening Undergraduate Mathematics and Statistics in Biology, Workshop, Radford University
2010. Student Learning Outcomes and Assessment, Workshop, Radford University
2009. Strategies for Teaching Quantitative Skills in Biology Courses, Workshop, Radford University
2007. Strategies for Teaching Reading & Writing, Quality Enhancement Plan Grant, Radford University
2005. Introduction to ArcGIS 9.1 (ESRI-certified course), Radford University
2004. GIS Across the Curriculum, National Institute for Technology & Liberal Education, Middlebury College
2004. Teaching Scientific Writing, CT College. Workshop developer (with L. Cornick)
2004. Teaching Critical Thinking Across the Disciplines, Workshop, Connecticut College
- 2003-2004. GIS Across the Curriculum. National Institute for Technology & Liberal Education, Invited panelist
2003. Tempel Summer Institute: Web-based Technology to Enhance Student Learning, Connecticut College
2002. Smithsonian National Park Conservation and Research Center: Advanced GIS and Remote Sensing: Measuring Landcover Change and its Impact on Endangered Species.
- 2002-2006. National Conservation and Research Foundation, Board of Trustees
- 2002-2004. C.F. Johnson Teaching Seminar, Organizing Committee, Connecticut College
- 2002-2003. Thomas J. Watson Global Fellowship Committee, Connecticut College
- 2001-2005. Burnham Brook Preserve Stewardship Committee, The Nature Conservancy (CT Chapter)
- 2001-2005. Center for Conservation Biology & Environmental Studies, Steering Committee, CT College
- 2001-2005. Charles B. Graves Herbarium, Curator, Connecticut College
- 2001-2005. Newsletter of the CT Botanical Society, Newsletter Editor and Production Manager
- 2001-2005. Northeastern Naturalist, Editorial Board Member / Guest Editor
- 2001-2004. C.F. Johnson Faculty Teaching Seminar, CT College
- 1999-2001. Assistant Webmaster, Department of Plant Biology, Ohio University
1996. Excellence in Teaching, Graduate Student Workshop, University of KY
1996. National Science Foundation Graduate Research Trainee, University of KY
- 1994-95, 2011. Carolina Vegetation Survey, Natural Vegetation Inventory
1994. National Park Service Vegetation Monitoring. Smoky Mountain National Park, TN
1991. Supplemental Instruction Leader / Peer Mentor, Christopher Newport University, VA