### J. RICHARD CARTER, PH.D.

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#### **PERSONAL**

Date and place of birth: 15 March 1953, Vicksburg, Mississippi Married: Sharon McCormick, 1984

### **EDUCATION**

Doctor of Philosophy, December 1984 Vanderbilt University, Nashville, Tennessee Major: General Biology / Doctoral Advisor: Robert Kral Dissertation title: A systematic study of the New World species of section *Umbellati* of *Cyperus* 

Master of Science, May 1978

Mississippi State University, Mississippi State, Mississippi

Major: Botany / Thesis Advisor: Sidney McDaniel Thesis title: A floristic study of the Delta National

Forest and adjacent areas

Bachelor of Science, May 1975

Mississippi State University, Mississippi State,

Mississippi Major: Zoology **EMPLOYMENT** 

Professor of Biology, 1996–present

Member of Graduate Faculty

Department of Biology, Valdosta State University,

Valdosta, Georgia

Associate Professor of Biology, 1991–1996

[tenured 1991]

Department of Biology, Valdosta State University,

Valdosta, Georgia

Assistant Professor of Biology, 1986–1991

Department of Biology, Valdosta State University,

Valdosta, Georgia

Temporary Instructor of Biology, 1984–1986

Department of Biology, Valdosta State University,

Valdosta, Georgia

# HONORS

Fellow of the Linnean Society of London, elected 2016 Henry Beadel Fellow of Tall Timbers Research Station, 2018–2023

## PEER-REVIEWED PUBLICATIONS

Student\*

- 72. Knapp, W.M., and J.R. Carter. 2024. *Juncus snowii* (Juncaceae), a new rare species endemic to the Altamaha Grit of Georgia, U.S.A. *Novon* 32: 70–76.
- 71. Carter, R., and \*J.C. Jones. 2023. Sphenocleaceae, pp. 458–459 in: *Flora of North America*, vol. 14. Oxford Univ. Press, New York. ISBN: 9780197691465.
- Robertson, K.M., E. Simonson, N. Ramirez-Bullon, B. Poulter, and R. Carter. 2023. Effects of spatial resolution, mapping window size, and spectral species clustering on remote sensing of plant beta diversity using biodivMapR and hyperspectral imagery. *Journal of Geophysical Research: Biogeosciences* 128, e2022JG007350. <a href="https://doi.org/10.1029/2022JG007350">https://doi.org/10.1029/2022JG007350</a>
- 69. \*Lowe, P.D., and J.R. Carter. 2023. A morphometric analysis of the *Cyperus squarrosus-Cyperus granitophilus* complex (Cyperaceae) in North America, with the description of a new variety of *Cyperus squarrosus*. *Castanea* 88(1): 1–36.
- 68. Alford, M.H., K. Cameron, and J.R. Carter. 2022. The utility of DNA markers for delimiting and identifying species of *Gamochaeta* (Compositae) in the eastern United States. *Rhodora* 124: 361–373.
- 67. \*Lowe, P.D., and J.R. Carter. 2022. *Eleocharis angusticeps* (Cyperaceae), a new spikerush from the highmarsh of Camden County, Georgia, U.S.A. *Castanea* 87(2): 286–301.

- 66. \*Lowe, P.D., and J.R. Carter. 2022. *Cyperus excurrens* (Cyperaceae), a new species from karst ponds in southern Georgia, U.S.A. *Castanea* 87(2): 224–243.
- 65. Kees, J.C., R. Carter, and A.S. Weakley. 2022. *Cyperus*, pp. 407–424 in: *Flora of the Southeastern United States*. University of North Carolina Herbarium, North Carolina Botanical Garden. Chapel Hill.
- 64. Weakley, A.S., and the Southeastern Flora Team [M. Lee, B. Sorrie, D. Poindexter, S. Ward, E. Ungberg, R. LeBlond, J. Kees, C. Ludwig, C.A. McCormick, S. Oberreiter, D. Ledesma, R. Lance, H. Ballard, R. Carter, M. Pyne, W. Knapp, K. Bradley, S. Zona, W. Barger, L. Musselman, P. Schafran, D. Spaulding, J. Nelson, E. Keith, G. Fleming, D. Estes, L. Majure, H. Medford, E. Bridges, R. Folk, Z. Murrell, R. Peet, J. Townsend, G. Nesom, A. Floden, J. Horn, E. Schilling, J. Triplett, T. Murphy, Z. Irick, K. Schoonover McClelland, M. Alford, M. Brock]. 2022. Flora of the Southeastern United States. University of North Carolina Herbarium, North Carolina Botanical Garden. Chapel Hill. 2022 pp.
- 63. Sedhain, N., S. Bag, K. Morgan, R. Carter, P. Triana, J. Whitaker, and R.C. Kemerait, and P.M. Roberts. 2021. Natural host range, incidence on overwintering cotton and diversity of cotton leafroll dwarf virus in Georgia USA. *Crop Protection* 144, 105604, June 2021, ISSN 0261-2194. DOI:10.1016/j.cropro.2021.105604.
- 62. Marsico, T.D., E.R. Krimmel, J.R. Carter, E.L. Gillespie, \*P.D. Lowe, R. McCauley, A.B. Morris, G. Nelson, M. Smith, D.L. Soteropoulos, and A.K. Monfils. 2020. Small herbaria contribute unique biogeographic records to county, locality, and temporal scales. *American Journal of Botany* 107(11): 1–11. DOI:10.1002/ajb2.1563.
- 61. Yost, J.M., P.W. Sweeney, E. Gilbert, G. Nelson, R. Guralnick, A.S. Gallinat, E.R. Ellwood, N. Rossington. C.G. Willis, S.D. Blum, R.L. Walls, E.M. Haston, M.W. Denslow, C.M. Zohner, A.B. Morris, B.J. Stucky, J.R. Carter, D.G. Baxter, K. Bolmgren, E.G. Denny, E. Dean, K.D. Pearson, C.C. Davis, B.D. Mishler, P.S. Soltis, and S.J. Maze. 2018. Digitization protocol for scoring phenology from herbarium specimens of seed plants. *Applications in Plant Sciences* 2018 6(2): e1022. DOI:10.1002/aps3.1022.
- 60. Zomlefer, W.B., J.R. Carter, J.R. Allison, W.W. Baker, D.E. Giannasi, S.C. Hughes, R.W. Lance, \*P.D. Lowe, P.S. Lynch, J.T. Miller, T.S. Patrick, E. Prostko, S.Y.S. Sewell, and A.S. Weakley. 2018. Additions to the flora of Georgia vouchered at the University of Georgia (GA) and Valdosta State University (VSC) herbaria. *Castanea* 83(1): 124–139. DOI:10.2179/17-151.
- 59. Ellwood, E.R., P. Kimberly, R. Guralnick, P. Flemons, K. Love, S. Ellis. J.M. Allen, J.H. Best, R. Carter, S. Chagnoux, R. Costello, M.W. Denslow, B.A. Dunckel, M.M. Ferriter, E.E. Gilbert, C. Goforth, Q. Groom, E.R. Krimmel, R. LaFrance, J.L. Martinec, A. Miller, J. Minnaert-Grote, T. Nash, P. Oboyski, D.L. Paul, K. Pearson, N.D. Pentcheff, M.A. Roberts, C.E. Seltzer, P.S. Soltis, R. Stephens, P.W. Sweeney, M. von Konrat, A. Wall, R. Wetzer, C. Zimmerman, and A.R. Mast. 2018. Worldwide engagement for digitizing biocollections (WeDigBio)—The biocollections community's citizen science space on the calendar. *BioScience* 68(2): 112–124.
- 58. \*Reid, C.S., V.P. Doyle, J.R. Carter, Y. Vargas-Rodriguez, and L.E. Urbatsch. 2017. Molecular systematics of targeted flatsedges (*Cyperus*, Cyperaceae) of the Americas. *Plant Ecology and Evolution* 150(3): 343–357. https://doi.org/10.5091/plecevo.2017.1262.
- 57. Glon, H.E., B.W. Heumann, J.R. Carter, \*J.M. Bartek, and A.K. Monfils. 2017. The contribution of small collections to species distribution modelling: A case study from Fuireneae (Cyperaceae). *Ecological Informatics* 42: 67–78. https://doi.org/10.1016/j.ecoinf.2017.09.009.
- 56. Carter, R., and R.L. Mears. 2017. Zornia gemella (Fabaceae) new to Florida. Phytoneuron 2017-4: 1-4.
- 55. Carter, R., R.L. Mears, C.T. Bryson, and R.H. Goddard. 2016. *Cyperus richardii* (Cyperaceae) new to Florida, U.S.A., and the Western Hemisphere. *J. Bot. Res. Inst. Texas* 10(1): 191–200.
- 54. Nelson, G., P. Sweeney, R. Rabeler, L. Wallace, D. Allard, H. Brown, R. Carter, M. Denslow, E. Ellwood, C. Germain-Autrey, E. Gilbert, E. Gillespie, L. Goertzen, B. Legler, B. Marchant, T. Marsico, C.A. McCormick, A. Morris, Z. Murrell, M. Nazaire, C. Neefus, D. Paul, B. Ruhfel, T. Sasek, P.S. Soltis, J. Shaw, K. Watson, A. Weeks and A.R. Mast. 2015. Digitization workflows for flat sheets and packets of plants, algae, and fungi. *Applications in Plant Sciences* 3(9): 1500065. http://www.bioone.org/doi/full/10.3732/apps.1500065.
- 53. \*Reid, C.S., D.J. Rosen, R. Carter, and P.M. Petersen. 2015. *Eragrostis plana* (Poaceae) new to Texas. *Phytoneuron* 2015-5: 1–3.
- 52. \*Reid, C.S., R. Carter and L.E. Urbatsch. 2014. Phylogenetic insights into New World *Cyperus* (Cyperaceae) using nuclear ITS sequences. *Brittonia* 66(3): 292–305.
- 51. Carter, R., \*J.C. Jones and R.H. Goddard. 2014. *Sphenoclea zeylanica* (Sphenocleaceae) in North America: Dispersal, ecology and morphology. *Castanea* 79(1): 33–50.

- 50. Zomlefer, W.B., L.G. Chafin, J.R. Carter and D.E. Giannasi. 2013. Coefficient of conservatism rankings for the flora of Georgia: Wetland indicator species. *Southeastern Naturalist* 12(4): 790–808.
- 49. Carter, R. 2012. A cost-effective method for constructing magnetic fumicels for herbarium cabinets. *J. Bot. Res. Inst. Texas* 6(2): 577–580.
- 48. Rosen, D.J., R. Carter, A. Richardson and K. King. 2012. *Cyperus albostriatus* (Cyperaceae) new to North America and *Fimbristylis cymosa* (Cyperaceae) new to Texas. *J. Bot. Res. Inst. Texas* 6(1): 299–302.
- 47. Bryson, C.T., and R. Carter. 2012. Growth, reproductive potential, and control strategies for deeproot sedge (*Cyperus entrerianus*). Weed Technology 26: 122–129.
- 46. Bryson, C.T., and R. Carter. 2010. Spread, growth parameters and reproductive potential for brown flatsedge (*Cyperus fuscus*). *Invasive Plant Science and Management* 3: 240–245.
- 45. Carter, R. 2009. Rediscovery of *Platanthera chapmanii* in Georgia. *Native Orchid Conference Journal* 6(4): 1–3, Figs. 1, 2, and cover.
- 44. Goddard, R.H., T.M. Webster, R. Carter and T.L. Grey. 2009. Resistance of Benghal Dayflower (*Commelina benghalensis*) seeds to harsh environments and the implications for dispersal by Mourning Doves (*Zenaida macroura*) in Georgia, U.S.A. *Weed Science* 57: 603–612.
- 43. Carter, R., C.W. Allen, P. and D. Lewis. 2009. *Cyperus pilosus* Vahl (Cyperaceae) new to the flora of Texas. J. *Bot. Res. Inst. Texas* 3: 457–459.
- 42. Carter, R., W.W. Baker and M.W. Morris. 2009. Contributions to the flora of Georgia, U.S.A. Vulpia 8: 1–54.
- 41. Bryson, C.T., and R. Carter. 2008. The significance of Cyperaceae as weeds. Pp. 15–101. *In* R. F. C. Naczi and B. A. Ford (editors), *Sedges: Uses, Diversity, and Systematics of the Cyperaceae*. Monogr. Syst. Bot. Missouri Bot. Gard. 108.
- 40. Carter, R. 2008. Floristic highlights from Camden County. *Tipularia* 23: 34–42.
- 39. Bergstrom, B.J., and R. Carter. 2008. Host tree selection by an epiphytic orchid, *Epidendrum magnoliae* Muhl., in an inland hardwood hammock in Georgia. *Southeastern Naturalist* 7: 571–580.
- 38. \*Rosen, D.J., S.R. Hatch and R. Carter. 2008. Taxonomy and nomenclature of three closely related species of *Eleocharis* subg. *Limnochloa* (Cyperaceae). *Blumea* 53: 235–246.
- 37. Bryson, C.T., V.L. Maddox and R. Carter. 2008. Spread of Cuban Club-rush [Oxycaryum cubense (Poeppig & Kunth) Palla] in the Southeastern United States. Invasive Plant Science and Management 1: 326–329.
- 36. Bryson, C.T., and R. Carter. 2008. A novel design for a light weight and durable field press. *J. Bot. Res. Inst. Texas* 2(1): 517–520.
- 35. Whittier, D.P., and R. Carter. 2007. The gametophyte of Lycopodiella prostrata. Amer. Fern J. 97(4): 230–233.
- 34. Carter, R. 2007. Nomenclatural notes on *Cyperus retrorsus* Chapm. and «*Cyperus retroversus* Chapm.» (Cyperaceae). *Vulpia* 6: 1–3.
- 33. González-Elizondo, M.S., \*D.J. Rosen, R. Carter and P.M. Peterson. 2007. *Eleocharis reznicekii* (Cyperaceae), a new species from the Mexican High Plateau. *Acta Botanica Mexicana* 81: 35–43.
- 32. Carter, R., C.T. Bryson and S.J. Darbyshire. 2007. Preparation and use of voucher specimens for documenting research in weed science. *Weed Technology* 21: 1101–1108.
- 31. \*Rosen, D.J., S.R. Hatch and R. Carter. 2007. Infraspecific taxonomy and nomenclature of *Eleocharis acutangula* (Cyperaceae). *J. Bot. Res. Inst. Texas* 1(2): 875–888.
- 30. \*Rosen, D.J., and R. Carter. 2007. Additional noteworthy collections of *Cyperus drummondii* (Cyperaceae) from Texas and first report from Mexico. *J. Bot. Res. Inst. Texas* 1(1): 779–780.
- 29. \*Rosen, D.J., R. Carter and C.T. Bryson. 2006. The spread of *Cyperus entrerianus* (Cyperaceae) in the southeastern United States and its invasive potential in bottomland hardwood forests. *Southeastern Naturalist* 5: 333–344.
- 28. Carter, R. 2005. An introduction to the sedges of Georgia. *Tipularia* 20: 17–45.
- 27. Bryson, C.T., and R. Carter. 2004. Biology of pathways for invasive weeds. Weed Technology 18: 1216–1220.
- 26. Tucker, G.C., B.G. Marcks and J.R. Carter. 2002. *Cyperus*, pp. 141–191 in: *Flora of North America*, vol. 23, Cyperaceae. Oxford Univ. Press, New York. ISBN: 0-19-515207-7.
- 25. Townsend, J.F., R. Carter, R.D. Porcher and P.D. McMillan. 2000. Noteworthy collections: Georgia and South Carolina *Sesbania drummondii*. *Castanea* 65: 231–232.
- 24. Carter, R., and R.L. Mears. 2000. *Cyperus* (subg. *Queenslandiella*) *hyalinus* (Cyperaceae) new to the United States and the Western Hemisphere. *Sida* 19: 345–350.

- 23. Carter, R., and C.T. Bryson. 2000. *Cyperus sanguinolentus* (Cyperaceae) new to the southeastern United States, and its relationship to the supposed endemic *Cyperus louisianensis*. *Sida* 19: 325–343.
- 22. Carter, R., \*D.K. Alexander, C.T. Bryson and A. Lazari. 1999. The taxonomy of *Cyperus virens* and *Cyperus drummondii* (Cyperaceae) in the southeastern United States. *Sida* 18: 1049–1063.
- 21. McKenzie, P.M., B. Jacobs, C.T. Bryson, G.C. Tucker and R. Carter. 1998. *Cyperus fuscus* L. (Cyperaceae), new to Missouri and Nevada, with comments on its occurrence in North America. *Sida* 18: 325–333.
- 20. Carter, R., and S.D. Jones. 1997. Notes on the *Cyperus retroflexus* complex (Cyperaceae) with three nomenclatural proposals. *Rhodora* 99: 319–334.
- 19. Bryson, C.T., R. Carter, L.B. McCarty and F.H. Yelverton. 1997. *Kyllinga*, a genus of neglected weeds in the continental United States. *Weed Technology* 11: 838–842.
- 18. Jones, S.D., J.K. Wipff and R. Carter. 1996. Nomenclatural combinations in *Cyperus* (Cyperaceae). *Phytologia* 80: 288–290.
- 17. Carter, R., and C.T. Bryson. 1996. *Cyperus entrerianus*: A little known aggressive sedge in the southeastern United States. *Weed Technology* 10: 232–235.
- 16. Carter, R., R.L. Mears, K.C. Burks and C.T. Bryson. 1996. A report of four exotic *Cyperus* (Cyperaceae) species new to Florida, U.S.A. *Sida* 17: 275–281.
- 15. Bryson, C.T., J.R. MacDonald, R. Carter and S.D. Jones. 1996. Noteworthy *Carex, Cyperus, Eleocharis, Kyllinga*, and *Oxycaryum* (Cyperaceae) from Alabama, Arkansas, Georgia, Louisiana, Mississippi, North Carolina, Tennessee, and Texas. *Sida* 17: 501–518.
- 14. Bryson, C.T., and R. Carter. 1994. Additional notes on *Carex*, *Cyperus*, and *Kyllinga* (Cyperaceae) in Mississippi with records of eight species previously unreported to the state. *Sida* 16: 175–186.
- 13. Bryson, C.T., and R. Carter. 1993. Cogongrass, *Imperata cylindrica*, in the United States. *Weed Technology* 7: 1–5.
- 12. Carter, R. 1993. Animal dispersal in the North American sedge, *Cyperus plukenetii* (Cyperaceae). *American Midland Natura*list 129: 352–356.
- 11. Bryson, C.T., and R. Carter. 1992. Notes on *Cyperus* and *Kyllinga* (Cyperaceae) in Mississippi with records of six species new to the state. *Sida* 15: 119–124.
- 10. Carter, R., and C.T. Bryson. 1991. A second station and new county record for *Cyperus retroflexus* (Cyperaceae) in Missouri. *Missouriensis* 12: 33.
- 9. Carter, R., and S.D. Jones. 1991. Additional records of *Cyperus entrerianus* (Cyperaceae) in the United States. *Sida* 14: 615–616.
- 8. Carter, R., and C.T. Bryson. 1991. A report of *Cyperus grayioides* and *Cyperus retroflexus* (Cyperaceae) new to Missouri and notes on other selected Missouri *Cyperus*. *Sida* 14: 475–481.
- 7. Carter, R., and R. Kral. 1990. *Cyperus echinatus* and *Cyperus croceus* the correct names for North American *Cyperus ovularis* and *Cyperus globulosus*. *Taxon* 39: 322–327.
- 6. Carter, R., M.W. Morris, and C.T. Bryson. 1990. Some new or otherwise interesting vascular plants from the Delta Region of Mississippi. *Castanea* 55: 40–55.
- 5. Carter, R. 1990. *Cyperus entrerianus* (Cyperaceae), an overlooked species in temperate North America. *Sida* 14: 69–77.
- 4. Carter, R. 1988. Cyperus hystricinus (Cyperaceae) new to Florida. Sida 13: 118–119.
- 3. Carter, R., C.T. Bryson, and B.L. Lipscomb. 1987. *Cyperus uniflorus* (Cyperaceae) east of the Mississippi River. *Sida* 12: 250.
- 2. Carter, R., and W.R. Faircloth. 1986. *Osmunda cinnamomea* forma *frondosa* in the coastal plain of Georgia and Florida. *Amer. Fern J.* 76: 189.
- 1. Carter, R., and C.E. Jarvis. 1986. Re–evaluation and lectotypification of *Scirpus echinatus* L. *Rhodora* 88: 451–456

# MISCELLANEOUS PUBLICATIONS, ABSTRACTS AND REPORTS

Student\*

- 71. Carter, R. 2020. 2020 Elizabeth Anne Bartholomew Award: Wendy B. Zomlefer. Castanea 85(2): 422–424.
- 70. Carter, R., F. Snow, and J. Thompson. 2020. Flora of Alligator Creek Wildlife Management Area, Wheeler County, Georgia. Abstract PP168. *Southeastern Biology* 67: 98.

- 69. Carter, R., and W. Knapp. 2019. A new rush species endemic to the Altamaha Grit of Georgia. Abstract 163. *Southeastern Biology* 66: 78.
- 68. Carter, R., and F. Snow. 2019. Rare Plant Surveys, Habitat Mapping, and Documentation on Alligator Creek Wildlife Management Area, Wheeler County, Georgia, 72 pp., Technical Report submitted 10 September 2019 to Georgia Department of Natural Resources, Natural Heritage Program, Social Circle, Georgia.
- 67. Carter, R., and W.W. Baker. 2018. The status of *Schwalbea americana* L. (Orobanchaceae) in Georgia. Abstract 318. *Southeastern Biology* 65: 248.
- 66. Carter, R., and F. Snow. 2018. Rare Plant Surveys and Documentation on Alligator Creek Wildlife Management Area, Wheeler County, Georgia, 124 pp., Technical Report submitted 21 December 2018 to Georgia Department of Natural Resources, Natural Heritage Program, Social Circle, Georgia.
- 65. Carter, R. 2017. Survival at a small regional university. Abstract 4. Southeastern Biology 64: 63.
- 64. Carter, J.R. 2017. Robert Kral's Development as a Botanist and his Role as Teacher and Mentor. Botany 2017: Abstracts, CO1001, 97. http://www.botanyconference.org/engine/search/index.php?func=detail&aid=97.
- 63. Carter, J.R., \*A.D. Robinson, \*R.T. Woods and \*P.D. Lowe. 2016. Advances in wiregrass Georgia: Infrastructural improvements to sustain another half-century of herbarium-based research and teaching. Botany 2016: Abstracts, P. 198, No. 488. Savannah, Georgia.
- 62. \*Lowe, P.D., and J.R. Carter. 2016. Two birds with one stone: Using Excel and Mail Merge to create herbarium specimen labels in Word and populate a Specify database. Botany 2016: Abstracts, P. 196, No. 482. Savannah, Georgia.
- 61. Carter, R., \*A.D. Robinson, and \*P.D. Lowe. 2016. Advances in wiregrass Georgia: Infrastructural improvements to sustain another half-century of herbarium-based research and teaching at Valdosta State University. Abstract P82. *Southeastern Biology* 63(3): 368.
- 60. \*Lowe, P.D., and R. Carter. 2016. A morphometric study of the *Cyperus granitophilus–Cyperus squarrosus* complex in Georgia. Abstract P74. *Southeastern Biology* 63(3): 365.
- 59. Carter, R. 2016. Featured Herbarium: VSC The Valdosta State University Herbarium. Vasculum 11(1): 2–5.
- 58. Carter, R. 2015. Valdosta State University Herbarium receives NSF CSBR grant. Vasculum 10(2): 5.
- 57. Marsico, T.D., J. Caron, R. Carter, E. Gillespie, E.R. Krimmel, \*P.D. Lowe, R.A McCauley, A. Morris, G. Nelson, M. Smith and A. Monfils. 2015. The role of small herbaria in contributing to the understanding of biodiversity patterns. Abstract 1074. Botany 2015: Science and Plants for People. http://2015.botanyconference.org/.
- 56. Marsico, T. D., J.J. Caron, R. Carter, E. Gillespie, E.R Krimmel, R. McCauley, A.B. Morris, G. Nelson and A.K. Monfils. 2015. The role of small natural history collections in contributing to understanding species' distributions. Abstract published in program of Society for the Preservation of Natural History Collections [SPNHC] 30<sup>th</sup> Annual Meeting, P. 51. http://www.spnhc.org/media/assets/SPNHCProgramforWeb.pdf.
- 55. Carter, R. 2015. Contributions to the southeastern flora. Abstract 104. Southeastern Biology 62(3): 263.
- 54. Zomlefer, W.B., S. Hughes, R. Carter, D.E. Giannasi, A. Harvey and D. Morgan. 2015. Patterns of biodiversity documented by four herbaria in Georgia: Do small collections data make a difference? Abstract 167. *Southeastern Biology* 62(3): 291.
- 53. Carter, R. and W.W. Baker. 2014. Status survey and search efforts for *Schwalbea americana* L. (American chaffseed) in Georgia: 2013–2014 Final report. Unpublished report to Georgia Department of Natural Resources. Social Circle, Georgia. 163 pp.
- 52. \*Bartek, J.M., \*A.M. Vardeman, and R. Carter. 2014. Digitization of the Valdosta State University Herbarium: Undergraduate Student Perspectives [poster]. Abstract P113. *Southeastern Biology* 61(3): 381–382.
- 51. Carter, R. 2014. Digitization of the Valdosta State University Herbarium. Abstract 202. *Southeastern Biology* 61(3): 330.
- 50. Holt, M.O., and R. Carter. 2014. The Valdosta State University Virtual Herbarium. Abstract 203. *Southeastern Biology* 61(3): 330–331.
- 49. \*Lowe, P.D., and R. Carter. 2014. Two Birds with One Stone: Using Excel and Mail Merge to Create Herbarium Specimen Labels in Word and Populate a Specify Database. Abstract 204. *Southeastern Biology* 61(3): 331.
- 48. \*Steele, J.L., and R. Carter. 2014. Floristic inventory of the Lake Louise Field Station, Lowndes County, Georgia. Abstract 40. *Southeastern Biology* 61(3): 265–266.

- 47. Zomlefer, W.B., L. Chafin, J.R. Carter, D.E. Giannasi, and C. Walters. 2014. Coefficient of conservatism rankings for the flora of Georgia: Wetland indicator species [poster]. Abstract P110. *Southeastern Biology* 61(3): 380.
- 46. Carter, R., and \*J.C. Jones. 2013. Dispersal, distribution and ecology of *Sphenoclea zeylanica* (Sphenocleaceae) in North America [Abstract P74]. *Southeastern Biology* 60(3): 270–271.
- 45. Holt, M.O, and R. Carter. 2013 [continuously updated]. *The Valdosta State University Virtual Herbarium*. Available at: http://herb.valdosta.edu.
- 44. Zomlefer, W., and R. Carter. 2012. Second Georgia Herbarium Consortium meeting, Sponsored by SERNEC and VSC! *Vasculum* 7(2): 5.
- 43. Zomlefer, W.B., and J.R. Carter. 2012. GA and VSC herbaria receive collaborative CSBR grant. *Vasculum* 7(1): 9.
- 42. Wichmann, B.L., W.B. Zomlefer, D.E. Giannasi, and R. Carter. 2012. The GA-VSC herbaria collaborative: Phase I of a statewide consortium [Abstract P112]. *Southeastern Biology* 59(3): 346.
- 41. Carter, R. 2011. Review: Guide to the Vascular Plants of Florida, Third Edition. Florida Scientist 74: 275-276.
- 40. Carter, R. 2010. Status survey and search efforts for pondberry (*Lindera melissifolia*) and pondspice (*Litsea aestivalis*) in Georgia, with special attention to Laurel Wilt Disease Final Report. Unpublished report to Georgia Department of Natural Resources. Social Circle, Georgia. 253 pp.
- 39. Carter, R. 2010. Survey of trees at St. Barnabas Episcopal Church. Unpublished report submitted to St. Barnabas Episcopal Church, Valdosta, Georgia on 10 August 2010. 20 pp.
- 38. Jarvis, T.A., R. Carter, and R.H. Goddard. 2010. Agricultural significance of seed dispersal by migratory doves. *Proceedings of the Southeastern Microscopy Society* 30: 27 (abstract).
- 37. Goddard, R.H., T.M. Webster, R. Carter, and T. Grey. 2010. Functional morphology and seed anatomy of the invasive weed, Benghal dayflower (*Commelina benghalensis*): Implications for dispersal by mourning doves. *Proceedings of the Southeastern Microscopy Society* 30: 23 (abstract).
- 36. Carter, R. and W.W. Baker. 2009. Status survey and search efforts for *Schwalbea americana* L. (American chaffseed) in Georgia Final report. Unpublished report to Georgia Department of Natural Resources. Social Circle, Georgia. 191 pp.
- 35. Carter, R. 2008. Obituary Wayne R. Faircloth (1932-2008). Southeastern Biology 55: 501-504.
- 34. Bryson, C.T., and R. Carter. 2008. Brown Flatsedge (*Cyperus fuscus*): A potential rice weed. *Proc. South. Weed Sci. Soc.* 61: 39 (abstract).
- 33. Carter, R., R.H. Goddard, T.M. Webster, J.T. Flanders, A.S. Culpepper and T.L. Grey. 2006. Do mourning doves disperse seeds of tropical spiderwort? *Proceedings of the 38th Annual Meeting of the American Peanut Research and Education Society*, Savannah, Georgia. Abstract 117.
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- 31. Bryson, C.T., R. Carter and \*D.J. Rosen. 2006. Dispersal, biology, and control of deeprooted sedge. *Proc. South. Weed Sci. Soc.* 59: 253 (abstract).
- 30. Carter, R., C.T. Bryson, and \*D.J. Rosen. 2006. Invasive sedges: Impending problems. *Proc. South. Weed Sci. Soc.* 59: 254 (abstract).
- 29. \*Stewart, K., J.R. Carter, J.A. Nienow, J. Rudloe and J.T. Baxter. 2006. Phytochemical Investigations of *Thalassia testudinum. Georgia J. Sci.* 64(1): 33 (abstract).
- 28. Carter, R., C.T. Bryson and \*D.J. Rosen. 2005. Cyperaceae: Emerging invasive weeds of natural areas. Simposio Internacional "El Conocimiento Botánico en la Gestión Ambiental y el Manejo de Ecosistemas" y 2° Simposio Botánico del Norte de México, Resumenes, pp. 24–25, CIIDIR IPN Unidad Durango, Instituto Politécnico Nacional, Victoria de Durango, Dgo., México (abstract).
- 27. \*Rosen, D.J., Carter, R. and C.T. Bryson. 2005. The spread of *Cyperus entrerianus* (Cyperaceae) in the southeastern United States and its invasive potential in bottomland hardwood forests. Simposio Internacional "El Conocimiento Botánico en la Gestión Ambiental y el Manejo de Ecosistemas" y 2° Simposio Botánico del Norte de México, Resumenes, pp. 53–54, CIIDIR IPN Unidad Durango, Instituto Politécnico Nacional, Victoria de Durango, Dgo., México (abstract).
- 26. \*Emanuel, D.L., J.R. Carter, J.A. Nienow and J.T. Baxter. 2005. Phytochemical investigation of *Sargassum fluitans Georgia J. Sci.* 63(1): 29 (abstract).

- 25. Bryson, C.T., and R. Carter. 2003. Biology of pathways for invasive weeds. *Invasive Plants in Natural and Managed Systems: Linking Science and Management* at 7<sup>th</sup> International Conference on the Ecology and Management of Alien Plant Invasions. Abstracts: 13.
- 24. \*Lynn, B.A., R. Carter and J.T. Baxter. 2003. Phytochemical investigation of *Rumex hastatulus* and *Rumex acetosella*. *Georgia J. Sci*. 61(1): 29 (abstract).
- 23. Bryson, C.T., and R. Carter. 2003. Reproductive potential and control strategies for deeprooted sedge (*Cyperus entrerianus*). *Proc. Weed Sci. Soc. Am.* 43: 13–14 (abstract).
- 22. Carter, R. 2003. What to do with an unknown specimen: preparation and storage of vouchers. *Proc. South. Weed Sci. Soc.* 56: 372 (abstract).
- 21. Bryson, C.T., R. Carter and D.J. Rosen. 2003. Deeprooted sedge (*Cyperus entrerianus*). *Proc. South. Weed Sci. Soc.* 56: 370 (abstract).
- 20. Rosen, D. J., C. T. Bryson, R. Carter and C. Jacono. 2003. Deeprooted sedge: an overlooked aggressive weed in the southeastern United States. *Aquaphyte* 23(1): insert.
- 19. Carter, R., and C.T. Bryson. 2001. Bloodscale sedge (*Cyperus sanguinolentus*), a new weed in the United States. *Proc. Weed Sci. Soc. Am.* 41: 93 (abstract).
- 18. Carter, R., and C.T. Bryson. 2000. Taxonomy of weedy *Cyperus* species. Third International Weed Science Congress, Abstracts, p. 47.
- 17. Carter, R., and C.T. Bryson. 2000. Distribution, ecology and taxonomy of *Cyperus louisianensis* (Cyperaceae). *Georgia J. Sci.* 58: 50 (abstract).
- 16. Carter, R. 1997. Rare plant survey of Kings Bay Submarine Base, Camden County, Georgia. Grant No. 1995CCD002. Unpublished report to Georgia Department of Natural Resources, Social Circle, GA. 65 pp.
- 15. Carter, R., and C.T. Bryson. 1995. *Cyperus entrerianus* Boeckeler, a new weed in temperate North America. *Proc. Weed Sci. Soc. Am.* 35: 92 (abstract).
- 14. Bryson, C.T., and R. Carter. 1995. Introduction and spread of weedy *Cyperus* species in the United States. *Proc. Weed Sci. Soc. Am.* 35: 36 (abstract).
- 13. Carter, R. 1995. *General botany laboratory studies*. 2<sup>nd</sup> Ed. Kendall/Hunt Publishing Company. Dubuque, Iowa. 170 pp. ISBN 0-7872-0738-1.
- 12. Bergstrom, B.J., J.R. Carter, A.E. Davis, and K.A. Lutz. 1995. Moody Air Force Base natural heritage inventory: final report. Contract No. M6700491D0010-5W01. Unpublished report to U.S. Department of Defense, Department of the Air Force, Moody Air Force Base, Georgia. 262 pp.
- 11. Carter, R. 1994. Status report: *Cyperus louisianensis* (Cyperaceae). Unpublished report to U.S. Fish & Wildlife Service, Endangered Species Office, Jackson, Mississippi.
- 10. Carter, R., and N. McInnis. 1993. Final status report: *Cyperus cephalanthus* (Cyperaceae). Unpublished report to U.S. Fish & Wildlife Service, Endangered Species Office, Jackson, Mississippi. 140 pp.
- 9. Carter, R. 1993. Fort Stewart floristic inventory: field data 1992 & 1993. Unpublished report to Nature Conservancy of Georgia. 641 pp.
- 8. Carter, R., and W.R. Faircloth. 1991. *General botany laboratory studies*. 1<sup>st</sup> Ed. Kendall/Hunt Publishing Company. Dubuque, Iowa.
- 7. Carter, R. 1987. Site survey and report on a *Lindera melissifolia* site in Wheeler County, Georgia. Unpublished report to Nature Conservancy of Georgia, Atlanta.
- 6. Carter, R. 1985. Lectotypification of Scirpus echinatus L. ASB Bulletin 32: 71 (abstract).
- 5. Carter, R. 1984. Master plan and floristic inventory of Grassmere Farm. Unpublished report to Cumberland Museum and Science Center, Nashville, Tennessee.
- 4. Carter, R. 1982. The flora of Delta National Forest. ASB Bulletin 29: 55 (abstract).
- 3. Carter, R. 1982. Morphological relationships among species of *Cyperus* section *Umbellati* from North America. *ASB Bulletin* 29: 55 (abstract).
- 2. Carter, R. 1983. Rare plant survey of Snead Road Glade. Unpublished report to Nature Conservancy, Tennessee Field Office, Nashville.
- 1. Carter, R. 1980. Master plan and floristic survey of Taylor Hollow, Sumner County, Tennessee. Unpublished report to Nature Conservancy, Tennessee Field Office, Nashville.

### CONTRIBUTED PAPERS, POSTERS, WORKSHOPS, SHORT COURSES AND PUBLIC LECTURES

Presenter's name in **bold**; student\*, invited contributions<sup>+</sup>

- 70. +Carter, R. 2023. Plant Identification Workshop. Sponsored by Georgia Botanical Society and Coastal Plain Chapter of Georgia Native Plant Society at Gaskins Forest Education Center, Alapaha, Georgia, 27 April 2024.
- 69. +Carter, R. 2024. Exploring VSU's Herbarium. Learning in Retirement, Continuing Education, Valdosta State University, 8 April 2024.
- 68. +Carter, R. 2024. Our Fantastic Flora: A Pictorial Exploration of the Amazing Native Plants of Georgia. Learning in Retirement, Continuing Education, Valdosta State University, 12 February 2024.
- 67. +Carter, R. 2023. The Amazing Fall Flora at Greenwood. Learning in Retirement, Continuing Education, Valdosta State University, 17 October 2023.
- 66. +Carter, R. 2023. Exploring VSU's Herbarium. Learning in Retirement, Continuing Education, Valdosta State University, 18 September 2023.
- 65. +Carter, R. 2023. Native Sedges Workshop. Sponsored by Georgia Botanical Society and Coastal Plain Chapter of Georgia Native Plant Society at Gaskins Forest Education Center, Alapaha, Georgia, 19–20 August, 2023.
- 64. **Carter, R.** 2023. The Wonderful World of Trees. Learning in Retirement, Continuing Education, Valdosta State University, 12, 19 and 26 April 2023.
- 63. +Carter, R. 2023. The Valdosta State University Herbarium a botanical treasure supporting teaching, research, and public outreach in southern Georgia for three-quarters of a century. Herbarium Talk for Odum Library's Year of the Herbarium, Odum Library Auditorium, Valdosta State University, 19 April 2023.
- 62. **Carter, R.** 2022. Biodiversity, Learning in Retirement, Continuing Education, Valdosta State University, 19 and 26 October, 2 November 2022.
- 61. \*Carter, R. 2022. Native Grasses Workshop. Sponsored by Coastal Plain Chapter of Georgia Native Plant Society and the Georgia Botanical Society at Gaskins Forest Education Center, Alapaha, Georgia, 7 August 2022.
- 60. \*Carter, R. 2021. Identifying locations of endangered plant species in southern Georgia. Georgia Initiative for Stewarding Pesticides and Protecting Endangered Species while Economically Providing Food, Feed, and Fiber for a Growing World Population, sponsored by University of Georgia College of Agriculture and Environmental Sciences and Georgia Department of Agriculture, Farmers Market, Macon, 2 December 2021.
- 59. \*Carter, R. 2021. Native Ferns Workshop. Sponsored by Coastal Plain Chapter of Georgia Native Plant Society at Gaskins Forest Education Center, Alapaha, Georgia, 7 August 2021.
- 58. **Carter, R.**, F. Snow and J. Thompson. 2021. Flora of Alligator Creek Wildlife Management Area, Wheeler County, Georgia [poster]. 82<sup>nd</sup> Annual Meeting of the Association of Southeastern Biologists, 24–26 March 2021, Virtual Meeting.
- 57. \*Carter, R. 2019. Red Hills Fall Flora with Introduction to the Grasses. Red Hills Natural History Alliance Short Course. Sponsored by Tall Timbers Research Station and Birdsong Nature Center, 20–22 September 2019.
- 56. \*Carter, R. 2019. What's going on in that herbarium anyway? Lunch Bunch Talk, Tall Timbers Research Station, Tallahassee, Florida, 19 September 2019.
- 55. <sup>+</sup>Carter, R. 2019. Native Medicinal Plants. Short course for State Botanical Garden of Georgia Certificate in Native Plants Program–Tifton, Valdosta State University, 16 February 2019.
- 54. **Carter, R.**, and W. Knapp. 2019. A new rush species endemic to the Altamaha Grit of Georgia. 80<sup>th</sup> Annual Meeting of the Association of Southeastern Biologists, 5 April 2019, Memphis, Tennessee.
- 53. **Carter, R.**, and W.W. Baker. 2018. The status of *Schwalbea americana* L. (Orobanchaceae) in Georgia. 79<sup>th</sup> Annual Meeting of the Association of Southeastern Biologists, 30 March 2017, Myrtle Beach, South Carolina.
- 52. \*Carter, J.R. 2017. Robert Kral's Development as a Botanist and his Role as Teacher and Mentor. Colloquium: Kral-ing Through Time: The Impact of Robert Kral on the Past, Present, and Future of Botany in the Southeastern U.S. Botany 2017, 26 June 2017, Fort Worth, Texas.
- 51. \*Carter, R. 2017. Survival at a Small Regional University. Workshop: Advancing Herbaria in the Age of Digitization. Association of Southeastern Biologists 78<sup>th</sup> Annual Meeting of the Association of Southeastern Biologists, 30 March 2017, Montgomery, Alabama.

- 50. \*Carter, R. 2017. Some Basics of Plant Identification and the Essential Role of the Herbarium in Accurate and Consistent Identification and Naming of Plants. Plant Identification Workshop, South Georgia Native Plant and Wildflower Symposium, Sponsored by University of Georgia College of Agriculture & Environmental Sciences and Garden Club of Georgia, Inc., Camellia District IV, Tifton, Georgia, 22 March 2017.
- 49. **Carter, R.** 2017. Status and Tour of the Valdosta State University Herbarium, Meeting of the Georgia Herbarium Alliance, Valdosta, Georgia, 25 February 2017.
- 48. Carter, J.R., \*A.D. Robinson, \*R.T. Woods and \*P.D. Lowe. 2016. Advances in wiregrass Georgia: Infrastructural improvements to sustain another half-century of herbarium-based research and teaching. Botany 2016: Celebrating our History, Conserving our Future, 30 July–3 August 2016, Savannah, Georgia.
- 47. \*Lowe, P.D., and J.R. Carter. 2016. Two birds with one stone: Using Excel and Mail Merge to create herbarium specimen labels in Word and populate a Specify database. Botany 2016: Celebrating our History, Conserving our Future, 30 July–3 August 2016, Savannah, Georgia.
- 46. **Carter, R.**, \*A.D. Robinson and \*P.D. Lowe. 2016. Advances in wiregrass Georgia: Infrastructural improvements to sustain another half-century of herbarium-based research and teaching at Valdosta State University. Association of Southeastern Biologists 77<sup>th</sup> Annual Meeting, 31 March–3 April 2016, Concord, North Carolina.
- 45. \*Lowe, P.D., and R. Carter. 2016. A morphometric study of the *Cyperus granitophilus-Cyperus squarrosus* complex in Georgia. Association of Southeastern Biologists 77<sup>th</sup> Annual Meeting, 31 March–3 April 2016, Concord, North Carolina.
- 44. \*Carter, R. 2016. What's going on in that herbarium anyway? Herbarium Best Practices Workshop, National Science Foundation, University of Georgia, Athens, 20 May 2016.
- 43. **Carter, R.** 2016. What's going on in that herbarium anyway? Science Seminar Series, College of Arts and Sciences, Valdosta State University, Valdosta, Georgia, 14 April 2016.
- 42. **Carter, R.** 2015. Contributions to the southeastern flora. Association of Southeastern Biologists 76<sup>th</sup> Annual Meeting, 1–4 April 2015, Chattanooga, Tennessee.
- 41. \*Carter, R. 2014. Medicinal plants. Learning in Retirement, Continuing Education, Valdosta State University, 23 & 20 September 2014.
- 40. \*Carter, R. 2014. Outdoor identification of plants. Gardening Study School Program Course IV, sponsored by National Garden Clubs, Inc., The Garden Club of Georgia, Inc., Magnolia District, 24 June 2014, Southwest Georgia Research & Education Center, Plains, Georgia.
- 39. \*Carter, R. 2014. Alternative funding discoveries. Recruiting, Supporting, and Retaining Small Collections in Biodiversity Digitization, workshop sponsored by CollectionsWeb and iDigBio, 7–9 April 2014, Central Michigan University, Mt. Pleasant, Michigan.
- 38. \*Carter, R. 2014. Lightening rounds: Challenges to small collections recruitment and retention. Recruiting, Supporting, and Retaining Small Collections in Biodiversity Digitization, workshop sponsored by CollectionsWeb and iDigBio, 7–9 April 2014, Central Michigan University, Mt. Pleasant, Michigan.
- 37. \*Lowe, P.D., and R. Carter. 2014. Two birds with one stone: Using Excel and Mail Merge to create herbarium specimen labels in Word and populate a Specify database. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.
- 36. **Holt, M.O.**, and R. Carter. 2014. The Valdosta State University Virtual Herbarium. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.
- 35. **Carter, R.** 2014. Digitization of the Valdosta State University Herbarium. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.
- 34. **Zomlefer, W.B.**, L.G. Chafin, **J.R. Carter**, D.E. Giannasi and C. Walters. 2014. Coefficient of Conservatism rankings for the flora of Georgia: Wetland indicator species [Poster]. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.
- 33. \*Bartek, J.M., A.M. Vardeman and R. Carter. 2014. Digitization of the Valdosta State University Herbarium: Undergraduate student perspectives [Poster]. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.
- 32. \*Steele, J.L., and R. Carter. 2014. Floristic inventory of the Lake Louise Field Station, Lowndes County, Georgia. Association of Southeastern Biologists 75<sup>th</sup> Annual Meeting, 2–5 April 2014, Spartanburg, South Carolina.

- 31. <sup>+</sup>Carter, R. 2013. Plants: Biodiversity Course 1–The Living Earth. 4–5 November 2013, Environmental Studies School. Presented by National Garden Clubs, Inc., through Valdosta State University's Learning in Retirement, Valdosta, Georgia.
- 30. **Carter, R.**, and J.C. Jones. 2013. Dispersal, distribution and ecology of *Sphenoclea zeylanica* (Sphenocleaceae) in North America [Poster]. Association of Southeastern Biologists 74<sup>th</sup> Annual Meeting, 10–13 April 2013, Charleston, West Virginia.
- 29. \*Carter, R. Learn to love the sedges. Short-course: Certificate in Native Plants Program, 22 September 2012, Coastal Georgia Botanical Gardens, University of Georgia (Savannah).
- 28. \*Carter, R. Learn to love the sedges. Short-course: Certificate in Native Plants Program, 8 September 2012, State Botanical Garden of Georgia, University of Georgia (Athens).
- 27. **Wichmann, B.L., W.B. Zomlefer, D.E. Giannasi, and R. Carter**. 2012. The GA-VSC herbaria collaborative: Phase I of a statewide consortium [Poster]. Association of Southeastern Biologists 73<sup>rd</sup> Annual Meeting, 4–7 April 2012, University of Georgia, Athens.
- 26. \*Carter, R. 2012. Address on behalf of the Campus Beautification and Stewardship Subcommittee, Arbor Day Celebration, 17 February 2012, Valdosta State University, Valdosta, Georgia.
- 25. \*Carter, R. Plant Taxonomy. Short-course: Certificate in Native Plants Program, 5 November 2011, Coastal Georgia Botanical Gardens, University of Georgia (Savannah).
- 24. \*Carter, R. Learn to love the sedges. Short-course: Certificate in Native Plants Program, 11 September 2010, State Botanical Garden of Georgia, University of Georgia (Athens).
- 23. \*Carter, R. Basics of Weed Identification. Workshop for program on Control and Identification of Problem Plants in Turfgrass, Ornamentals, and Natural Sites, 22 April 2011, University of Georgia, College of Agricultural & Environmental Sciences, at Valdosta State University.
- 22. <sup>+</sup>Carter, R. Sedge Identification Workshop. 30<sup>th</sup> Annual Conference of the Florida Native Plant Society, 23 May 2010, Tallahassee, Florida.
- 21. **Bryson, C.T.**, R. Carter, and D.J. Rosen. Update on the biology and dispersal of deeproot sedge (*Cyperus entrerianus*). *Managing Invasive Plants in Disturbed Landscapes*, Southeast Exotic Pest Plant Council 10th Annual Symposium, 20–21 May, 2008, Biloxi, Mississippi.
- 20. **Bryson, C.T.**, and R. Carter. Brown Flatsedge (*Cyperus fuscus*): A potential rice weed. *Managing Invasive Plants in Disturbed Landscapes*, Southeast Exotic Pest Plant Council 10th Annual Symposium, 20–21 May 2008, Biloxi, Mississippi.
- 19. \*Carter, R. Appreciating Native Grasses. Presented at the 2008 Symposium of the Georgia Native Plant Society, Mercer University, Atlanta, Georgia; 16 February 2008.
- 18. **Carter, R.**, R.H. Goddard, T.M. Webster, J.T. Flanders, A.S. Culpepper and T.L. Grey. Do mourning doves disperse seeds of tropical spiderwort? Paper presented at *Symposium Tropical Spiderwort: A New Troublesome Exotic-Invasive Weed in Peanut*. 38<sup>th</sup> Annual Meeting, American Peanut Research and Education Society, Savannah, Georgia; 11–14 July 2006.
- \*Carter, R. An introduction to sedges. Presented to Florida Native Plant Society, Magnolia Chapter, Tallahassee; 08 March 2006.
- 16. \*Carter, R., C.T. Bryson, and D.J. Rosen. Invasive sedges: Impending problems. Paper presented at Symposium – Invasive Grasses and Sedges: Deep-rooted Issues sponsored by U.S. Fish and Wildlife Service and SWSS at 59th Annual Meeting of Southern Weed Science Society, San Antonio, Texas; 23–25 January 2006.
- 15. \*Carter, R., C.T. Bryson and D.J. Rosen. Cyperaceae: Emerging invasive weeds of natural areas. Paper presented at *Simposio Internacional* "El Conocimiento Botánico en la Gestión Ambiental y el Manejo de Ecosistemas" y 2° *Simposio Botánico del Norte de México*, Resumenes, pp. 24–25, CIIDIR IPN Unidad Durango, Instituto Politécnico Nacional, Victoria de Durango, Dgo., México; 13–15 September 2005.
- 14. \*Carter. R. Invasive graminoids and vines. Paper presented at *Invasive Plant Control Workshop*, sponsored by the Georgia Exotic Plant Pest Council. University of Georgia, Tifton; 13 April 2005.
- 13. \*Carter, R. Tracking pathways of dispersal of invasive plants. Paper presented at *Conservation Education and Interpretive Services: A Natural Connection* 2004 National Conference sponsored by the U.S. Forest Service, St. George, Utah; 1–5 March 2004.
- 12. \*Carter, R. Botanizing the Coastal Plain of Georgia. Research seminar series sponsored by *Sigma Xi* at the Coastal Plain Experiment Station, University of Georgia, Tifton; 18 December 2003.

- 11. \*Carter, R. What to do with an unknown specimen: preparation and storage of vouchers. Paper presented at *Invasive Weeds Symposium* co-sponsored by U.S. Fish & Wildlife Service and Southern Weed Science Society at the Annual Meeting of the SWSS, Houston, Texas; 28–29 January 2003.
- 10. \*Bryson, C.T. and R. Carter. Impact of Cyperaceae as weeds. Paper presented at *Sedges 2002: International Conference on Uses, Diversity and Systematics of Sedges*, Delaware State University, Dover, Delaware; 6 June 2002.
- 9. **Carter, R.** and C.T. Bryson. Bloodscale sedge (*Cyperus sanguinolentus*), a new weed in the United States. Paper presented at the 41st Meeting of the Weed Science Society of America in Greensboro, North Carolina; 13 February 2001.
- 8. **Carter, R.** and C.T. Bryson. Distribution, ecology and taxonomy of *Cyperus louisianensis* (Cyperaceae). Paper presented at the 77th Annual Meeting of Georgia Academy of Science in Valdosta, Georgia; 25 March 2000
- 7. \*Carter, R. and C.T. Bryson. Taxonomy of weedy *Cyperus* species. Paper presented at Third International Weed Science Congress, Abstracts, p. 47, Foz do Iguaçu, Brazil; 6–11 June 2000. Note: I was unable to attend the meeting, because of the lack of matching travel support by VSU.
- 6. **Carter, R.** and C.T. Bryson. *Cyperus entrerianus* Boeckeler, a new weed in temperate North America. Poster presented at the Annual Meeting of the Weed Science Society of America in Seattle, Washington; 31 January 1995.
- 5. **Carter, R.** Systematics and ecology of North American *Cyperus*. Seminar presented to Biology Department, University of Southern Mississippi, Hattiesburg, Mississippi; 28 February 1994.
- 4. \*Carter, R. Discovery of *Orobanche minor* in Thomas County, Georgia. Paper presented at Field Day and Workshop on Small Broomrape [*Orobanche minor*] in Southern Georgia, sponsored by the United States Department of Agriculture, Animal Plant Health Inspection Service, Plant Protection and Quarantine, in cooperation with the Department of Biology, Valdosta State College, Valdosta, Georgia; 7 May 1993.
- 3. **Carter, R.** Lectotypification of *Scirpus echinatus* L. Paper presented at the Annual Meeting of the Association of Southeastern Biologists in Murphreesboro, Tennessee; April 1985.
- 2. **Carter, R.** The flora of Delta National Forest. Paper presented at the Annual Meeting of the Association of Southeastern Biologists in Richmond, Kentucky; April 1982.
- 1. **Carter, R.** Morphological relationships among species of *Cyperus* section *Umbellati* from North America. Paper presented at the Annual Meeting of the Association of Southeastern Biologists in Richmond, Kentucky; April 1982.

# RESEARCH FUNDING

Funded projects involving students\*

- Rare Plant Surveys, Habitat Mapping, and Documentation on Alligator Creek WMA. Carter. R. (PI). Georgia Department of Natural Resources, Letter of Agreement 05/01–08/31/2019; \$2,400.
- Rare Plant Surveys and Documentation on Alligator Creek WMA. Carter. R. (PI). Georgia Department of Natural Resources, Letter of Agreement 06/15–11/15/2018; \$2,400.
- \*CSBR: Natural History: Advances in Wiregrass Georgia: Infrastructural Improvements to Sustain another Half Century of Herbarium-Based Research and Teaching. R. Carter (PI). National Science Foundation, Award DBI-1458264, \$176,917; 2015–2019.
- \*Digitization TCN: Collaborative Research: The Key to the Cabinets: Building and sustaining a research database for a global biodiversity hotspot. W.B. Zomlefer (PI), R. Carter, A. Harvey (Co-I). National Science Foundation, Award DBI-1410081, \$7,130 [collaborative total, \$74,385]; 2014–2019.
- Status Survey and Search Efforts for American Chaffseed (*Schwalbea americana*) in Georgia. Carter, R. (PI). Georgia Department of Natural Resources, \$20,000; 2013–2014.
- A Valdosta State University Virtual Herbarium, M. Holt (PI), R. Carter (Co-I). Valdosta State University Faculty Research Seed Grant (FRSG), \$6,834; 2012–2013.
- \*Collaborative Research: The GA-VSC Herbaria Collaborative: Phase I of a Statewide Consortium. R. Carter (PI). National Science Foundation, Award DBI-1054366, \$199,336 [collaborative total with W.B. Zomlefer (PI), D.E. Giannasi (Co-I), Univ. of Georgia, \$395,315]; 2011–2014.
- \*Floristic Inventory and Vegetation Survey of the Banks Lake National Wildlife Refuge, Lanier County, Georgia. R. Carter. U.S. Fish & Wildlife Service, \$4,000; 2009–2011.

- Survey of known and potential populations of pondberry (*Lindera melissifolia*) and pondspice (*Litsea aestivalis*) in Georgia. R. Carter (PI). Georgia Department of Natural Resources, \$20,000; 2008–2009.
- \*Effects of Prescribed Burning on Representative Forest Communities at Moody Air Force Base and Grand Bay Wildlife Management Area, Lowndes and Lanier counties, Georgia; cooperative agreement with Moody Air Force Base. R. Carter, R. (PI), J. Pascarella (Co-I). U.S. Army Medical Research Acquisition Activity (USAMRAA), \$87,000; 2007–2012.
- Status Survey and Search Efforts for American Chaffseed (*Schwalbea americana*) in Georgia. R. Carter (PI). Georgia Department of Natural Resources, \$18,800; 2007–2008.
- \*Flora of Camden County, Georgia, with emphasis on Crooked River State Park. R. Carter (PI). Georgia Botanical Society Marie Mellinger Field Botany Research Grant, \$1,500; 2006.
- \*Acquisition of a variable pressure scanning electron microscope for interdisciplinary research and teaching, R. Goddard (PI), J. Nienow, R. Carter, M. Smith, T. Manning, L. Wood, M. Groszos, M. Leake (Co-I). National Science Foundation, DBI-0420454, \$245,505; 2005–2007.
- \*Federal noxious weed survey: *Orobanche minor*. R. Carter (PI). USDA-APHIS through University of Georgia (Tifton), \$3,000; 2004.
- \*Federal noxious weed survey: *Orobanche minor*. R. Carter (PI). USDA-APHIS through University of Georgia (Tifton), \$2,500; 2003.
- \*Vegetation survey: Grand Bay Wildlife Management Area. R. Carter (PI). Georgia Department of Natural Resources, \$4,000; 2003.
- Rare plant and plant community survey of Kings Bay Submarine Base, Kings Bay, Georgia. R. Carter (PI). Department of Defense through Georgia Department of Natural Resources, \$19,500; 1996–1997.
- Status survey of Lilium iridollae (Liliaceae) in Georgia. R. Carter (PI). U.S. Fish & Wildlife Service, \$2,500; 1994.
- \*Floristic inventory of Moody Air Force Base and Grassy Pond Recreational Area, Lowndes and Lanier counties, Georgia. R. Carter (PI). U.S. Air Force through The Nature Conservancy, \$7,500; 1993–1994.
- Status survey of Cyperus louisianensis (Cyperaceae). R. Carter (PI). U.S. Fish & Wildlife Service, \$2,500; 1993.
- Status survey of *Cyperus cephalanthus* (Cyperaceae). R. Carter (PI). U.S. Fish & Wildlife Service through Louisiana Department of Wildlife and Fisheries, \$5,000; 1992–1993.
- \*Floristic inventory of Fort Stewart, Georgia. R. Carter (PI). U.S. Army through The Nature Conservancy, \$9,800; 1992.
- Floristic inventory of *Lindera melissifolia* (Lauraceae) site in Wheeler County, Georgia. R. Carter (PI). The Nature Conservancy, \$500; 1987.
- Thesis-parts appointment to use scanning electron microscope. R. Carter (PI). Argonne National Laboratory; 1981. Floristic inventory of Taylor Hollow, Sumner County, Tennessee. R. Carter (PI). The Nature Conservancy, \$1,500; 1980.

# **MANUSCRIPTS IN PREPARATION**

- Alford, M.H., A.C. Fennell, D.M. McNair, J.R. Carter, J.T. Shaw, H.M. Sullivan, S.Y.S. Sewell, and J.R. Gwaltney. Another coastal plain endemic rescued from obscurity: Morphological and genetic evidence for the recognition of *Euphorbia apocynifolia* Small. In prep.
- Carter, R., and W.W. Baker. Notes on the status of Schwalbea americana (Orobanchaceae) in Georgia. In prep.
- Carter, R., F. Snow, and J. Thompson. The flora of Alligator Creek Wildlife Management Area, Wheeler County, Georgia. In prep.
- Platt, W., K. Robertson, R. Carter, W.W. Baker. The flora of the Wade Tract, Arcadia Plantation, an ecologically significant old-growth longleaf pine-wiregrass community in Thomas County, Georgia. In prep.
- Carter, R., and W.W. Baker. The vascular flora of Livingston Place, Jefferson County, Florida. In prep.
- Carter, R. The vascular flora of Camden County, Georgia, U.S.A. In prep.
- Carter, R. *Cyperus* (Cyperaceae) in the southeastern United States, with special emphasis on section *Umbellati* subsection *Umbellati* (Cyperaceae, Cyperace). In prep.
- Carter, R., and F. Snow. *Oxalis asynchrona* (Oxalidaceae), an undescribed epilithic species in the coastal plain of the southeastern United States. In prep.
- Carter, R., C.T. Bryson, and C. Reid. The taxonomy, distribution, ecology, and status of *Cyperus cephalanthus* (Cyperaceae) in the southeastern United States. In prep.
- Carter, R. Notes on Lindera melissifolia and Litsea aestivalis (Lauraceae) in Georgia. In prep.

Carter, R. Flora of Georgia, long-term project underway.

## HERBARIUM CURATOR/DIRECTOR

# Valdosta State University, 1985-present

The Valdosta State University Herbarium (VSC) is a regional collection of more than 85,000 vascular plant, bryophyte and lichen specimens and is especially rich in plants of the Georgia coastal plain. Since 1985, the size of the collection has increased more than two-fold, largely through my field efforts. Through funding from the National Science Foundation (DBI-1054366, DBI-1458264), the collection has been digitized, and voucher specimen label data and high-resolution images are publically available on-line through several web portals: VSU Virtual Herbarium, Southeastern Regional Network of Expertise and Collections (SERNEC), Consortium of Bryophyte Herbaria, and Consortium of Lichen Herbaria. In addition to maintaining the collection and sending and receiving research loans and exchange specimens, I am involved with all other aspects of herbarium work and supervision of undergraduate herbarium assistants. My activities as Director of the Herbarium also include routine identification of plant specimens for weed scientists and others, and providing data to scientists at other institutions.

### PROFESSIONAL SERVICE

## **Committee Service**

Department of Biology, Valdosta State University

Promotion & Tenure Review Committee

Faculty Search Committees, 1986, 1994, 1996, 1997, 1999, 2003–2004 (Chair), 2021

Committee to Evaluate the B.S. Curriculum in Biology (ad hoc) (2020-2021)

Awards Committee, 2010–2013

Graduate Committee, 2009–2012

Assessment Committee, 2003–2006, Chair (2004–2005)

Master of Science Program Committee, 1996-2004

Curriculum Committee, 1994–1996, 2000–2002, Chair (1995–1996, 2001–2002)

Bylaws Revision Committee, 1998–1999

Facilities Planning Committees for Botany Laboratories, Herbarium, and Greenhouse, 1995–1997

Department Head Search Committee, 1993–1994, 1994–1995

Introductory Biology Committee, 1994–1995

Connell Lecture Committee, 1987, 1990–1992, Chair (1991)

College of Arts & Sciences, Valdosta State University

Promotion & Tenure Advisory Committee, elected faculty representative, 2004–2005

Promotion & Tenure Guidelines Revision Committee, 1998–1999

Middle School Science Education Major Science Course Development Committee, 1999

Lake Louise Oversight Committee, 1996–1999

Programming Committee for Biology Chemistry Building, 1996–1998

Dean of Arts & Sciences Screening Committee, 1994–1995

Academic Council, 1987–1989

Committee on General Education (COGE), 1987–1988

Concerts & Lectures Committee, 1987-1988

Valdosta State University

Campus Beautification & Stewardship Subcommittee, 1993–present, Chair (2005–2006, 2008)

Faculty Senate, 2004-2008

Environmental Issues Committee, 2004–2008, Vice-Chair (2005–2006), Chair (2006–2007)

University Council, 2006–2007

Ropes Course Committee, 2006–2007

Executive Committee, VSU Chapter, American Association of University Professors, 2003–2005

Committee on Committees, 2004–2005

Faculty and Staff Campaign Committee, 2002–2005

Science Discipline Committee, 2001–2003 Honorary Piano Scholarship Committee, 2001 Georgia Systemic Teacher Education Program (GSTEP), 2000–2001

External

Valdosta Tree Commission, 2004–2007

One-Mile Branch Stream Restoration Steering Committee, 2004–2005

St. John School Board, 2003-2004

Grand Bay-Banks Lake Council, 1995–1999

Plants Technical Team, advisory to Georgia Department of Natural Resources, 2023

### **Professional Offices**

Society of Herbarium Curators, Southeastern Section, President, 2015–2017

Southern Appalachian Botanical Society, Council Member, 2012–2014

Association of Southeastern Biologists, Graduate Student Support Award Committee, 2009–2011 (member), 2011–2012 (chair)

### **Graduate Committees**

Phillip D. Lowe, M.S. Thesis Committee, Biology Department, Valdosta State University; 2015–2018 (chair) Elizabeth Mercer, M.S. Thesis Committee, Biology Department, Valdosta State University; 2011–2013 (member) David J. Rosen, Doctoral Dissertation Committee, Department of Range Science & Ecology, Texas A&M University; 2003–2006 (member)

### Reviewing

National Science Foundation Review Panel; 2018, 2019, 2023

Peer-reviewer for United States Department of Agriculture, Agricultural Research Service

Regional Reviewer, Flora of North America; 2006–2023

Merit-reviewer, National Science Foundation; 2007, 2008, 2009

Book reviewer for:

University of Virginia Press, Charlottesville

Benjamin Cummings Publisher, San Francisco, California

Menasha Ridge Press, Birmingham, Alabama University

of Georgia Press, Athens

Peer-reviewer for the following journals:

Brittonia Monogr. in Systematic Botany Southeastern Naturalist
Castanea Novon Systematic Botany

Florida Scientist Phytologia Taxon
Georgia Journal of Science Plant Ecology & Evolution Tipularia
Harvard Papers in Botany Invasive Rheedea Webbia

Plant Sci. and Manag. Rhodora Weed Technology

J. Bot. Res. Institute of Texas Sida

### **Miscellaneous Service**

Secretary, VSU Chapter, American Association of University Professors; 2003–2005

Identification of plant specimens for agricultural scientists at University of Georgia, Athens, Griffin, Tifton campuses; 2000–present

Served on Local Arrangements Committee for Georgia Academy of Science Annual Meeting in Valdosta; 1989.

Secretary-Treasurer, Southeastern Section of Botanical Society of America; 1992–1993

Member, Editorial Board of Castanea, Journal of the Southern Appalachian Botanical Club; 1991–1994

### CURRENT MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

American Association of University Professors (AAUP)

Association of Southeastern Biologists (ASB)

Georgia Academy of Science

Georgia Botanical Society

International Association of Plant Taxonomists (IAPT)

International Sedge Society

Linnean Society of London (elected)

Society of Herbarium Curators

Southern Appalachian Botanical Society (SABS)

# **TEACHING EXPERIENCE**

# Department of Biology, Valdosta State University

Elements of Biological Science I

An introductory level, mixed majors/non-majors course in basic principles of biology, including cellular chemistry, structure and function of cells, genetics, and microevolution.

# Elements of Biological Science II

An introductory level, mixed majors/non-majors course in basic principles of micro- and macroevolution, diversity, and structure and function of representative organisms.

Introduction to Biology: The Evolution and Diversity of Life

An introductory level, non-majors course in the principles of micro- and macro-evolution and diversity of life. *Biodiversity Lab* 

A non-majors laboratory course to accompany *Introduction to Biology: The Evolution and Diversity of Life. Natural History for Middle School Teachers* 

An upper level course for Middle Grades Education majors, using the biota of southern Georgia as a model for studying basic ecological principles, population structure and dynamics, life history patterns, and reproductive strategies and behaviors common to living systems.

### History and Use of Medicinal Plants

A general course for non-majors, comprising a brief history of medicinal plants from prehistory to the present, including the use of herbal and non-timber forest products in different cultures and countries.

## General Botany

A sophomore-level course for majors comprising a survey of diversity, evolution, and reproductive cycles of the plant kingdom and development, structure and function of representative seed-bearing plants.

# Ecology and Evolution

An introduction to major topics in ecology and evolution for biology majors, including population, community, and ecosystem ecology.

# Local Flora

A field-oriented, elective course in descriptive botany and diversity, emphasizing identification, distribution, and ecology of locally occurring seed-bearing plants. Also cross-listed for graduate credit.

## Taxonomy of Seed Plants I

An upper level, elective course in descriptive botany and diversity, dealing with principles of classification and nomenclature; classification, evolution, and a survey of diversity of major families; and identification of local representatives, using dichotomous keys in a technical floristic manual. Also cross-listed for graduate credit.

## Taxonomy of Seed Plants II

An advanced upper level, elective course in descriptive botany, dealing with a survey of diversity, classification, and evolution of selected, technically difficult, specialized families (e.g., Asteraceae, Poaceae, Cyperaceae, Juncaceae) and the identification of local representatives, using dichotomous keys in technical floristic manuals. Also cross-listed for graduate credit.

# Dendrology

A field-oriented elective course emphasizing trees of the southeastern United States and forest communities of North America, including field identification, description and classification of forest communities, and a study of reproductive cycles, anatomy, and development of representative species. Also cross-listed for graduate credit.

## Plant Systematics (subsumes Taxonomy of Seed Plants)

An upper level, elective course surveying the principles of plant systematics, including identification, nomenclature, evolution, and classification within the plant kingdom, and a systematic survey of plant families, with emphasis on local representatives. Also cross-listed for graduate credit.

## Morphology of Land Plants

An upper level, elective course emphasizing vegetative organization, reproductive cycles, phylogenetic and ecological relationships of bryophytes, pteridophytes and seed plants. Also cross-listed for graduate credit.

## Ethnobotany

An upper level, elective course surveying the use of plants by humans, including the significance of plants in sustaining human life, the diversity, origins, and history of plant uses, the origins of agriculture, and the roles of science and technology in enhancing agricultural production. Also cross-listed for graduate credit.

# Directed Study

An upper level, elective course for majors, involving supervised investigation of a specific problem and preparation of a final report.

### Senior Seminar

An upper level, capstone course for the Biology major, assessing the student's ability to research topics in biology independently, assimilate information, and disseminate information in an organized and understandable manner in both written and oral forms.

## Laboratory Practicum

An upper level course for Biology majors involving individualized instruction and practice in assisting with the preparation and teaching of biology laboratory exercises.

### Graduate Seminar

A graduate level course involving discussion and reports of current topics in biology and related sciences, in which students are expected to demonstrate comprehension of topics and communication skills, both oral and written.