

CHRISTOPHER MOORMAN
Department of Forestry and Environmental Resources
Fisheries, Wildlife, and Conservation Biology Program
Turner House, Box 7646
Raleigh, NC 27695-7646
Phone: (919) 515-5578
E-mail: chris_moorman@ncsu.edu

ACADEMIC HISTORY

Present Rank: Associate Professor
Coordinator - Fisheries, Wildlife, and Conservation Biology Program

Areas of Interest: Forest wildlife management with emphasis on fire ecology; conservation of northern bobwhite and songbirds in agricultural landscapes; avian ecology and conservation in temperate and tropical regions; urban wildlife ecology and management; management of native plant communities.

Education

BS, Wildlife Ecology and Management, University of Georgia; December 1992
MS, Wildlife Ecology and Management, University of Georgia; March 1995
PhD, Wildlife Ecology and Management, Clemson University; May 1999

Employment History

2008-present	Associate Professor; Fisheries, Wildlife, and Conservation Biology Program Coordinator
2005-2008	Associate Professor/Extension Wildlife Specialist, NCSU
1999-2005	Assistant Professor/Extension Wildlife Specialist, NCSU
1995-1999	Graduate Assistant, Clemson University, Dept. of Forest Resources
1995	Research Assistant, Patuxent Wildlife Research Center - UGA
1993-1995	Graduate Assistant, University of Georgia, School of Forest Resources

PROFESSIONAL ACTIVITIES

Current Membership

The Wildlife Society, Certified Wildlife Biologist

- Urban Wildlife Working Group – Past Chair
- Southeastern Section
- North Carolina Chapter – Past President

North Carolina Prescribed Fire Council – Past Chair

Service/Offices Held

The Wildlife Society

- Southeastern Section Representative to the Student Affairs Committee (1996-1997)

- Honorary Membership and Special Recognition Service Awards Committee, (2001-2004); Chair (2002-2003)
- Associate Editor, *Wildlife Society Bulletin* (2002-2004)
- Urban Wildlife Working Group, Member (2005-present); Program Chair (2006); Chair-elect (2007-2009); Chair (2009-2011)

North Carolina Chapter, The Wildlife Society

- Conservation and Review Committee, Chair (2000-2001)
- Executive Board (2002-present)
- President (2005-2006)

SCHOLARLY AND CREATIVE ACTIVITIES

Activity Summary

Refereed Journal Articles	42
Book Chapters and Proceedings, and Peer-edited Articles	17
Research Presentations	110
Research Grants (\$6,335,285)	40
Extension Grants (\$711,391)	32
Extension Publications	36
Popular Articles	17
Extension Presentations/Trainings	350
Graduate Student Committees	22
Graduate Students Directed/Co-directed	27
Course Sections Taught	39
Current Undergraduate Advisees (2012)	55

Current Courses

Forest Wildlife (FOR 264), Summer Camp, every year
 Forest Wildlife Management (FW 404) – fall semester, every year
 Nicaraguan Wildlife and Nature-based Tourism (FW 495/595) – spring break, even years
 Fisheries and Wildlife Sciences Seminar (FW 602/802) – periodically

PEER-REVIEWED PUBLICATIONS SINCE 2007

Shake, C. S., C. E. Moorman, and M. R. Burchell. *In Press*. Patch area affects shrubland bird occupancy. *The Condor*.

Golden, K. E., C. S. DePerno, C. E. Moorman, M. N. Peterson, and R. E. Bardon. *In Press*. Predicting North Carolina private landowner participation and interest in wildlife related fee access. *Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies*.

Moorman, C. E., L. T. Bowen, J. C. Kilgo, J. L. Hanula, and S. Horn. *In Press*. Arthropod abundance and seasonal bird use of forest canopy gaps in a bottomland forest. *The Wilson Journal of Ornithology*.

- Blackman, E. B., C. S. DePerno, M. J. Krachey, C. E. Moorman, and M. N. Peterson. *In Press*. Effects of crop field characteristics on nocturnal winter use by American woodcock. *Journal of Wildlife Management*.
- Dellinger, J. A., J. M. McVey, D. T. Cobb, and C. E. Moorman. 2011. Diameter thresholds for distinguishing between red wolf and non-red wolf canid scat. *Wildlife Society Bulletin* 35:416-420.
- Blackman, E. B., C. S. DePerno, C. E. Moorman, and M. N. Peterson. 2011. Avian influenza testing of American woodcock in an agricultural landscape. *Journal of the North Carolina Academy of Science* 127:189-191.
- Shake, C. S., C. E. Moorman, and M. R. Burchell. 2011. Cropland edge, forest succession, and landscape affect shrubland bird nest predation. *Journal of Wildlife Management* 75:825-835.
- Riddle, J. D., and C. E. Moorman. 2010. The importance of agriculture-dominated landscapes and lack of field border effect for early-succession songbirds. *Avian Conservation and Ecology* 5(2):9. [online] URL <http://www.ace-eco.org/vol5/iss2/art9/>.
- Blackman, E., J. W. Reynolds, C. S. DePerno, C. E. Moorman, and M. N. Peterson. 2010. Earthworm species available to American woodcock (*Scolopax minor*) on the wintering grounds in eastern North Carolina, USA. *Megadrilogica* 14(4):59-64.
- Matthews, C. E., C. E. Moorman, C. H. Greenberg, and T. A. Waldrop. 2010. Response of herpetofauna to repeated fires and fuel reduction treatments. *Journal of Wildlife Management* 74:1301-1310.
- Riddle, J. D., S. J. Stanislav, K. H. Pollock, C. E. Moorman, and F. S. Perkins. 2010. Separating components of the detection process with combined methods: an example with northern bobwhite. *Journal of Wildlife Management* 74:1319-1325.
- Savage, A. L., C. E. Moorman, J. A. Gerwin, and C. Sorenson. 2010. Prey selection by Swainson's warblers on the breeding grounds. *The Condor* 112:605-614.
- Ayers, C. R., C. E. Moorman, C. S. DePerno, F. H. Yelverton, and H. J. Wang. 2010. Effects of mowing on anthraquinone for deterrence of Canada geese. *Journal of Wildlife Management* 74:1863-1868.
- Ayers, C. R., C. S. DePerno, C. E. Moorman, and F. H. Yelverton. 2010. Canada goose (*Branta canadensis*) weed dispersal and nutrient loading in turfgrass systems. *Applied Turfgrass Science* [On-line] doi:10.1094/ATS-2010-0212-02-RS..
- Moorman, C. E., and J. C. Beane. 2010. *Virginia valeriae valeriae* (Eastern Smooth Earthsnake) Predation. *Herpetological Review* 41:101.

- Peterson, M. N., C. S. DePerno, C. E. Moorman, K. A. Cunningham, J. P. Milrad, J. D. Riddle, and T. A. Steelman. 2010. Hunting and non-hunting college students' perceptions of wildlife and each other. *Proceedings of the Annual Conference of the Southeastern Association of Fish and Wildlife Agencies* 63:47-53.
- Kleist, A. M., C. E. Moorman, C. S. DePerno, and R. E. Bardon. 2010. Opportunities for planned county-based wildlife programming. *Journal of Extension [On-line]*, 48(2) Article 2RIB7.
- Matthews, C. E., C. E. Moorman, C. H. Greenberg, and T. A. Waldrop. 2009. Response of soricid populations to repeated fires and fuel reduction treatments in the southern Appalachian Mountains. *Forest Ecology and Management* 257:1939-1944.
- Kohut, S. G. R. Hess, and C. E. Moorman. 2009. Avian use of suburban greenways as stopover habitat. *Urban Ecosystems* 12:487-502.
- Champlin, T. B., J. C. Kilgo, and C. E. Moorman. 2009. Food abundance does not determine bird use of early-successional habitat? *Ecology* 90:1586-1594.
- Champlin, T. B., J. C. Kilgo, M. L. Gumpertz, and C. E. Moorman. 2009. Avian response to microclimate in canopy gaps in a bottomland forest. *Southeastern Naturalist* 8(1):107-120.
- Riddle, J. D., C. E. Moorman, and K. H. Pollock. 2008. The importance of habitat shape and landscape context to northern bobwhite populations. *Journal of Wildlife Management* 72:1376-1382.
- Riddle, J. D., C. E. Moorman, and K. H. Pollock. 2008. A comparison of methods for estimating northern bobwhite covey detection probabilities. *Journal of Wildlife Management* 72:1437-1442.
- Smith, T. A., D. L. Osmond, C. E. Moorman, J. M. Stucky, and J. W. Gilliam. 2008. Effects of vegetation management on bird habitat in riparian buffer zones. *Southeastern Naturalist* 7(2)277-288.
- Miller, J. E., G. R. Hess, and C. E. Moorman. 2007. Southern two-lined salamanders in urbanizing watersheds. *Urban Ecosystems*: 10:73-85.
- Mason, J., C. Moorman, G. Hess, and K. Sinclair. 2007. Designing suburban greenways to provide habitat for forest-breeding birds. *Landscape and Urban Planning* 80:153-164.
- Moorman, C. E., L. T. Bowen, J. C. Kilgo, C. E. Sorenson, J. L. Hanula, S. Horn, and M. D. Ulyshen. 2007. Seasonal diets of insectivorous birds using canopy gaps in a bottomland forest. *Journal of Field Ornithology* 78:11-20.

Bowen, L. T., C. E. Moorman, and J. C. Kilgo. 2007. Seasonal bird use of canopy gaps in a bottomland forest. *The Wilson Journal of Ornithology* 19:77-89.

SELECTED PRESENTATIONS (from over 400 research and extension presentations)

- Reptile and amphibian response to hardwood forest management. Association of Southeastern Biologists Annual Meeting, Asheville, NC. (with C. H. Greenberg and K. R. Russell)
- Prescribed fire on non-industrial private forestlands: implications for non-game wildlife. 7th Annual Conference of The Wildlife Society, Nashville, TN. (with P. T. Bromley, M. A. Megalos, and D. Drake)
- Agricultural wintering habitat as a limiting factor for woodcock in the Southeast: thirty years of agroecosystem change. 16th Annual Conference of The Wildlife Society, Monterey, California (with E. B. Blackman, C. S. DePerno, and M. N. Peterson)
- Reconciling conflicting requirements for greenways in residential landscapes. 2009 International Symposium on Urban Wildlife and the Environment, Univ. of Massachusetts-Amherst. (with G. Hess)
- Managing early-succession habitats in the farm landscape. Edgecombe County Wildlife Meeting, Tarboro, NC.
- Woody biomass and wildlife. *Forest Issues Forum* Teleconference, North Carolina State University, Raleigh, NC.
- Using prescribed fire in an urbanizing state. NC Division of SAF Summer Meeting, Carthage, NC.
- Managing for nongame wildlife. *Master Wildlifer 2003* Satellite Series, Clemson University, Clemson, SC.
- Barriers to conservation based development in North Carolina. 15th Annual Conference of The Wildlife Society, Miami, FL. (with S. C. Allen and S. Moore)
- Effects of patch size and shape on bird presence and nest survival in scrub-successional riparian buffer habitat. 2008 Annual Meeting of TWS, Miami, FL. (with C. Shake)

SELECTED EXTENSION PUBLICATIONS (from over 45 popular and web-based pubs)

- C. E. Moorman, and R. A. Hamilton. 2000. Developing Wildlife Friendly Pine Plantations. North Carolina Cooperative Extension Service, Woodland Owner Note #38.
- Moorman, C., M. Johns, L. T. Bowen, and others. 2002. Landscaping for Wildlife with Native Plants. NC Cooperative Extension Service AG-636-3. 12 pp.
- Moorman, C. E. 2002. Burnin' for Wildlife. *Forest Landowner* 61(3):5-9.
- Moorman, C. E. 2003. Think American: Manage Native Plants for Wildlife. *Forest Landowner* 62(3):5-9.

Graduate Student Advisees

Jamie R. Hull, MS, 2003 (co-directed with George Hess) – Can Urban Greenways Provide High Quality Avian Habitat?

Liessa T. Bowen, PhD, 2004 – Seasonal Relationship between Birds and Arthropods in Bottomland Forest Canopy Gaps

Tracey B. Champlin, MS, 2007 – Do Food Availability and Microclimate Determine Bird Use of Forest Canopy Gaps?

Salina M. Kohut, MS, 2007 (co-directed with George Hess) – Avian Use of Suburban Greenways as Stopover Habitat

Jason D. Riddle, PhD, 2007 – Maximizing the Impact of Field Borders for Northern Bobwhite and Early-Succession Songbirds

Charlotte E. Matthews, MS, 2008 – Response of Herpetofaunal Populations to Prescribed Fire and Mechanical Fuel Reduction in the Southern Appalachians

Corey S. Shake, MS, 2009 – Effects of Buffer Width, Patch Size and Shape, and Landscape Context on Bird Communities and Nest Success in Conservation Reserve Enhancement Program (CREP) Forested Riparian Buffers

Amelia L. Savage, MS, 2009 – Foraging Habits of Swainson’s Warbler in a Managed Forest Landscape

Chris R. Ayers, MS, 2009 (co-directed with Chris DePerno) – Longevity of FlightControl PLUS Goose Repellency Following Two Mowing Regimes

Kate E. Golden, MS, 2010 (co-directed with Chris DePerno) – Fee-hunting and Wildlife Management Activities by Non-industrial Private Landowners in North Carolina

Liz Rutledge, PhD (co-directed with Chris DePerno) – Non-migratory Canada Goose Movement Around Piedmont Triad International Airport

Stephen Allen, MS, 2011 (co-directed with Susan Moore) – Identifying Barriers to Implementation of Conservation Subdivisions

Amy Raybuck, MS, 2011 (co-directed with Chris DePerno) – Small Mammal and Herpetofauna Response to Oak Regeneration Treatments in the Southern Appalachian Mountains

Justin McVey, MS, 2012 (co-directed with David Cobb) – Food Habits of Co-occurring Coyote and Red Wolf

Ryan Klimstra, MS – Bird and Small Mammal Use of Native Warm-season and Exotic Cool-season Grass Fields

Charlie Plush, MS, 2011 – Comparing Wildlife Habitat Value of Planted and Fallow Field Borders on an Organic Farm

Shannon Bowling, MS – Multi-scale Factors that Influence Northern Bobwhite and Songbird Abundance in CP33 Borders

Sharon Becker Hux, MFW – Temporal Changes in Amphibian and Reptile Communities in an Urbanized Landscape

Sarah Fritts, PhD (co-directed with Dennis Hazel) – Ground-dwelling Wildlife Response to Biomass Harvesting Guidelines Used During Clearcut Harvests

Colter Chitwood, PhD (co-directed with Chris DePerno) – White-tailed Deer Fawn Mortality and Movements in the North Carolina Sandhills

Marcus Lashley, PhD (co-directed with Chris DePerno) – Effects of Growing-season Prescribed Fire on White-tailed Deer Habitat Use

Morgan Elfelt, MS (co-directed with Chris DePerno) – Effects of Coyotes on White-tailed Deer Movement and Fawn Mortality

Eric Kilburg, MS (co-directed with Chris DePerno) - Effects of Growing-season Prescribed Fire on Wild Turkey Habitat Use

Annemarie Prince, MS (co-directed with Chris DePerno) - Effects of Growing-season Prescribed Fire on Fox Squirrel Habitat Use

Paul Taillie, MS (co-directed with Nils Peterson) – Identifying Predictors to Guide Restoration of Functional Longleaf Ecosystems

Steve Grodsky, PhD – Effects of Biomass Harvest on Arthropods and Shrubland Birds
Lindsey Garner, MS – Population Status of American Alligator in North Carolina