

CURRICULUM VITAE

NAME Theodore R. Simons

TITLE Assistant Unit Leader, U.S. Geological Survey, NC Cooperative Fish and Wildlife Research Unit, Professor, Departments of Applied Ecology and Forestry, North Carolina State University

ADDRESS Department of Applied Ecology
226A David Clark Labs, Box 7617
North Carolina State University
Raleigh, NC 27695-7617

Telephone 919-515-2689
FAX 919-515-4454
email tsimons@ncsu.edu
<http://www4.ncsu.edu/~simons>

EDUCATION B.S. Wildlife Ecology 1975
University of Wisconsin, Madison

M.S. Wildlife Biology 1979
University of Washington

Ph.D. Wildlife Biology 1983
University of Washington

DISSERTATION "Biology and Conservation of the Endangered Hawaiian Dark-rumped Petrel *Pterodroma phaeopygia sandwichensis*"
Advisor - Dr. D.A. Manuwal

PROFESSIONAL EXPERIENCE

2004 Assistant Unit Leader, Cooperative Fish and Wildlife Research Unit, Professor, Zoology and Forestry, North Carolina State University, Raleigh, NC

1998 Assistant Unit Leader, Cooperative Fish and Wildlife Research Unit, Associate Professor, Zoology and Forestry, North Carolina State University, Raleigh, NC

1996 Assistant Unit Leader, Cooperative Fish and Wildlife Research Unit, Assistant Professor, Zoology and Forestry, North Carolina State University, Raleigh, NC

1993 Director, Cooperative Park Studies Unit, Assistant Professor, Zoology and Forestry, North Carolina State University, Raleigh, NC

1991 Director, National Park Service Cooperative Park Studies Unit
Research Assistant Professor, University of Virginia, Charlottesville, VA

1984-1991 Research Biologist, U.S. National Park Service, Gulf Islands National Seashore, Ocean Springs, MS

- 1979-1983 Research Associate, U.S. National Park Service/University of Washington, Maui, Hawaii, Lecturer, Wildlife Science Program, College of Forest Resources, University of Washington, Seattle
- 1977-1978 Research Associate, U.S. Forest Service/University of Washington, Seattle
Teaching Assistant, College of Forest Resources, Univ. of Washington, Seattle
- Research Associate, U.S. Fish and Wildlife Service University of Washington, Barren Islands, Alaska

AWARDS

Fellow, American Ornithologists' Union 2014
Elected Member, The Waterbird Society Executive Council 2013
Elective Member, American Ornithologists' Union 2011
USGS Star Awards 1998, 2005, 2008 - 2016
USGS Cooperative Res. Program – National Scientific Excellence Award 2007
USFWS – Technical Assistance Award 2006
Tanner Fellowship – Great Smoky Mountains Conservation Association 2003
USGS Cooperative Research Program – National Leadership Award 2002
U.S. National Park Service Special Achievement Awards 1990, 1991, 1992, 1993
U.S. NPS, Regional Science Award and nominee for Director's Award 1989
American Ornithologists' Union, Marcia Brady Tucker Award 1983
Wilson Ornithological Society Student Award 1978
Frank M. Chapman Memorial Fund for Ornithology Research Award 1977

FACULTY APPOINTMENTS

Mississippi State University
University of Southern Mississippi
Auburn University
University of Virginia
University of Wisconsin – Stevens Point

EDITORIAL BOARDS

Ecological Applications (2003 - 2017)

INTERNATIONAL WORKSHOPS

“Sampling Elusive Wildlife Species: Accounting for Detection Probability” with Ken Pollock and Russell Alpizar, Murdoch University, Perth, Australia, July 2011.

“Estimating Animal Abundance” with Ken Pollock and Jean-Dominique Lebreton, University of Evora, Portugal, July 2008

GRANTS

- 2016 U.S. Fish and Wildlife Service. "Strategic management and monitoring for the recovery of the Key Largo woodrat." \$48,600
- 2014 National Wetlands Research Center. "Assessing the Effects of Storms, Coastal Development, and Shoreline Erosion on Waterbird Populations in Coastal North Carolina." \$42,000
- 2013 National Park Service. "Assessing the effects of the National Park Service predator and vehicle management practices on nesting shorebirds at Cape Hatteras National Seashore." \$208,000
- 2011 U.S. Fish and Wildlife Service. "Assessing endangered marsh rabbit and wood rat habitat use and feral cat populations using photographic, video, and RFID capture-recapture data" with Allan O'Connell and Beth Gardner, \$306,000
- 2011 National Park Service. "Assessing the effects of the National Park Service prescribed fire program on the breeding bird community in Great Smoky Mountains National Park" \$72,000
- 2009 US Marine Corps. "Assessing the responses of breeding shorebirds to military jet overflights of the Core MOA at Cape Lookout National Seashore" with J. Fraser and S. Karpanty, \$1,025,007
- 2009 USGS. "Coastal wetland dynamics and wildlife populations: modeling the effects of sea level rise and landscape change" with Allan O'Connell and G. Guntensbergen, \$270,000
- 2009 NFWF/National Audubon Society. "American Oystercatcher Conservation Initiative North Carolina", \$150,000
- 2009 NC DOJ. "Maximizing the Benefits of Field Borders for Nesting Quail and Early-Succession Songbirds" with Chris Moorman and Jason Riddle, \$100,000
- 2006 USGS/National Park Service. "Evaluating the consequences of predator removal for endangered species management at Cape Lookout National Seashore" with Allan O'Connell USGS, \$190,000
- 2006 U.S. Forest Service. "Assessing the effects of atmospheric pollution on high elevation bird and snail communities in the southern Appalachians", \$45,000
- 2006 USGS Status and Trends. "Incorporating estimates of detection probability into the Breeding Bird Survey protocol: assessment of current sampling methods" with Ken Pollock NCSU, \$100,000
- 2006 North Carolina Wildlife Resources Commission. "Estimating Detection Probabilities for Community Assessment and Population Monitoring", \$10,000
- 2004 USGS/National Park Service. "Assessing the relationship between acid precipitation, calcium depletion, and avian productivity in Great Smoky Mountains National Park", \$60,000

- 2004 USGS/National Park Service. "Measuring the effects of off-road vehicles on the coastal avifauna of Cape Lookout National Seashore", \$64,000
- 2003 Great Smoky Mountains Conservation Association. "Assessing the relationship between acid precipitation, calcium depletion and avian productivity in Great Smoky Mountains National Park", \$10,000
- 2002 Patuxent Wildlife Research Center, U.S. Forest Service. "Estimating Detection Probabilities for Community Assessment and Population Monitoring" with Ken Pollock, NCSU, \$344,000
- 2002 Patuxent Wildlife Research Center. "Development of Patch Occupancy Models for Use in Amphibian Monitoring" with Ken Pollock, NCSU, \$165,000
- 2002 USFWS. "Conservation status of the Black-capped Petrel, (*Pterodroma hasitata*)", \$20,000
- 2002 The Nature Conservancy. "Applying Remote Sensing Tools to Regional Conservation Planning for Migratory Landbirds" Smith Fellowship to Sarah Mabey, \$120,000
- 2002 U.S. Fish and Wildlife Service, National Park Service, USGS. "Evaluating American Oystercatchers as indicators of resource conditions in coastal North Carolina", \$168,000
- 2000 U.S. Forest Service. "Assessing the relationship between avian abundance and habitat quality on managed and unmanaged forests in the Southern Appalachians", \$75,000
- 1999 Environmental Protection Agency, Patuxent Wildlife Research Center, "Statistical Inference from Count Surveys" with Ken Pollock NCSU, \$94,500
- 1998 Environmental Protection Agency, USGS. "Evaluation of salamander habitat associations and population monitoring techniques in Great Smoky Mountains National Park" with Ken Pollock, NCSU, \$195,000
- 1998 USGS, Walcott Endowment, National Park Service. "Determinants of forest songbird nesting success in the southern Appalachians", \$177,900
- 1997 National Park Service. "Assessing the diversity and habitat associations of salamanders in Great Smoky Mountains National Park", \$70,000
- 1996 U.S. Forest Service. "The effects of landscape pattern, core areas, and forest management practices on avian communities in the southern Appalachians", \$74,500
- 1995 NBS/Friends of Great Smoky Mountains National Park. "Ecology and conservation of Neotropical migrants in the Southern Appalachians", \$240,000
- 1994 National Park Service. "Evaluating Great Smoky Mountains National Park as a population source for Wood Thrush", \$160,000
- 1994 New York Zoological Society. "Monitoring indicator bird species and habitats in Costa Rica" with Kerry Rabenold, Purdue University, and Greg Budney, Cornell Laboratory of Ornithology, \$12,500

- 1991 State of Mississippi. "Genetic diversity in barrier island Carolina populations" with Patty Rabenold, Purdue University, \$4,660
- 1991 U.S. Fish and Wildlife Service. "Use of stopover habitats along the northern coast of the Gulf of Mexico by Neotropical migrants" with Frank Moore, University of Southern Mississippi, \$118,000
- 1990 U.S. Navy. "Operation of EMPRESS II and the behavior of migratory birds in the Gulf of Mexico" with Frank Moore, University of Southern Mississippi, \$173,000
- 1990 National Fish and Wildlife Foundation. "Establishment of Migratory Bird Watch Program in Costa Rica", \$30,000 challenge grant
- 1989 - 1991 U.S. Fish and Wildlife Service. "Red Wolf restoration and propagation, Horn Island, Mississippi", \$55,000
- 1986 - 1989 State of Mississippi. "Restoration of barrier island Bald Eagle populations", \$25,000
- 1987 State of Mississippi. "Dispersal and survival of juvenile Osprey", \$3,500

PEER-REVIEWED PUBLICATIONS

- Cove, M.V., B. Gardner, **T.R. Simons**, and A.F. O'Connell. In press. Co-occurrence dynamics of endangered Lower Keys marsh rabbits and free-ranging domestic cats: prey responses to an exotic predator removal program. *Ecology and Evolution*.
- Felton, S.K., K.H. Pollock, and **T.R. Simons**. 2018. Response of beach-nesting American Oystercatchers to off-road vehicles: An experimental approach reveals physiological nuances and decreased nest attendance. *Condor* 120: 47-62.
DOI.org/10.1650/CONDOR-17-84.1
- Simons, T.R.** 2017. The American Oystercatcher (*Haematopus palliatus*) Working Group: 15 Years of Collaborative Focal Species Research and Management. *Waterbirds* 40: 1-9.
DOI.org/10.1675/063.040.sp102
- Cove, M.V., B. Gardner, **T.R. Simons**, R. Kays, and A.F. O'Connell. 2017. Free Ranging domestic cats (*Felis catus*) on public lands: estimating density, activity, and diet in the Florida Keys. *Biological Invasions*. DOI 10.1007/s10530-017-1534-x
- Stocking, J.J., **T.R. Simons**, A.W. Parsons, and A.F. O'Connell. 2017. Managing Native Predators to Protect Shorebirds: Evidence from a Partial Removal of Raccoons (*Procyon lotor*) on the Outer Banks of North Carolina. *Waterbirds* 40: 10-18.
DOI.org/10.1675/063.040.sp103
- Felton, S.K., N.J. Hostetter, K.H. Pollock, and **T.R. Simons**. 2017. Managing American Oystercatcher (*Haematopus palliatus*) Population Growth by Targeting Nesting Season Vital Rates. *Waterbirds* 40: 44-54. DOI.org/10.1675/063.040.sp106
- Denmon, P., S.A. Heath, F.J. Sanders, **T.R. Simons**, and S.L. Jones. 2017. American Oystercatcher. *Waterbirds* 40 Special Publication 1: 126 pp.
DOI.org/10.1675/063.040.sp113

- Schulte, S.A., and **T.R. Simons**. 2016. Hurricane Disturbance Benefits Nesting American Oystercatchers. *Waterbirds* 39: 327-337. DOI.org/10.1675/063.039.0402
- Cove, M.V., **T.R. Simons**, B. Gardner, A.S. Maurer, and A. F. O'Connell. 2016. Evaluating nest supplementation as a recovery strategy for the endangered rodents of the Florida Keys. *Restoration Ecology*. DOI:10.1111/rec.12418
- Rose, E.T. and **T.R. Simons**. 2016. Avian response to fire in pine-oak forests of Great Smoky Mountains National Park following decades of fire suppression. *The Condor* 118: 179-183. DOI: 10.1650/CONDOR-15-85.1
- Rose, E.T., **T.R. Simons**, R. Klein, and A.J. McKerrow. 2016. Normalized burn ratios link fire severity with patterns of avian occurrence. *Landscape Ecology* 31: DOI:10.1007/s10980-015-0334-x
- Borneman, T.E., E.T. Rose, and **T.R. Simons**. 2016. Off-road vehicles affect nesting behavior and reproductive success of American Oystercatchers. *Ibis* 158: 261-78. DOI: 10.1111/ibi.12358
- Parsons, A.W., **T.R. Simons**, A.F. O'Connell, K. Pollock, M.K. Stoskopf, and J.J. Stocking. 2015. Camera Traps and Mark-Resight Models: The Value of Ancillary Data for Evaluating Assumptions. *Journal of Wildlife Management* 79: 1163-1172. DOI: 10.1002/jwmg.931
- Hostetter, N.J. B. Gardner, S.H. Schweitzer, R. Boettcher, A. L. Wilke, L. Addison, W.R. Swilling, K.H. Pollock, and **T.R. Simons**. 2015. Repeated count surveys help standardize multi-agency estimates of American Oystercatcher (*Haematopus palliatus*) abundance. *The Condor* 117: 354-363. DOI: 10.1650/CONDOR-14-185.1
- Miller, D.A.W., L.L. Bailey, E.H. Campbell Grant, B.T. McClintock, L.A. Weir, and **T.R. Simons**. 2015. Performance of occupancy estimators when basic assumptions are not met: a test with field data where truth is known. *Methods in Ecology and Evolution* 6: 557-565. DOI: 10.1111/2041-210X.12342
- Schulte, S.A. and **T.R. Simons**. 2015. Factors affecting the reproductive success of American Oystercatchers (*Haematopus palliatus*) on the Outer Banks of North Carolina. *Marine Ornithology* 43: 37-47.
- Keller, R.A, D. B. Buchwalter, L. Xie, K. E. Franzreb, and **T. R. Simons**. 2014. Mercury bioaccumulation in southern Appalachian avifauna. *Ecotoxicology* 23:304-316.
- Borneman, T.E., E.T. Rose, and **T.R. Simons**. 2014. Minimal changes in the heart rate of incubating American Oystercatchers (*Haematopus palliatus*) in response to human activity. *The Condor* 116: 493-503.
- R.P. Clay, A.J. Lesterhuis, S. Schulte, S. Brown, D. Reynolds, and **T.R. Simons**. 2014. A global assessment of the conservation status of the American Oystercatcher (*Haematopus palliatus*). Special Issue, *International Wader Study Bulletin* 20:62-82.
- Simons, T.R.**, D.S. Lee, and J. C. Haney. 2013. Diablotin *Pterodroma hasitata*: A biography of the endangered Black-capped Petrel. *Marine Ornithology* 41: 1-43.
- Becker, S., C. Moorman, C. DePerno, and **T. Simons**. 2013. Quantifiable long-term monitoring on parks and nature preserves. *Southeastern Naturalist* 12: 339-352.

- Parsons, A.W., **T.R. Simons**, A.F. O'Connell, and M.K. Stoskopf. 2013. Demographics, diet, movements, and survival of an isolated, unmanaged raccoon *Procyon lotor* (Procyonidae, Carnivora) population on the Outer Banks of North Carolina. *Mammalia* 77: 21-30.
- Sollmann, R., B. Gardner, A.W. Parsons, J.J. Stocking, B.T. McClintock, **T. R. Simons**, K.H. Pollock, and A.F. O'Connell. 2013. A spatial mark-resight model augmented with telemetry data. *Ecology* 94: 553-559.
- Simons, T.R.**, E. Nol, and R. Boettcher (eds.), American Oystercatcher Working Group. 2012. American Oystercatcher (*Haematopus palliatus*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology; <http://bna.birds.cornell.edu/bna/species/082> doi:10.2173/bna.82.
- Simmerman, S., J. Wang, J. Osborne, K. Shook, J. Huang, W. Godsoe and **T.R. Simons**. 2012. Exploring Similarities Among Many Species Distributions. *Extreme Science and Engineering Discovery Environment* (12).
- Miller, D.A.W., L.A. Weir, B.T. McClintock, E.H. Grant, L.L. Bailey, and **T.R. Simons**. 2012. Experimental investigation of false positive errors in auditory species occurrence surveys. *Ecological Applications* 22: 1656-1674.
- McClintock, B.T., L.L. Bailey, K.H. Pollock and **T.R. Simons**. 2010. Unmodeled observation error induces bias when inferring patterns and dynamics of species occurrence via aural detections. *Ecology* 91(8): 2446-2454.
- McClintock, B.T., L.L. Bailey, K.H. Pollock and **T.R. Simons**. 2010. Experimental Investigation of Observation Error in Anuran Call Surveys. *Journal of Wildlife Management* 74(8): 1882-1893.
- Stringer, E.M., M.K. Stoskopf, **T.R. Simons**, A.F. O'Connell, and A. Waldstein. 2010. Ultrasonic Measurement of Body Fat as a Means of Assessing Body Condition in Free-Ranging Raccoons (*Procyon lotor*). *International Journal of Zoology* 2010: 1-6.
- Martin, J., A.F. O'Connell Jr., W. L. Kendall, M.C. Runge, **T.R. Simons**, A.H. Waldstein, S.A. Schulte, S.J. Converse, G.W. Smith, T. Pinion, M. Rikard, E.F. Zipkin. 2010. Optimal control of native predators. *Biological Conservation* 143: 1751-1758.
- Stanislav, S., Pollock, K.H., **Simons, T. R.** and M.W. Alldredge. 2010. Separation of Availability and Perception Processes for Aural Detection in Avian Point Counts: a Combined Multiple Observer and Time-Of-Detection Approach. *Avian Ecology and Conservation* 5(1): 3. [online] URL: <http://www.ace-eco.org/vol5/iss1/art3/>.
- Riddle, J.D., J.H. Pollock, and **T.R Simons**. 2010. An unreconciled double-observer method for estimating detection probability and abundance. *The Auk* 127(4):841-849.
- Riddle, J.D., R.S. Mordecai, K.H. Pollock, and **T.R. Simons**. 2010. Effects of prior detections on estimates of detection probability, abundance, and occupancy. *The Auk* 127: 1-6.
- Sanders, N.J., R.R. Dunn, M.C. Fitzpatrick, C.E. Carlton, M.R. Pogue, C.R. Parker, and **T.R. Simons**. 2010. Diverse Elevational Diversity Gradients in Great Smoky Mountains National Park, U.S.A. Pp. 75 – 87 in E.M Spehn and C. Korner, *Data Mining for Global Trends in Mountain Biodiversity*. CRC Press, Boca Raton, Florida.

- Simons, T. R.**, K. H. Pollock, J. M. Wettröth, M. W. Alldredge, K. Pacifici, and J. Brewster. 2009. Sources of measurement error, misclassification error, and bias in auditory avian point count data. Pp. 237-254 in D.L. Thomson et al. (eds.), *Modeling Demographic Processes in Marked Populations*, Environmental and Ecological Statistics 3, Springer Science and Business Media.
- Brewster, J.P. and **T.R. Simons**. 2009. Testing the importance of auditory detections in avian point counts. *Journal of Field Ornithology* 80: 178-182.
- Alldredge, M.W., Pacifici, K., **T.R. Simons**, and K.H. Pollock. 2008. A field evaluation of the effectiveness of distance sampling and double independent observers to estimate detection probability in aural avian point counts. *Journal of Applied Ecology* 45: 1349-1356.
- Pacifici, K., **T.R. Simons**, and K.H. Pollock. 2008. Effects of vegetation and background noise on the detection process in auditory avian point count surveys. *The Auk* 125:600-607.
- Webster, R. A., Pollock, K. H., and **Simons, T. R.** 2008. Bayesian spatial modeling of point transect data from bird surveys. *Journal of Agricultural, Biological and Environmental Statistics* 13: 121-139.
- Alldredge, M.W. **T.R. Simons**, K.H. Pollock, and K. Pacifici. 2007. A Field Evaluation of the time-of-detection method to estimate population size for Aural Avian Point Counts. *Avian Ecology and Conservation* 2(2):13.
- Alldredge, M.W., **T.R. Simons**, and K.H. Pollock. 2007. An experimental evaluation of distance measurement error in avian point count surveys. *Journal of Wildlife Management* 71: 2759-2766.
- Alldredge, M.W., K.H. Pollock, **T.R. Simons**, J.A. Collazo, and S.A. Shriner. 2007. Time of detection method for estimating abundance from point count surveys. *The Auk* 124(2): 653-664.
- Alldredge, M.W., **T.R. Simons**, and K.H. Pollock. 2007. Factors affecting aural detections of songbirds. *Ecological Applications* 17:948-955.
- Alldredge, M.W., K.H. Pollock, **T.R. Simons**, and S.A. Shriner. 2007. Multiple species analysis of point count data: a more parsimonious modeling framework. *Journal of Applied Ecology* 44: 281-290.
- Podolsky, A.L., **T.R. Simons**, and J.A. Collazo. 2007. Modeling population growth of the Ovenbird in the southern Appalachians. *The Auk* 124:1359-1372.
- Simons, T.R.**, M.W. Alldredge, and K.H. Pollock. 2007. Experimental analysis of the auditory detection process on avian point counts. *The Auk* 124: 986-999.
- Alldredge, M.W., K.H. Pollock, and **T.R. Simons**. 2006. Estimating detection probabilities from multiple-observer point counts. *The Auk* 123: 1172-1182.
- McGowan, C.P. and **T.R. Simons**. 2006. Effects of human disturbance on the incubation behavior of American Oystercatchers. *Wilson Bulletin* 118: 485-493.
- Simons, T.R.**, S.A. Shriner, and G.L. Farnsworth. 2006. Comparison of breeding bird and vegetation communities in primary and secondary forests of Great Smoky Mountains National Park. *Biological Conservation* 129: 302-311.

- Farnsworth, G.L. and **T.R. Simons**. 2005. Relationship between Mayfield nest-survival estimates and seasonal fecundity: A cautionary reply. *The Auk* 122: 1000-1001.
- Farnsworth, G.L., J.D. Nichols, J.R. Sauer, S.T. Fancy, K.H. Pollock, S.A. Shriner, and **T.R. Simons**. 2005. Statistical approaches to the analysis of point count data: a little extra information can go a long way. USDA Forest Service, Gen. Tech. Rep. PSW-GTR-191: 736-743.
- Hyde, E.J., and **T.R. Simons**. 2005. Monitoring Salamander Populations in Great Smoky Mountains National Park. Chapter 44 *In: Amphibian Declines: the conservation and status of United States Species* (M.J. Lannoo ed.). University of Iowa Press.
- Moore, F.R., M.S. Woodrey, J.J. Buler, S. Woltmann, and **T.R. Simons**. 2005. Understanding the stopover of migratory birds: a scale dependent approach. USDA Forest Service, Gen. Tech. Rep. PSW-GTR-191: 684-689.
- McGowan, C.P. and **T.R. Simons**. 2005. A method for trapping breeding adult American Oystercatchers. *Journal of Field Ornithology* 76: 46-49.
- McGowan, C.P., **T.R. Simons**, W. Golder, and J. Cordes. 2005 A comparison of American Oystercatcher reproductive success on barrier beach and river island habitats in coastal North Carolina. *Waterbirds* 28: 150-155.
- McGowan, C.P., S.A. Schulte, and **T.R. Simons**. 2005. Resightings of marked American Oystercatchers banded as chicks. *Wilson Bulletin* 117: 382-385.
- Bailey, L. L., **T. R. Simons**, and K. H. Pollock. 2004. Estimating detectability parameters for plethodon salamanders using the robust capture-recapture design. *Journal of Wildlife Management* 68: 1-13.
- Bailey, L. L., **T. R. Simons**, and K. H. Pollock. 2004. Spatial and temporal variation in detection probability of plethodon salamanders using the robust capture-recapture design. *Journal of Wildlife Management* 68: 14-24.
- Bailey, L. L., **T. R. Simons**, and K. H. Pollock. 2004. Estimating site occupancy and species detection probability parameters for terrestrial salamanders. *Ecological Applications* 14: 692-702.
- Bailey, L.L., **T.R. Simons**, and K.H. Pollock. 2004. Comparing population size estimators for Plethodontid salamanders. *Journal of Herpetology* 38: 370-380.
- Podolsky, A., **T. R. Simons**, and J. A. Collazo. 2004. A Method of food supplementation for ground-foraging insectivorous birds. *Journal of Field Ornithology* 75: 296-302.
- Pollock, K.H., H.H. Marsh, L.L. Bailey, G.L. Farnsworth, **T.R. Simons**, and M.W. Alldredge. 2004. Separating components of detection probability in population abundance estimation: An overview with diverse examples. Chapter 3, pp. 43-58, *In: Sampling rare or elusive species: Concepts, designs, and techniques for estimating population parameters*. William Thompson (ed.). Island Press.
- Simons, T.R.**, F.R. Moore, and S.A. Gauthreaux. 2004. Mist netting trans-Gulf migrants at coastal stopover sites: the influence of spatial and temporal variability on capture data. *In: The use of mist nets to monitor bird populations*, (C.J. Ralph and E.H. Dunn eds.). *Studies in Avian Biology* 29: 135-143.

- Farnsworth, G. L., K. H. Pollock, J. L. Nichols, **T. R. Simons**, J. E. Hines, and J. R. Sauer. 2002. A removal model for estimating detection probabilities from point count surveys. *The Auk* 119: 414-425.
- Pearson, S.M., and **T.R. Simons**. 2002. Spatial analysis of stopover habitats of Neotropical migratory birds. Chapter 52 *In: Predicting Species Occurrences: Issues of Scale and Accuracy* (J.M. Scott et al. eds.). Island Press.
- Pollock, K.H., J.D. Nichols, **T.R. Simons**, G.L. Farnsworth, L.L. Bailey, and J.R. Sauer. 2002. Large scale wildlife monitoring studies: statistical methods for design and analysis. *Environmetrics* 13: 105-119.
- Lichstein, J.W., **T.R. Simons**, and K.E. Franzreb. 2002. Landscape effects on breeding songbird abundance in managed forests. *Ecological Applications* 12: 836-857.
- Lichstein, J.W., **T.R. Simons**, S.A. Shriner, and K.E. Franzreb. 2002. Spatial autocorrelation and autoregressive models in ecology. *Ecological Monographs* 72: 445-463.
- Shriner, S.A., and **T.R. Simons** and George L. Farnsworth. 2002. A GIS-based habitat model for Wood Thrush, *Hylocichla mustelina*, in Great Smoky Mountains National Park. Chapter 47 *In: Predicting Species Occurrences: Issues of Scale and Accuracy* (J.M. Scott et al. eds.). Island Press.
- Davis, M.B., **T.R. Simons**, M.J. Groom, J.L. Weaver, and J.R. Cordes. 2001. The breeding status of American Oystercatcher on the east coast of North America and breeding success in North Carolina. *Waterbirds* 24: 195-202.
- Farnsworth, G.L. and **T.R. Simons**. 2001. How many baskets? Clutch sizes that maximize annual fecundity of multiple-brooded birds. *The Auk* 118: 973-982.
- Hyde, E.J. and **T.R. Simons**. 2001. Sampling Plethodontid salamanders: sources of variability. *Journal of Wildlife Management* 65: 624-632.
- Farnsworth, G.L. and **T.R. Simons**. 2000. Observation of Wood Thrush nest predators in a large contiguous forest. *Wilson Bulletin* 112: 82-87.
- Farnsworth, G.L., K.C. Weeks, and **T.R. Simons**. 2000. Validating the assumptions of the Mayfield Method. *Journal of Field Ornithology* 71: 658-664.
- Simons, T.R.**, S.A. Pearson, and F.R. Moore. 2000. Application of spatial models to the stopover ecology of trans-Gulf migrants. *Studies in Avian Biology* 20: 4-14.
- Simons, T.R.**, G.L. Farnsworth, and S.A. Shriner. 2000. Evaluating Great Smoky Mountains National Park as a population source for the Wood Thrush. *Conservation Biology* 14: 1133-1144.
- Farnsworth, G.L. and **T.R. Simons**. 1999. Factors affecting nesting success of Wood Thrushes in Great Smoky Mountains National Park. *The Auk* 116: 1075-1082.
- Farnsworth, G.L. and **T.R. Simons**. 1999. Is Great Smoky Mountains National Park acting as a population source for Wood Thrushes? *Research and Resources Management in Parks and Public Lands* 10: 109-113. The George Wright Society, Hancock, Michigan.

- Simons, T.R.** and C.N. Hodges. 1998. The Dark-rumped Petrel (*Pterodroma phaeopygia*) *In: The Birds of North America*, No. 345 (A. Poole, and F. Gill, eds.). The Birds of North America Inc., Philadelphia, PA, 24 pp.
- Simons, T.R.**, S.K. Sherrod, M.W. Collopy, and M.A. Jenkins. 1998. Restoring the Bald Eagle. Chapter 23 *In: Exploring Ecology and Its Applications* (P.M. Kareiva ed.). Sigma Xi, Research Triangle Park, NC.
- Simons, T.R.**, K.N. Rabenold, D.A. Buehler, J. Collazo, and K.E. Franzreb. 1998. The role of indicator species: Neotropical migratory song birds. Chapter 9 *In: Ecosystem management for sustainability: principles and practices illustrated by the Southern Appalachian Man and Biosphere Cooperative* (J. Peine, ed.). CRC Press.
- Rakocinski, C.F., R.W. Heard, S.E. Le Croy, J.A. McLelland, and **T.R. Simons**. 1996. Responses by macrobenthic assemblages to extensive beach restoration at Perdido Key, Florida, U.S.A. *Journal of Coastal Research* 12: 326-353.
- Moore, F. R., S. A. Gauthreaux, Jr., P. Kerlinger, and **T. R. Simons**. 1995. Habitat Requirements During Migration: Important Link in Conservation. *In: Ecology and Management of Neotropical Migratory Birds: A Synthesis and Review of Critical Issues* (T. E. Martin and D. M. Finch eds.). Oxford Univ. Press.
- Bartle, J.A., D. Hu, P. Pyle, **T.R. Simons**, J.C. Stahl, and D. Woodby. 1993. Status and ecology of gadfly petrels in the temperate North Pacific. *In: The status ecology and conservation of marine birds of the North Pacific* (K. Vermeer, K. T. Briggs, K.H. Morgan and D. Siegel Causey eds.). Canadian Wildlife Service, Ottawa.
- Moore, F.R., S.A. Gauthreaux, P. Kerlinger, and **T.R. Simons**. 1993. Stopover habitat: Management implications and guidelines. *In: Status and management of Neotropical migratory birds* (D. M. Finch and P.J. Stangel, eds). U.S. Forest Service, Fort Collins, Colorado.
- Moore, F.R. and **T.R. Simons**. 1993. Orientation behavior of migratory birds in response to EMPRESSII-simulated EMP. *In: EMP human health effects*. U.S. Navy, Washington, D.C.
- Rakocinski, C. F., R.W. Heard, S.E. LeCroy, J. A. McLelland, and **T. R. Simons**. 1993. Seaward change and zonation of the sandy-shore macrofauna at Perdido Key, Florida, U.S.A. *Estuarine, Coastal, and Shelf Science* 36: 81 - 104.
- Moore, F.R., and **T.R. Simons**. 1992. Habitat suitability and the stopover ecology of Neotropical passerine migrants. *In: Ecology and Conservation of Neotropical Migrant Landbirds* (J.W. Hagan and D.W. Johnston, eds.). Smithsonian Institution Press, Washington, D.C.
- Kuenzi, A.J., F.R. Moore, and **T.R. Simons**. 1991. Stopover of Neotropical landbird migrants on East Ship Island following trans-Gulf migration. *Condor* 93: 869-883.
- Rakocinski, C., R. Heard, **T.R. Simons**, and D. Their. 1991. Macroinvertebrate associations from beaches of selected barrier islands in the Northern Gulf of Mexico: important environmental relationships. *Bulletin of Marine Science* 48: 689-701.
- Kepler, C.B., A.K. Kepler, **T.R. Simons**, B. Hobdy, and P.M. Simons. 1990. Hawaii's seabird islands, No. 3: Moku-ho'oniki and Kanaha Rock, Molokai, 'Elepaio 50: 75-79.

- Moore, F.R., P. Kerlinger, and **T.R. Simons**. 1990. Stopover on a Gulf Coast Barrier Island by spring trans-Gulf migrants. *Wilson Bulletin* 103: 487-500.
- Holler, N.R., D.W. Mason, R.M. Dawson, **T.R. Simons**, and M.C. Wooten. 1989. Reestablishment of the Perdido Key beach mouse (*Peromyscus polionotus trissyllepsis*) on Gulf Islands National Seashore. *Conservation Biology* 3: 397-404.
- Simons, T.R.** and C.W. Whittow. 1989. A seabird in the house of the sun. *Natural History*, March 1989: 50-53.
- Simons, T.R.**, S.K. Sherrod, M.W. Collopy, and M.A. Jenkins. 1988. Restoring the Bald Eagle. *American Scientist* 76: 252-260.
- Pierce, J.D., and **T.R. Simons**. 1986. The influence of human disturbance on Tufted Puffin breeding success. *The Auk* 103: 214-216.
- Simons, T.R.** 1985. Biology and behavior of the endangered Hawaiian Dark-rumped Petrel. *Condor* 87: 229-245.
- Simons, T.R.**, P.M. Simons, C.B. Kepler, and A.K. Kepler. 1985. Hawaii's seabird islands, No.2: Hulu Island and vicinity. *'Elepaio* 45: 111-113.
- Kepler, C.B., A.K. Kepler, and **T.R. Simons** 1984. Hawaii's seabird islands, No. 1: Moke'ehia. *'Elepaio* 44: 71-74.
- Simons, T.R.** 1984. A population model of the endangered Hawaiian Dark-rumped Petrel. *Journal of Wildlife Management* 48: 1065-1076.
- Simons, T.R.** and G.C. Whittow. 1984. Energetics of growth in the Dark-rumped Petrel. Chapter 8 *In: Seabird Energetics*, G.C. Whittow, ed., Plenum, New York.
- Whittow, G.C., **T.R. Simons**, and T.N. Pettit. 1984. Water loss from the eggs of a tropical seabird (*Pterodroma phaeopygia*) at high altitude. *Comparative Biochemistry and Physiology* 78: 537-540.
- Simons, T.R.** 1981. Behavior and attendance patterns of the Fork-tailed Storm Petrel. *The Auk* 98: 145-158.
- Simons, T.R.** 1981. A simple event recorder for monitoring cavity-dwelling animals. *Murrelet* 62: 27-30.
- Simons, T.R.** 1980. Discovery of a ground-nesting Marbled Murrelet. *Condor* 82: 1-9.
- TECHNICAL AND OTHER PUBLICATIONS
- Simons, T.R.** 1981. Seabirds and park management. *In: Proceedings; Hawaii Forestry and Wildlife Conference 1980*. U.S. Dept. Agriculture, U.S. Forest Service.
- Simons, T.R.** 1983. Biology and conservation of the endangered Hawaiian Dark-rumped Petrel (*Pterodroma phaeopygia sandwichensis*). National Park Service, Cooperative Park Studies Unit, College of Forest Resources, University of Washington, Seattle, Washington. CPSU/UW 83-2, 311 p.

- Simons, T.R.** 1987. The role of research in developing resource management tools at Gulf Islands National Seashore. *In: Estuarine and Coastal Management - Tools of the Trade*. The Coastal Society.
- Simons, T.R.** 1989. Proposed Migratory Bird Watch to encompass research, monitoring, and interpretation. *Park Science* 9(3):8.
- Simons, T.R.** 1990. The migratory bird watch program: an overview and summary of research at Gulf Islands National Seashore. *In: Proceedings of the nongame migratory bird workshop, Atlanta, GA*. U.S. Fish and Wildlife Service, Fort Collins, Colorado. 312 pp.
- Simons, T.R.** 1995. Coastal Park Inventory and Monitoring Handbook. National Park Service Technical Report NPS/SERNCSU/NRTR-95/01, 192 pp.
- Simons, T.R.** and P.M. Simons 1981. Breeding biology of the Dark-rumped Petrel in the Hawaiian Islands. *In: Proceedings of the Third Conference in Natural Sciences, Hawaii Volcanoes National Park*. CPSU/UH, University of Hawaii, Honolulu, Hawaii.
- Simons, T.R.**, and J.D. Scurry. 1988. Application of GIS technology to monitor barrier island change: Integration of SAGIS and MOSS and Gulf Islands National Seashore. *In: Proceedings fifth national MOSS users workshop*. Louisiana Sea Grant College Program, Baton Rouge, and U.S. Fish and Wildlife Service, Slidell, LA. 308 pp.
- Rabenold, P.P. and **T.R. Simons**. 1991. Genetic diversity in barrier island Carolina Wren populations. Final report to the Mississippi Commission on Wildlife, Fisheries, and Parks. 12 pp.
- Simons, T.R.**, and F.R. Moore. 1993. Operation of EMPRESS II and the behavior of migratory birds in the Gulf of Mexico. Final report to the Dept. Navy, Naval Sea Systems Command, 125 pp.
- Esher, R.J., and **T.R. Simons**. 1993. Red Wolf propagation on Horn Island, Mississippi: Red Wolf ecological studies. Final report to the U.S. National Park Service, 35 pp.
- Grundel, R. and **T.R. Simons**. 1994. Neotropical migratory bird workshop and research. *Park Science* 14(3): 1 - 5.
- Simons, T.R.** and G.L. Farnsworth. 1995. Evaluating Great Smoky Mountains National Park as a population source of Wood Thrush. Annual report to the National Park Service, 18 pp.
- Simons, T.R.**, K. Rabenold, and G.L. Farnsworth. 1995. Characterization of deciduous forest breeding bird communities of Great Smoky Mountains National Park. Final report to the National Park Service, 84 pp.
- Simons, T.R.** and S.A. Shriner. 1997. Ecology and conservation of Neotropical migrants in the southern Appalachians. 1996 Annual report to the National Park Service, 21 pp.
- Simons, T.R.** and G. L. Farnsworth. 1997. Evaluating Great Smoky Mountains National Park as a population source for Wood Thrush. 1996 Annual report to the National Park Service, 26 pp.
- Simons, T.R.** and S.A. Shriner. 1998. Ecology and conservation of Neotropical migrants in the southern Appalachians. 1997 Annual report to the National Park Service, 27 pp.

- Simons, T.R.** and G. L. Farnsworth. 1998. Evaluating Great Smoky Mountains National Park as a population source for Wood Thrush. 1997 Annual report to the National Park Service, 29 pp.
- Simons, T.R.**, J.L. Lichstein, and K.E. Franzreb. 1998. The effects of landscape pattern, core areas, and forest management practices on avian communities in the southern Appalachians. 1997 Annual report to the U.S. Forest Service, 23 pp.
- Ross, D.L., Jr., K.N. Rabenold, and **T.R. Simons**. 1998. Indicator Birds of the Costa Rican Cloud Forest. Library of Natural Sounds, Cornell Laboratory of Ornithology. ISBN 0-938027-42-5.
- Simons, T.R.** and S.A. Shriner. 1999. Ecology and conservation of Neotropical migrants in the southern Appalachians. 1998 Annual report to the National Park Service, 30 pp.
- Simons, T.R.**, J.L. Lichstein, and K.E. Franzreb. 1999. The effects of landscape pattern, core areas, and forest management practices on avian communities in the southern Appalachians. 1998 Annual report to the U.S. Forest Service, 44 pp.
- Simons, T.R.**, and E. Johnson. 1999. Assessing the diversity and habitat associations of salamanders in Great Smoky Mountains National Park. 1998 Annual report to the National Park Service, 22 pp.
- Simons, T.R.** and S.A. Shriner. 2000. Ecology and conservation of Neotropical migrants in the southern Appalachians. 1999 Annual report to the National Park Service, 27 pp.
- Simons, T.R.**, J.L. Lichstein, and K.E. Franzreb. 2000. The effects of landscape pattern, core areas, and forest management practices on avian communities in the southern Appalachians. 1999 Annual report to the U.S. Forest Service, 23 pp.
- Simons, T.R.**, L.L. Bailey, E.J. Hyde, and K.J. Pollock. 2000. Evaluation of salamander habitat associations and population monitoring techniques in Great Smoky Mountains National Park. 1999 Annual report to the Environmental Protection Agency, 20 pp.
- Simons, T.R.**, C. McGowan, J. Cordes, M. Lyons, and W. Golder. 2003. American Oystercatcher (*Haematopus paliatus*) research and monitoring in North Carolina. Annual report to the National Park Service and the US. Fish and Wildlife Service, 27 pp.
- Simons, T.R.** and K.J. Pollock. 2003. Estimating detection probabilities for community assessment and population monitoring. Annual report to the USGS Status and Trends Program, 33 pp.
- Simons, T.R.** and K.J. Pollock. 2004. Estimating detection probabilities for community assessment and population monitoring. Annual report to the USGS Status and Trends Program, 21 pp.
- Simons, T.R.** and K.J. Pollock. 2005. Estimating detection probabilities for community assessment and population monitoring. Annual report to the USGS Status and Trends Program, 29 pp.
- Simons, T.R.** and K.J. Pollock. 2006. Estimating detection probabilities for community assessment and population monitoring. Annual report to the USGS Status and Trends Program, 33 pp.

- Simons, T.R.,** S. Schulte, C. McGowan, J. Cordes, M. Lyons, W. Golder. 2006. American Oystercatcher (*Haematopus palliatus*) research and monitoring in North Carolina. 2005 Annual report to the National Park Service, U.S. Fish and Wildlife Service, and the National Audubon Society. 46 pp.
- Simons, T.R.,** and R. Hylton. 2006. Assessment of Black-capped Chickadees as a Model Species for a Calcium Limitation Study in the Southern Appalachians. 2005 Annual Report to the National Park Service and the U.S. Geological Survey. 25 pp.
- Simons, T.R.,** and N. Tarr. 2006. Measuring the effect of off-road vehicles on beach birds at Cape Lookout National Seashore. 2005 Annual report to the National Park Service. 26 pp.
- Simons, T.R.,** S. Schulte, J. Cordes, M. Lyons, W. Golder. 2007. American Oystercatcher (*Haematopus palliatus*) research and monitoring in North Carolina. 2006 Annual report to the National Park Service, U.S. Fish and Wildlife Service, and the National Audubon Society. 46 pp.
- Simons, T.R.** and R. Hylton. 2007. Assessing the Effects of Atmospheric Pollution on High Elevation Bird and Snail Communities in the Southern Appalachians. 2006 Annual Report to the National Park Service and the U.S. Geological Survey. 20 pp.
- Simons, T.R.,** and N. Tarr. 2007. The effects of vehicle traffic on migrating shorebirds at Cape Lookout National Seashore. 2006 Annual report to the National Park Service. 39 pp.
- Simons, T.R.,** and S. Schulte. 2008. American Oystercatcher (*Haematopus palliatus*) research and monitoring in North Carolina. 2007 Annual report to the National Park Service, U.S. Fish and Wildlife Service, and the National Audubon Society. 58 pp.
- Simons, T.R.,** and N. Tarr. 2008. Fall shorebird migration and ORV disturbance at Cape Lookout National Seashore. 2007 Annual report to the National Park Service. 66 pp.
- Simons, T.R.** and R. Hylton. 2008. Effects of Atmospheric Pollution on High Elevation Fauna in the Great Smoky Mountains National Park. 2007 Annual Report to the National Park Service and the U.S. Geological Survey. 49 pp.
- Simons, T.R.,** A. Waldstein, and A. O'Connell. 2008. Raccoon (*Procyon lotor*) Ecology at Cape Lookout National Seashore, North Carolina. 2007 Annual Report to the National Park Service. 58 pp.
- Simons, T.R.,** K.H. Pollock, J.M. Wettrath, M.W. Alldredge, K. Pacifici, and J. Brewster. 2008. Sources of measurement error, misclassification error, and bias in auditory avian point count data. *The All-Bird Bulletin*, March 2008: 2-3.
- Simons, T.R.** and J.J. Stocking. 2010. American Oystercatcher Conservation Initiative – North Carolina. 2010 Annual Report to the National Park Service. 22 pp.
- Simons, T.R.** and T. Borneman. 2010. Effects of Military Jet Overflights on American Oystercatcher Breeding Behavior and Productivity at Cape Lookout National Seashore. 2010 Annual Report to the U.S. Marine Corps. 36 pp.
- Simons, T.R.** and J.J. Stocking. 2011. American Oystercatcher Conservation Initiative – North Carolina. 2011 Annual Report to the National Park Service. 26 pp.

Simons, T.R. and T. Borneman. 2011. Effects of Military Jet Overflights on American Oystercatcher Breeding Behavior and Productivity at Cape Lookout National Seashore. 2011 Annual Report to the U.S. Marine Corps. 44 pp.

SELECTED PROFESSIONAL PRESENTATIONS

"Attendance patterns of the Fork-tailed Storm Petrel", Pacific Seabird Group annual meeting, Victoria, B.C., January 1978

"Breeding habits of the Marbled Murrelet", Pacific Seabird Group annual meeting, Monterey, California, December 1978

"Behavior and attendance patterns of the Fork-tailed Storm Petrel", Pacific Seabird Group annual meeting, Monterey, California, January 1980

"Breeding biology of the Dark-rumped Petrel in the Hawaiian Islands", National Park Service Science Conference, Hawaii Volcanoes National Park, Volcano, Hawaii, June 1980

"Development of a management plan for the Dark-rumped Petrel in Haleakala National Park", Hawaii Forestry and Wildlife Conference, Honolulu, Hawaii, October 1980*

"Breeding biology and behavior of the Dark-rumped Petrel in the Hawaiian Islands", Pacific Seabird Group annual meeting, Seattle, Washington, January 1982

"The energetics of growth in breeding Dark-rumped Petrels", American Physiological Society, annual meeting, Honolulu, Hawaii, August 1983*

"Breeding and population biology of the endangered Hawaiian Dark-rumped Petrel", American Ornithologists' Union, Centennial Meeting, New York, September 1983*

"A population model of the endangered Hawaiian Dark-rumped Petrel", Pacific Seabird Group annual meeting, Monterey, California, January 1984

"Avian mortality associated with Hurricane Elena" American Ornithologists' Union, annual meeting, Starkville, Mississippi, August 1986

"Behavior and ecology of trans-Gulf migrants on the Mississippi barrier islands" American Ornithologists' Union, annual meeting, San Francisco, California, August 1987

"Conservation and management of endangered and threatened birds at Gulf Islands National Seashore" Mississippi Academy of Sciences, annual meeting, Biloxi, Mississippi, March 1988*

"Application of GIS technology to monitor barrier island change: integration of SAGIS and MOSS at Gulf Islands National Seashore" Fifth National MOSS users conference, New Orleans, Louisiana, May 1988*

"The migratory bird watch program: an overview and summary of research at Gulf Islands National Seashore" Non-game migratory bird workshop, U.S. Fish and Wildlife Service, Atlanta, Georgia, November 1989*

"Habitat suitability and the stopover ecology of Neotropical passerine migrants" Symposium on the ecology and conservation of Neotropical migrant landbirds, Woods Hole, Massachusetts, December 1989*

"Stopover habitat: a limiting resource for migratory passerine birds?" Society for Conservation Biology, annual meeting, Madison, Wisconsin, June 1991

"Conservation of Neotropical migratory birds" Non-game bird management workshop, U.S. Fish and Wildlife Service, Gainesville, Florida, September 1991*

"Monitoring Neotropical migratory bird populations in protected habitats" Society for Conservation Biology, annual meeting, Blacksburg, Virginia, June 1992

"Habitat needs of Neotropical migrants during migration" Neotropical migratory bird symposium, joint meeting of the American Birding Association and the Association of Field Ornithologists, New London Connecticut, October 1992*

"Orientation behavior of migratory birds in response to EMPRESS-simulated EMP" EMP human health effects science review panel, US Navy, Williamsburg, Virginia, March 1993*

"Mist netting trans-Gulf migrants at coastal stopover sites: The influence of spatial and temporal variability on capture data" Workshop on the use of mist nets to monitor bird populations, Tomales Bay, California, October 1993*

"Application of spatial models to the stopover ecology of trans-Gulf migrants." American Ornithologists' Union annual meeting, Missoula, Montana, June 1994*

"Is Great Smoky Mountains National Park a Wood Thrush population source?" American Ornithologists' Union annual meeting, Missoula, Montana, June 1994

"Avian diversity in managed and unmanaged landscapes in the Southern Appalachians." Ecological Society of America, annual meeting, Knoxville, Tennessee, August 1994*

"Partners in wildlife conservation." North Carolina Wildlife Federation, February 1995*

"Ecology and conservation of Neotropical migratory birds." University of Richmond, March 1995.*

"Protecting avian diversity in the Southern Appalachians." Southern Appalachian Forest Coalition, Bird Conservation Summit, Asheville, NC, February 1996.*

"Correlates of spatial pattern in the stopover ecology of trans-Gulf Migrants" International Association for Landscape Ecology, 12th Annual Symposium, Duke University, Durham, NC, March 1997.

"How do predation and the length of the breeding season constrain the optimal clutch size of precocial birds?" American Ornithologists' Union 115th Annual Meeting, University of Minnesota, Minneapolis, MN, August 1997 (presented by George Farnsworth).

"A comparison of the composition, relative abundance and diversity of the breeding forest bird community in old growth and second growth sites in Great Smoky Mountains National Park." American Ornithologists' Union 115th Annual Meeting, University of Minnesota, Minneapolis, MN, August 1997 (presented by Susan Shriner).

"Spatial pattern correlates to the stopover ecology of trans-Gulf migrants." American Ornithologists' Union 115th Annual Meeting, University of Minnesota, Minneapolis, MN, August 1997.

"Patterns of breeding bird diversity and abundance across land use gradients in the southern Appalachians." North American Ornithological Congress, St. Louis, MO, April 1998 (presented by Jeremy Lichstein).

"Evaluating Great Smoky Mountains National Park as a population source for Wood Thrush." North American Ornithological Congress, St. Louis, MO, April 1998 (presented by George Farnsworth).

"Modeling Wood Thrush habitat associations in the southern Appalachians." North American Ornithological Congress, St. Louis, MO, April 1998.

"Behavior and ecology of intercontinental migrant landbirds: Importance of scale." North American Ornithological Congress, St. Louis, MO, April 1998 (presented by Frank Moore).*

"Assessing diversity, abundance, and habitat associations of salamanders in Great Smoky Mountains National Park." 10th Conference on Research and Resource Management in Parks and Public Lands, Asheville, NC, March 1999 (presented by Erin Johnson).

"Calibration of relative abundance indices for salamanders in Great Smoky Mountains National Park." 10th Conference on Research and Resource Management in Parks and Public Lands, Asheville, NC, March 1999 (presented by Larissa Bailey).

"Developing an inventory of breeding birds in Great Smoky Mountains National Park: Idealism meets practicality." 10th Conference on Research and Resource Management in Parks and Public Lands, Asheville, NC, March 1999 (presented by Susan Shriner).

"Factors affecting nesting success of Wood Thrush, *Hylocichla mustelina*, in Great Smoky Mountains National Park." 10th Conference on Research and Resource Management in Parks and Public Lands, Asheville, NC, March 1999 (presented by George Farnsworth).

"Landscape context and habitat use by migratory land birds." Management of forest birds in the southeastern United States. Biloxi, MS, April 1999 (presented by Scott Pearson).*

"Modeling habitat associations of breeding birds in Great Smoky Mountains National Park." Predicting Species Occurrences: Issues of Scale and Accuracy, Snowbird, UT, October 1999 (presented by Susan Shriner).*

"Spatial analysis of stopover habitats of Neotropical migratory birds." Predicting Species Occurrences: Issues of Scale and Accuracy, Snowbird, UT, October 1999 (presented by Scott Pearson).*

"Assessing diversity, abundance, and habitat associations of salamanders in Great Smoky Mountains National Park." Predicting Species Occurrences: Issues of Scale and Accuracy, Snowbird, UT, October 1999 (poster).

"A multi-scale assessment of the effects of landscape composition on breeding birds in southern Appalachian forests." Predicting Species Occurrences: Issues of Scale and Accuracy, Snowbird, UT, October 1999 (poster).

"Evaluation of salamander population monitoring techniques in Great Smoky Mountains National Park." Predicting Species Occurrences: Issues of Scale and Accuracy, Snowbird, UT, October 1999 (poster).

"A history of Neotropical migratory bird conservation." Wings Over Water, Cape Hatteras North Carolina, November 1999.*

"Estimating seasonal fecundity in songbirds: a comparison of several models." Society for Conservation biology, Missoula, Montana, June 2000 (presented by George Farnsworth).

"A comparison of breeding bird communities in primary and secondary eastern deciduous forests." Society for Conservation biology, Missoula, Montana, June 2000.

"Comparison of normal, Poisson, and negative binomial regression models for analyzing count data: An example with southern Appalachian songbirds." American Ornithologists' Union, St. Johns, Newfoundland, August 2000 (presented by Jeremy Lichstein).

"Habitat models for breeding songbirds in a large contiguous forest." American Ornithologists' Union, St. Johns, Newfoundland, August 2000 (presented by Susan Shriner).

"A removal model for estimating detection probabilities from point-count surveys." American Ornithologists' Union, St. Johns, Newfoundland, August 2000 (presented by George Farnsworth).

"Evaluating Great Smoky Mountains National Park as a population source for the Wood Thrush." American Ornithologists Union, St. Johns, Newfoundland, August 2000.

"Breeding status of American Oystercatchers in the eastern United States and Canada." Annual Meeting of the Waterbird Society, Niagara Falls, Ontario, Canada. November 2001.

"Development of predictive models from breeding bird inventory data. All Taxa Biodiversity Inventory Conference, Great Smoky Mountains National Park." November 2001.**

"Estimating temporary emigration and detectability in Plethodon Salamanders using Pollock's robust design." Society for Conservation Biology, Canterbury, England. July 2002 (presented by Larissa Bailey).

"Sampling Plethodontid salamanders: sources of variability." Society for Conservation Biology, Canterbury, England. July 2002

"Spatial and temporal variation in detectability parameters for Plethodon salamanders." Annual meeting of The Wildlife Society, Bismarck, North Dakota. September 2002 (presented by Larissa Bailey).

"An experimental study of parental care under varying food availability." Third North American Ornithological Congress, New Orleans, LA. September 2002 (presented by Andrei Podolsky).

"Factors affecting nesting success of American Oystercatchers in North Carolina." Third North American Ornithological Congress, New Orleans, LA. September 2002 (presented by Conor McGowan).

"Estimating density from point-count surveys: theory with applications." Third North American Ornithological Congress, New Orleans, LA. September 2002 (presented by George Farnsworth).

"Evaluating the population status of Ovenbird in Great Smoky Mountains National Park." Third North American Ornithological Congress, New Orleans, LA. September 2002 (presented by Andrei Podolsky).

"Forest bird communities on managed and unmanaged landscapes in the southern Appalachians." Third North American Ornithological Congress, New Orleans, LA. September 2002.

"Conservation of southern Appalachian songbirds; methods, models, and emerging issues." Keynote address, Partners in Flight Annual Meeting, Virginia Tech., Blacksburg, VA, March 2003.*

"Estimating site occupancy and detection probabilities for terrestrial salamanders." Ecological Society of America, Savannah, Georgia, 2003 (presented by Larissa Bailey).

"Application of capture-recapture type models in point count surveys." The Statistical Society of Canada, Montreal, Canada, May 2004.* (presented by Ken Pollock).

"Experimental analysis of detection probabilities on avian point count censuses." Ecological Society of America Annual Meeting, Portland, Oregon, August 2004.

"Multiple-observer and time of detection methods for estimating abundance of birds from point count surveys." American Ornithologists' Union in conjunction with the Society of Canadian Ornithologists. Quebec, Canada, August 2004, (presented by Mat Alldredge).

"Multiple species modeling of point count surveys." American Ornithologists' Union in conjunction with the Society of Canadian Ornithologists. Quebec, Canada, August 2004, (presented by Mat Alldredge).

"Appropriate allocation of count-based and estimation-based sampling methods for monitoring plethodontid salamanders." 2004 Annual Meeting, The Wildlife Society, Calgary Alberta, Canada (presented by Larissa Bailey).

"Modeling wildlife habitat relationships, issues of scale and accuracy." Duke University, Durham, NC, September 2004.*

"The importance of estimating detection probabilities in animal sampling." University of North Carolina, Chapel Hill, NC, April 2005.*

"Dissecting detection probabilities on avian point count censuses." National Breeding Bird Survey State Coordinator's Meeting, Washington, D.C., April 2005.*

"Experimental analysis of detection probabilities on avian point count surveys." American Ornithologists' Union Annual Meeting, Santa Barbara, CA, August 2005.

"Factors affecting detection probabilities of point count surveys." American Ornithologists' Union Annual Meeting, Santa Barbara, CA, August 2005, (presented by Mat Alldredge).

"Estimating detection distance to birds detected by song." American Ornithologists' Union Annual Meeting, Santa Barbara, CA, August 2005 (presented by Mat Alldredge).

"Effects of human recreation on the incubation behavior of American Oystercatchers." 2006. Western Hemisphere Shorebird Science Meeting, Boulder, CO, (presented by Conor McGowan).

"Breeding bird inventories in Great Smoky Mountains National Park – links to research and monitoring." 2006. Association of Southeastern Biologists 67th annual meeting, Gatlinburg, TN.*

"Sources of measurement error, misclassification error, and bias in auditory avian point count data." 2006. IV North American Ornithological Congress, Veracruz, Mexico. Poster.

"Improved survival of American Oystercatcher nests on the Outer Banks of North Carolina: effects of Hurricane Isabel." 2006. IV North American Ornithological Congress, Veracruz, Mexico. (presented by Shiloh Schulte).

"Effects of acid deposition and calcium depletion on high elevation Southern Appalachian songbirds and terrestrial snails." 2006 Advances in Threat Assessment and Their Application to Forest and Rangeland Management Conference, Boulder, CO. (poster)

"Sources of measurement error, misclassification error, and bias in auditory avian point count data." 2007 EURING Technical Conference, Dunedin, New Zealand, January 2007.*

"Modeling Avian Detection Probabilities." American Statistical Association Annual Meeting. Salt Lake City, Utah, August 2007. (Presented by Ken Pollock).

"Status and distribution of the American Oystercatcher." 2007 International Wader Study Group Annual Conference, Workshop on Conservation Status of Oystercatchers Around the World, La Rochelle, France, October 2007.*

"The American Oystercatcher Working Group." 2007 International Workshop on Oystercatcher Research, Schiermonnikoog, Netherlands, October 2007.*

"A Demographic Model for American Oystercatchers in North Carolina." 2007 International Oystercatcher meeting, Schiermonnikoog, Netherlands October 2007.* (Presented by Shiloh Schulte).

"Sources of measurement error, misclassification error, and bias in auditory avian point count data." 2007 Southeast and Mid-Atlantic Partner's in Flight Conference, Patuxent Wildlife Research Center, Laurel, MD, October 2007.* (presented by Jason Riddle).

"Adaptive Management: Dealing with uncertainty in natural resources management." 2007 NC Wildlife Resources Commission, staff retreat, Hendersonville, NC, November 2007.*

"Sources of measurement error, misclassification error, and bias in auditory avian point count data." 2007 Midwest Fisheries and Wildlife Conference, Madison, WI, November 2007.*

"Mercury contaminating high elevation songbirds in Great Smoky Mountains National Park." 2007. American Ornithologists' Union, Laramie, WY. August 2007* (presented by Becky Keller).

"Mercury contaminating high elevation songbirds in Great Smoky Mountains National Park." 2007 Southern Appalachian Man and the Biosphere Conference, Johnson City, TN (poster).

"Sources of measurement error, misclassification error, and bias in auditory avian point count data." 2008 International Partners in Flight Conference, McAllen, TX, February 2008.*

"Workshop on Estimating Animal Abundance." Universidade de Evora, Portugal, 7-9 July 2008. Invited instructor with Jean-Dominique Lebreton and Ken Pollock.*

"A before-after-control-impact study of disturbance effects on nonbreeding shorebirds." 2008 American Ornithologists' Union Annual Meeting, Portland, Oregon (poster).

"Camera Traps and Mark-Resight Sampling of a Coastal Raccoon Population: Evaluating Estimates of Abundance, Density, Survival, and Sources of Bias." 10th International Mammal Congress (2009), Mendoza, Argentina* (presented by Arielle Waldstein).

"Evaluating spatial capture recapture models for estimating density of a raccoon population." Ecological Society of America, Annual Meeting August 2010 (presented by Beth Gardner).

“Sources of detection bias in animal sampling.”* Virginia Tech, invited seminar September 2010.

“Fifteen Years of American Oystercatcher Research in Coastal North Carolina.”* UNC Center for Marine Science and Technology, invited seminar November 2010.

“Sources of Detection Bias in Avian and Amphibian Sampling.”* Duke University, invited seminar January 2011.

“Effects of human activity on American Oystercatchers breeding at Cape Lookout National Seashore, North Carolina.” Ecological Society of America, annual meeting, Austin, TX, August 2011 (poster).

“From Program MARK to WinBUGS: Moving toward a hierarchical analysis of avian nest survival” Ecological Society of America, annual meeting, Austin, TX, August 2011 (poster).

“The importance of estimating detection probability in animal sampling”* Murdoch University, Perth Australia, invited seminar July 2011.

“Fifteen Years of American Oystercatcher Research on the Outer Banks of North Carolina - Focal Species Management in a Dynamic Environment”* Western Australian Wildlife Research Center, Wanneroo, Western Australia, invited seminar July 2011.

“Haematopology – collaborative focal species research and management in waterbird conservation”* Invited plenary lecture. Waterbird Society annual meeting, Annapolis, MD, 11 November 2011.

“American Oystercatcher Research on the Outer Banks of North Carolina.”* Invited Darwin Day Lecture, North Carolina Museum of Natural Sciences, Raleigh, NC, 11 February 2012.

“Calcium Limitation in High Elevation Birds in Great Smoky Mountains National Park” North American Ornithological Conference, Vancouver, BC, August 2012 (poster).

“Effects of human activity on American Oystercatchers breeding at Cape Lookout National Seashore, North Carolina” North American Ornithological Conference, Vancouver, BC, August 2012 (poster).

“Using artificial-egg heart rate monitors to assess the physiological response of American Oystercatchers (*Haematopus palliatus*) to anthropogenic activity” North American Ornithological Conference, Vancouver, BC, August 2012 (poster).

“Comparison of nest success and chick growth on traditional and non-traditional island sites for the American Oystercatcher in North Carolina” North American Ornithological Conference, Vancouver, BC, August 2012 (presented by Jessica Stocking).

“An experimental evaluation of the performance of acoustic recording systems for estimating avian species richness and abundance” North American Ornithological Conference, Vancouver, BC, August 2012 (presented by Antonio Celis-Murillo).

“Observer Expectation; an Overlooked Source of Bias in Repeated Count Surveys” North American Ornithological Conference, Vancouver, BC, August 2012 (poster).

“Amazing Migrants”* Invited talk at the Daily Planet, NC Museum of Natural Sciences, Raleigh, NC, 24 August 2012.

“Acoustical Communication in Birds”* Invited Science Café lecture, NC Museum of Natural Sciences, Raleigh, NC, 17 January 2013.

“Effects of off-road vehicles on American Oystercatchers nesting at Cape Hatteras National Seashore.” Waterbird Society annual meeting, LaPaz, Mexico, October 2014 (presented by Tracy Borneman).

“Harnessing a Collaborative Database for Demographic Modeling of American Oystercatchers.” Waterbird Society Annual Meeting, La Paz, Mexico, October 2014 (presented by Shilo Felton).

“Repeated count surveys help standardize multi-agency estimates of American Oystercatcher abundance.” Waterbird Society Annual Meeting, La Paz, Mexico, October 2014.

“Determining spatial and temporal overlaps of endangered small mammals and their invasive predators in the Florida Keys: inference from camera traps.” Wildlife Society Annual Meeting, Pittsburg, PA, October 2014 (poster).

“Understanding long-term trends in bird occurrence following an increase in the prevalence of fire on a southern Appalachian landscape.” American Ornithologists' Union, Annual Meeting, Fr. Collins, Colorado, September 2014, (presented by Eli Rose).

“The importance of estimating detection probability in animal sampling.”* Invited seminar, University of Tennessee, Knoxville, September 2014.

“The importance of estimating detection probability in animal sampling.”* Invited seminar, Clemson University, February 2015.

“Determining spatial and temporal overlaps of endangered small mammals and their invasive predators.” American Society of Mammalogists. June, 2015, Jacksonville, FL.(presented by Mike Cove).

“Managing American Oystercatcher Population Growth by Targeting Nesting Season Vital Rates.” Waterbird Society Annual Meeting, August 2015, Bar Harbor, Maine. (presented by Shilo Felton).

“Managing Native Predators To Protect Shorebirds: Evidence From An Experimental Removal Of Raccoons On The Outer Banks Of North Carolina.” Waterbird Society annual meeting, August 2015, Bar Harbor, Maine. (presented by Jessica Stocking).

“The American Oystercatcher Working Group – 15 years of collaborative focal species research and management.” Waterbird Society Annual Meeting, August 2015, Bar Harbor, Maine.

“Haematology – the ecology and conservation of American Oystercatchers: 15 years of collaborative focal species research in shorebird conservation.”* Invited Plenary Lecture, Western Hemisphere Shorebird Conference, Wallops Island, Virginia, October 2015.

“Evaluating Assumptions of Mark-Resight Models: An Island Case Study. The Wildlife Society Annual Meeting, October 2015, Manitoba, Canada. (presented by Arielle Parsons).

“Behavioral and Physiological Responses of Nesting American Oystercatchers to Off-Road Vehicles on North Carolina’s National Seashores.” Waterbird Society 2016 Annual Meeting, New Bern, NC, September 2016 (presented by Shilo Felton).

“Assessment of Storm Impacts on Coastal Bird Populations, Behavior, and Nesting along the Outer Banks Barrier Islands, North Carolina.” Waterbird Society 2016 Annual Meeting, New Bern, NC, September 2016. (poster).

“Exotic predators affect prey behavior with potential for trophic cascades in island ecosystems.” The Wildlife Society 2016 Annual Meeting, Raleigh, NC, October 2016 (presented by Mike Cove).

“Co-occurrence dynamics of endangered Lower Keys marsh rabbits and free-ranging cats.”* The Wildlife Society 2016 Annual Meeting, Raleigh NC, October 2016 (presented by Mike Cove).

* Invited Presentations