

NORMAN LEROY CHRISTENSEN, JR.
Curriculum Vitae – May 2010

Professor of Ecology
The Nicholas School of the Environment and Earth Sciences
Department of Biology (secondary appointment)
Duke University

ADDRESS, etc.

Office

Nicholas School of the Environment
Duke University, Box 90328
Durham, NC 27708

Home

[REDACTED]

Telephone (919) 613-8052
Fax (919) 684-8741
email normc@duke.edu

[REDACTED]

Born December 28, 1946 in Fresno, California.
Married with two children, two grandchildren

EDUCATION

A.B. (Biology) – California State University, Fresno, 1968
M.A. (Biology) – California State University, Fresno, 1970
Ph.D. (Biology) -- University of California, Santa Barbara, 1973

EMPLOYMENT

Assistant Professor, Department of Botany, Duke University, 1973-79
Associate Professor, Department of Botany, Duke University, 1979-87
Professor, Department of Botany, Duke University, 1987-1991)
Dean, Nicholas School of the Environment and Earth Sciences, 1991-2001
Professor of Ecology, Nicholas School of the Environment and Earth Sciences, 1991-present

RESEARCH INTERESTS

The effects of disturbance on structure and function of populations and communities, including analysis of patterns of forest development following cropland abandonment, comparative studies of biogeochemical and community responses to varying fire regimes; applications of remote sensing systems such as synthetic aperture radar to evaluate long-term changes in forest ecosystems. Christensen has written widely on the importance of natural disturbance in the management of forests, shrublands, and wetlands, and on the concept of ecosystem management.

AWARDS AND HONORS:

1977 Duke Endowment Award for Teaching Excellence
1989 E.V. Komarek Lecturer, Tall Timbers Fire Ecology Conference
1991 A. Starker Leopold Award, National Park Service -- Yellowstone
1991 Distinguished Teaching Award, Trinity College of Arts and Sciences, Duke University
1993 Fellow, American Association for the Advancement of Science
1994 Distinguished Scholar Award, Natural Sciences, California State University, Fresno
1995 Distinguished Alumnus Award, California State University, Fresno
2002-2005 Vice President for Finance, The Ecological Society of America
2004 Honorary Doctor of Science, The College of Wooster, Wooster, OH
2005 Clarence Korstian Award, Duke Forest
2006 Walton Lecturer, University of Virginia
2008 President, Ecological Society of America

BOARDS AND COMMITTEES

1993 National Science Foundation, Long-term Ecological Research Program, Ten-year Review Panel
1993-1999 Chair, National Academy of Sciences Committee on the Environmental Issues in Forest Management in the Pacific Northwest
1993-1995 Chair, Ecological Society of America, Committee on Ecosystem Management
1993-1995 Sierra Nevada Ecosystem Project Team
1993-present Board of Trustees, North Carolina Nature Conservancy
1993-present Board of Directors, The Conservation Fund
1994-1995 National Geographic Society Panel on Non-point-Source Pollution and Water Quality
1995 Chair, State of North Carolina Wetlands Task Force
1997 Co-chair, Federal Advisory Committee on the California Spotted Owl
1997-2004 US Nuclear Waste Technical Review Board (appointed by President Bill Clinton)
1999-present Board of Directors, Resources for the Future
1999-2004 Board of Governors, The North Carolina Museum of Natural Sciences
2001-2003 Board of Trustees, The Triangle Land Conservancy
2001-2003 Board of Trustees, The Forest History Society
2000-2008 National Commission on Science for Sustainable Forestry, Chair (2001-2003)
2003-2008 Advisory Panel, State of the Nation's Ecosystems Project, John Heinz Center.
2003-present Board of Trustees, Environmental Defense Fund
2003-present Sustainable Forestry Board
2007 U.S National Forest Service Fire Research Program Review Panel (Chair)

SERVICE TO PROFESSIONAL SOCIETIES

Editorial Board, *American Midland Naturalist*, 1979-1986
Chairman, Vegetation Section, Ecological Society of America, 1985-87
Awards Committee, Mercer Award, Ecological Society of America, 1988-1989
Editorial Board, *Journal of Vegetation Science*, 1989-94
Editorial Board, *Journal of Wildland Fire*, 1992-1996
Editorial Board, *Ecosystem Health*, 2000-2002
Vice President for Finance, Ecological Society of America, 2002-2005
Governing Board, Ecological Society of America, 2002-2009
President, Ecological Society of America, 2007-8

VISITING APPOINTMENTS

Visiting Associate Professor, University of Minnesota Forestry and Biological Station, Lake Itasca, MN, 1982

Visiting Associate Professor, University of Virginia Biological Station, Mountain Lake, VA, 1984, 1987
Guest Lecturer in Ecology, University of Barcelona, Spain. May 1988.

UNIVERSITY ADMINISTRATION

Director of Undergraduate Studies, Biology and Botany, Duke University, 1981-1986

Director, Angier B. Duke Memorial Scholarship Program, Duke University, 1988-1990

Executive Committee, Academic Council, Duke University, 1988-1990

Chair, Botany Department, Duke University, 1990-1991

Interim Director, Duke University Phytotron, 1990-1992

Dean, Nicholas School of the Environment, Duke University, 1991-2001

Executive Director, Duke Environmental Leadership Program 2002-2007

PROFESSIONAL SOCIETIES

The American Association for the Advancement of Science (Fellow)

The Ecological Society of America (President)

Association for Fire Ecology

The Forest History Society

Sigma Xi

Society of American Foresters

COURSES TAUGHT

Fall Semester: In alternate years, the following are offered in the Duke Environmental Leadership

ENV 463 – Program Management for Environmental Professionals (3 credits, 20-25 students). In the private and public sectors, as well as not-for-profit organizations, managerial effectiveness is central to environmental leadership. This course focuses on the development of management skills including decision-making, motivation, working in teams, organizational cultures, organizational design, learning organizations and change management.

ENV 464 – Ecosystem Science and Management (3 credits, 20-25 students). Environmental management must be accomplished in the context of arbitrary temporal and spatial boundaries, complexity, dynamic processes, uncertainty, and varied and changing human values. Topics in this course include adaptive management, decision-making in the context of uncertainty, conflict resolution, strategic planning, evaluation and accountability. Case studies cover terrestrial, aquatic and marine ecosystems and an array of social and institutional settings.

Spring Semester: (one of either ENV 25 or ENV 320)**ENV 25 – Introduction to Environmental Science and Policy.** (3 credits, 120-150 students).

An introduction to the study of environmental sciences and policy through exploration of basic environmental principles in the life, physical, and social sciences. Emphasis on understanding how the atmosphere, hydrosphere, lithosphere, cryosphere, and biosphere function, and how these spheres interact with human consumption, production, and technological patterns and processes.

ENV 320 – Ecosystem Management. (3 credits, 50 students). Principles of environmental management in the context of arbitrary temporal and spatial boundaries, complexity, dynamic processes, uncertainty and varied and changing human values.

1-Week Intensive Courses (at least one offered each year)

ENV 460 – Duke Environmental Leadership Orientation – Making a Difference in the World (1 credit, 15 students).

ENV 473 – Science and Management of Ecosystem Change (1 credit, 12 students, DEL)

ENV 475 – California Water Management Field Trip (1 credit, 12 students, DEL)

SCIENTIFIC PUBLICATIONS

101. Conde, D.A., F. Colchero, H. Zarza, **N.L. Christensen, Jr.**, J.O. Sexton, C. Monterola, C. Chavez, A. Rivera, D. Azurara and G. Ceballos. 2010. Sex matters: modeling male and female habitat differences for jaguar conservation. *Conservation Biology* (In Press).
100. Fesenmyer, K.A. and **N.L. Christensen, Jr.**. 2010. Fire History in Southern Appalachian Forests Using Soil Charcoal. *Ecology*: 91:662-670.
99. Karanth, K.K., J.D. Nichols, K.U. Karanth, J.E. Hines and **N.L. Christensen**. 2010. The shrinking ark: patterns of large mammal extinctions in India. *Proceedings of the Royal Society B*. doi:10.1098/rspb.2010.0171.
98. Karanth, K.K., J.D. Nichols, J.E. Hines. K.U. Karanth, and **N.L. Christensen**. 2009. Patterns and Determinants of Mammal Species Occurrence in India. *Journal of Applied Ecology*. In Press.
97. **Christensen, N.L.** 2009. Future Forests, Future Fires. *Yellowstone Science*. 17:40-44.
96. Adeney, J.M., **N.L. Christensen**, and S.L. Pimm. 2009. Reserves Protect Against Deforestation Fires in the Amazon. *PLoS ONE* 4(4): e5014. doi:10.1371/journal.pone.0005014.
95. Keeley, J.E., Aplet, G., **N.L. Christensen, Jr.**, S.G. Conard, E.A. Johnson, P.N. Omi, D.L. Peterson and T.W. Swetnam. 2009. Ecological Foundations of Fire Management. *U.S. Forest Service General Technical Report*. PNW.GTR-779, 92 pp.
94. **Christensen, N.L., Jr.** 2008. Sustaining America's Forest Legacy. *Conservation Biology* 22: 1378-1379.
93. **Christensen, N.L., Jr.** 2008. Ecological science: embracing diversity, embracing change. *Frontiers in Ecology and the Environment* 6:403.

92. Karanth, K.K., R.A. Kramer, S.S. Quian and **N.L. Christensen, Jr.** 2008. Examining conservation attitudes, perspectives and challenges in India. *Biological Conservation* 141:2357-2367.
91. Poulter, B., S.S. Quian and **N.L. Christensen, Jr.** 2008. Dynamics of coastal treelines and the role of facilitation, competition and disturbance. *Plant Ecology*. (Available on line; in print March 2009).
90. Poulter, B., **N.L. Christensen, Jr.** and S.S. Qian. 2007 Tolerance of *Pinus taeda* and *P. serotina* to low salinity and flooding: implications for equilibrium vegetation dynamics. *Journal of Vegetation Science* doi: 10.3170/2007-8-18410.
89. Poulter, B, **N.L. Christensen, Jr.** and P. Halpin. 2006. Carbon emissions from a temperate peat fire and its relevance to interannual variability of trace atmospheric greenhouse gases. *Journal of Geophysical Research*, 111, D06301, doi:10.1029/2005JD006455.
88. **Christensen, N.L., Jr.** 2006. Environmental Leadership Indeed. Forward in Gordon, J. and J. Berry, *Environmental Leadership*. Yale University Press.
87. **Christensen, N.L., Jr.** 2005. Fire in the Parks: A case study for change management. *The George Wright Forum*. 22:12-31.
86. Sarah C. Goslee, W. A. Niering, D. L. Urban and **N. L. Christensen, Jr.** 2005. The relationship between environmental and historical factors and the vegetation of a Connecticut Forest over 45 years. *Journal of the Torrey Botanical Club* 132: 471–482.
85. Saterson, K.A., **N. L. Christensen, Jr.**, R.B. Jackson, R.A. Kramer. S.L. Pimm, M.D. Smith and J.B. Wiener. 2004. Disconnects in Evaluating the Relative Effectiveness of Conservation Strategies. *Conservation Biology* 18:597-599.
84. Wallace, L. and **N.L. Christensen, Jr.** 2004. A decade of learning from the 1988 Yellowstone fires. Pp. 363-371. In L. Wallace, *The Yellowstone Fires: A Decade of Change*. Yale University Press.
83. **Christensen, N.L., Jr.** and F.S. Gilliam. 2003. Herb diversity and succession in eastern deciduous forests. pp. 224-237 in F.S. Gilliam and M. Roberts (eds.) "The herbaceous layer in forests of eastern North America," Oxford University Press
82. Jensen, M.E., **N.L. Christensen, Jr.** and P.S. Bourgeron. 2001. An overview of ecological assessment principles and applications. Pp. 13-28 in M.E. Jensen and P.S. Bourgeron (eds.), *A Guidebook for Integrated Ecological Assessments*. Springer, New York.
81. **Christensen, N. L.** 2000. Vegetation of the Coastal Plain of the southeastern United States. Pp. 397-448 In M. Barbour and W. D. Billings (eds.). *Vegetation of North America*. Second Edition. Cambridge University Press.
80. **Christensen, N.L., Jr.** 1999. The Evolving Role of Science in Wilderness to our Understanding of Ecosystems and Landscapes in D. Cole, et al. (eds.) *Wilderness Science*. University of Montana
79. Parsons, D.J., T.W. Swetnam and **N.L. Christensen, Jr.** 1999. Uses and limitations of historical variability in ecosystem management. *Ecological Applications*. 9:1177-1178
78. Rapport, D.J., **N.L. Christensen, Jr.**, J.R. Karr and G. Patil. 1999. The centrality of ecosystem health in achieving sustainability in the 21st century: concepts and new approaches to environmental management. *Proceedings and Transactions of the Royal Society of Canada*.
77. **Christensen, N.L.** 1997. Implementing Ecosystem Management: Where do we go from here. pp. 325-341 In M. Boyce and A. Haney (eds.). *Ecosystem Management*. Yale University Press, New Haven.

76. Harrell, P.A., E.S. Kasischke, L.L. Bourgeau-Chavez, E.M. Haney, and **N.L. Christensen, Jr.** 1997. Evaluation of approaches to estimating aboveground biomass in southern pine forests using SIR-C data. *Remote Sensing of the Environment* 59:223-233.
75. **Christensen, N.L.** and R.D. Simpson. 1996. Epilogue. pp. 273-278 *In* D. Simpson and N.L. Christensen (eds.). 1996. Human Activities and Ecosystem Function. Chapman-Hall, Inc., New York.
74. Simpson, R.D. and **N.L. Christensen.** 1996. Ecosystem function and human activities. pp. vii-xxv *In* D. Simpson and N.L. Christensen (eds.). 1996. Human Activities and Ecosystem Function. Chapman-Hall, Inc., New York.
73. **Christensen N. L.** and J.F. Franklin. 1996. Ecosystem processes and ecosystem management. pp. 1-23 *In* D. Simpson and N.L. Christensen (eds.). 1996. Human Activities and Ecosystem Function. Chapman-Hall, Inc., New York.
72. **Christensen, N.L.** 1996. Managing dynamic landscapes for heterogeneity and complexity. *In* S.T.A. Pickett and R. Ostfeld (eds.), Chapman-Hall, Inc., New York.
71. **Christensen, N.L.** 1996. The scientific basis for sustainable use of land. pp 273-308 *In* Diamond, H.L. and P. Noonan (eds.). The Use of Land. Island Press, Washington, D.C.
70. **Christensen, N.L.,** A. Bartuska, J.H. Brown, S. Carpenter, C. D'Antonio, R. Francis, J.F. Franklin, J.A. MacMahon, R.F. Noss, D.J. Parsons, C.H. Peterson, M.G. Turner, and R.G. Woodmansee. 1996. The scientific basis for ecosystem management. *Ecological Applications.* 6:665-691.
69. Harrell, P., L.L. Bourgeau-Chavez, E.S. Kasischke, N.H.F. French, and **N.L. Christensen.** 1996. Sensitivity of ERS-1 and JERS-1 radar data to biomass and stand structure in Alaskan boreal forest. *Remote Sensing of the Environment* 54:247-253.
68. Kasischke, E.S., N.H.F. French, L.L. Bourgeau-Chavez, and **N.L. Christensen.** 1995. Estimating release of carbon from 1990 and 1991 forest fires in Alaska. *Journal of Geophysical Research.* 100(D2), 2941-2952.
67. **Christensen, N.L.** 1995. Fire Ecology. *In* The Encyclopedia of Ecology. Academic Press, Orlando. pp. 21-32
66. **Christensen, N.L.** 1995. Fire and Wilderness. *Journal of Wilderness* 1:33-38 .
65. **Christensen, N.L.** 1995. The biogeochemical consequences of fire in longleaf pine ecosystems. *Proceedings of the Tall Timbers Ecology Conference.* 19: 205-214.
64. **Christensen, N.L.** 1995. Plants in dynamic environments: is "wilderness management" an oxymoron? pp. 63-72 *In* P. Schullery and J. Varley. Plants and the Environment. U.S. Department of the Interior, National Park Service, Washington, DC.
63. Kasischke, E.S., **N.L. Christensen,** and L.L. Bourgeau-Chavez, 1995. The dependence of radar backscatter on components of biomass in loblolly pine forests. *IEEE Tras. Geosci. Remote Sensing* 33:643-659.
62. Kasischke, E.S., **N.L. Christensen,** and B.J. Stocks. 1995. Fire, global warming and the mass balance of carbon in boreal forests. *Ecological Applications.* 5:437-451.
61. Wang, Y., F.W. Davis, J.M. Melak, E.S. Kasischke, and **N.L. Christensen.** 1995. The effects of changes in forest biomass on radar backscatter from tree canopies. *Int. J. Remote Sensing* 3:503-513.

60. Kasischke, E.S., **N.L. Christensen**, E.M. Haney and L.L. Bourgeau-Chavez. 1994. Modeling of geometric properties of loblolly pine tree and stand characteristics for use in radar backscatter studies. *IEEE Tras. Geosci. Remote Sensing* 32:800-822.
59. Kasischke, E.S., **N.L. Christensen**, L.L. Bourgeau-Chavez, and E. Haney. 1994. Observations on the sensitivity of ERS-1 SAR image intensity to changes in aboveground biomass in young loblolly pine forests. *International Journal of Remote Sensing* 15:3-16.
58. Wang, Y., E.S. Kasischke, J.M. Melack, F.W. Davis, and **N.L. Christensen**. 1994. The effects of changes in loblolly pine biomass and soil moisture on ERS-1 SAR backscatter. *Remote Sensing of the Environment* 49:25-31.
57. **Christensen, N.L.** 1994. The effects of fire on soils and biogeochemical cycles in mediterranean shrublands. pp. 79-95 *In* J. Moreno and W. Oechel, The role of fire in mediterranean-climate ecosystems. Springer-Verlag, New York.
56. Kasischke, E.S., N.H.F. French, P. Harrell, **N.L. Christensen**, S.L. Ustin, and D. Barry 1993. Monitoring of wildfires in boreal forests using large area AVHRR NDVI composite image data. *Remote Sensing of the Environment* 45:61-71.
55. Kauffman, J.B., **N.L. Christensen**, J.G. Goldammer, C.O. Justice, T. May, S.J. Pyne, B.J. Stocks, L.V. Trabaud, W.S.W. Trollope, K. -F. Weiss, and M. Williams. 1993. The role of humans in shaping fire regimes and ecosystem properties. pp. 375-388. *In*, P.J. Crutzen and J.G. Goldammer (eds.) *Fire and the Environment*. John Wiley and Sons.
54. Barbour, M. G. and **N. L. Christensen**. 1993. The vegetation of North America. pp. 97-131 *In* The Flora of North America, Missouri Botanical Garden, St. Louis.
53. **Christensen, N.L.** 1993. Fire regimes and ecosystem dynamics. pp. 233- 244 *In*, P.J. Crutzen and J.G. Goldammer (eds.) *Fire and the Environment*. John Wiley and Sons.
52. Trabaud, L., **N.L. Christensen**, and A.M. Gill. 1993. History of wildland fire. pp. 277-296 *In*, P.J. Crutzen and J.G. Goldammer (eds.) *Fire and the Environment*. John Wiley and Sons.
51. Kasischke, E.S., L.L. Bourgeau-Chavez, N.H.F. French, P. Harrell, and **N.L. Christensen, Jr.** 1992. Initial observations on the use of SAR imagery to monitor wildfires in boreal forests. *International Journal Remote Sensing* 13:3495-3501.
50. Dobson, M.C., F.T. Ulaby, T. Le Toan, A. Beaudoin, E.S. Kasischke, and **N.L. Christensen**. 1992. Dependence of radar backscatter on coniferous forest biomass. *IEEE Transactions in Geoscience and Remote Sensing* 30:412-415.
49. **Christensen, N.L.** 1992. Variable fire regimes on complex landscapes: ecological consequences, policy implications, and management strategies. pp. ix-xiii *In* T. Waldrop, *Fire in the Environment*. USDA Forest Service General Technical Report SE-69
48. **Christensen, N.L.** 1991. Wilderness and high intensity fire: how much is enough. *Proceedings of the Tall Timbers Ecology Conference* 17:9-24.
47. **Christensen, N.L.**, E.S. Kasischke, and M.C. Dobson. 1990. SAR-derived estimates of aboveground biomass in forested landscapes. *Proc. International GeoScience and Remote Sensing Symposium*, IEEE no. 90CH2825-8 pp. 1209-1212.
46. **Christensen, N. L.** 1990. Natural disturbance and forest patch dynamics. *McGraw-Hill Yearbook of Science and Technology*. 12pp.
45. Cimino, J., J. Paris, D. Casey, F. Ahern, **N. L. Christensen**, M. C. Dobson, F. Ulaby, J. Weber, R. Hoffer, M. Imhoff, E. Kasischke, A. Milne, J. Richards, A. Sieber, P. Churchill, D. Simonett, C. Slaughter, L. Viereck, E. Mougins, T. LeToan. 1990. The effect of changing environmental

- conditions on microwave signatures of Forest Ecosystems. *International Journal of Remote Sensing* 11:1119-1144.
44. Kasischke, E.S. and **N.L. Christensen**. 1990. Connecting forest ecosystem and microwave remote sensing radiation models. *International Journal of Remote Sensing* 11:1277-1298.
 43. **Christensen, N.L.**, et al. 1989. Interpreting the Yellowstone Fires. *BioScience* 39:677-685.
 42. **Christensen, N.L.** 1989. Fire on the wilderness landscape. *Forum for Applied Research and Public Policy*. 4:46- 49.
 41. Raich, J.W. and **N.L. Christensen**. 1989. Tree seedling and sapling species composition and patterns of small- scale disturbance in Malaysian Dipterocarp forests. *National Geographic Research* 5:348-364.
 40. **Christensen, N.L.** 1989. Landscape history and ecological succession on the Piedmont of North Carolina. *Journal of Forest History* 33:116-124.
 39. Knox, R.G., R.K. Peet, and **N.L. Christensen**. 1989. Population dynamics in loblolly pine stands: changes in skewness and size inequality. *Ecology* 70:1153-1166.
 38. **Christensen, N.L.** and E.S. Kasischke. 1988. The use of old-field stands of loblolly pine in studies of the potential use of active microwave remote sensors for monitoring forest ecosystems. *Proceedings International Geoscience and Remote Sensing Symposium*. pp. 457-466.
 37. **Christensen, N.L.**, R.B. Wilbur, and J.S. McLean. 1988. Soil-vegetation correlations in pocosins of Croatan National Forest, North Carolina. U.S. Fish and Wildlife Service Biological Report 88 (28), 98 pp.
 36. Peet, R.K. and **N.L. Christensen**. 1988. Changes in diversity during secondary forest succession on the North Carolina Piedmont pp. 233-245. *In* During, H.J., M.J.A. Werger, and J.H. Willems, Diversity and pattern in plant communities. SPB Academic Publishing, The Hague.
 35. **Christensen, N.L.** 1988. Succession and natural disturbance: Paradigms, Problems and preservation of natural ecosystems. pp. 62-86 *In* J. Agee and D. Johnson (eds.), Ecosystem Management. Univ. of Washington Press, Seattle.
 34. **Christensen, N. L.** 1988. Vegetation of the Coastal Plain of the southeastern United States. Pp. 317-363 *In* M. Barbour and W. D. Billings (eds.). Vegetation of North America. Cambridge University Press.
 33. Roberts, M.R. and **N.L. Christensen**. 1988. Vegetation variation among mesic successional forest stands. *Canadian Journal of Botany* 66:1080-1090.
 32. **Christensen, N.L.** 1987. The Fire Management program in Sequoia-mixed conifer forest of Yosemite, Sequoia, and Kings Canyon National Parks: A Review. *Conservation and Restoration Notes*.
 31. **Christensen, N.L.** 1987. The biogeochemical consequences of fire and their effects on the vegetation of the Coastal Plain of the southeastern United States. Pp. 1-21 *In* L. Trabaud, Fire Ecology. SPB Publishing, the Hague.
 30. **Christensen, N.L.** and R.E. Schneider. 1987. The consequences of fire in the temperate savannas of the southeastern Coastal Plain of the United States. Pp. 222-253 *In* J. J. San Jose and R. Montes. Bioproductivity of Savannas. Instituto Venezolano Investigaciones Cientificas, Caracas.
 29. Peet, R.K. and **N.L. Christensen**. 1987. Competition and Tree Death. *BioScience* 37:586-595.
 28. Schafale, M. and **N.L. Christensen**. 1986. Vegetational variation among old fields in Piedmont North Carolina. *Bulletin of the Torrey Botanical Club* 113:413-420.

27. Gilliam, F.S. and **N.L. Christensen**. 1986. Herb-layer response to burning in pine flatwoods of the lower Coastal Plain of South Carolina. *Bulletin of the Torrey Botanical Club* 113:42-45.
26. Lubbers, A.E. and **N.L. Christensen**. 1986. Intra-seasonal variation in seed production among flowers and plants of *Thalictrum thalictroides* (Ranunculaceae). *American Journal of Botany* 73:190-203
25. **Christensen, N.L.** and L.S. Davis. 1986. Linking models of forest succession to models of habitat suitability. In Verner, J. (ed.). *Wildlife 2000: Modeling Habitat Relations of Terrestrial Vertebrates*. University of Wisconsin Press.
24. **Christensen, N.L.** and T.M. McAller. 1985. Soil mineral nitrogen transformations during succession in the Piedmont of North Carolina. *Soil Biology and Biochemistry* 17: 675-681.
23. **Christensen, N.L.** 1985. Shrubland fire regimes and their evolutionary consequences. Pp. 85-100 In S. T. A. Pickett and P. White (eds.), *Natural Disturbance and Patch Dynamics*. Academic Press.
22. **Christensen, N.L.** 1984. Fire research in southeastern universities. Pp. 145-156 In Wade, D. D. (ed.). *Prescribed Fire and Smoke Management in the South: Current Practices and Needs*. U.S.D.A. Forest Service, Southeastern Forest Experiment Station.
21. **Christensen, N.L.** and R.K. Peet. 1984. Convergence during secondary forest succession. *Journal of Ecology* 72:25-36.
20. **Christensen, N.L.** and R.B. Wilbur. 1983. Effects of fire on nutrient availability in a North Carolina coastal plain pocosin. *American Midland Naturalist* 110:54-61.
19. **Christensen, N.L.** and R.K. Peet. 1982. Measures of natural diversity. Pp. 43-58 In A. S. Cooper and J. Cooley (eds.), *Natural Diversity and Forest Management*. U.S. Forest Service.
18. **Christensen, N.L.** 1981. Fire Regimes in southeastern ecosystems. Pp. 112-136. In H. A. Mooney, T. M. Bonnicksen, N. L. Christensen, J. E. Lotan & W. A. Reiners. *Fire Regimes and Ecosystem Properties*. U.S.D.A. Forest Service General Technical Report WO-26. 594 pp.
17. **Christensen, N.L.** and T.M. Bonnicksen. 1981. Ecosystem distribution and structure through space and time: integrating summary. pp. 177-180. In H. A. Mooney, T. M. Bonnicksen, N. L. Christensen, J. E. Lotan & W. A. Reiners. *Fire Regimes and Ecosystem Properties*. U.S.D.A. Forest Service General Technical Report WO-26. 594 pp.
16. **Christensen, N.L.**, R.B. Burchell, and E. Simms. 1981. The structure and development of pocosin vegetation. Pp. 43-61. In C. Richardson (ed.), *Pocosin Wetlands*.
15. **Christensen, N.L.** and R.K. Peet. 1981. Secondary Forest Succession on the North Carolina Piedmont. Pp. 230- 245. In West, D. C., H. H. Shugart and D. Botkin (eds.), *Forest Succession: Concepts and Application*. Springer-Verlag, New York. 496 pp.
14. Martin, C.E., **N.L. Christensen**, and B.R. Strain. 1981. Seasonal patterns of growth, tissue acid fluctuations, and $^{14}\text{CO}_2$ uptake in the crassulacean acid metabolism epiphyte *Tillandsia usneoides* L. (Spanish moss). *Oecologia* 49: 322-328.
13. Peet, R.K. and **N.L. Christensen**. 1980. Succession: a population process. *Vegetatio* 43: 131-140.
12. Peet, R.K. and **N.L. Christensen**. 1980. Hardwood forest vegetation of the North Carolina Piedmont. *Ver. Geobot. Inst. ETH Stiftung Rubel*. 69:14-39.
11. **Christensen, N.L.** 1979. The xeric sandhill and savanna ecosystems of the Southeastern Atlantic Coastal Plain, U.S.A. *Ver. Geobot. Inst. ETH, Stiftung Rubel*. 68: 246-262.
10. **Christensen, N.L.** 1979. Shrublands of the Southeastern United States. Pp. 441-449. In R. L. Specht (ed.) *Heathlands and Related Shrublands of the World*. Elsevier, Amsterdam.

9. Montes, R. and **N.L. Christensen**. 1979. Nitrification and succession in the Piedmont of North Carolina. *Forest Science* 25: 287-297.
8. **Christensen, N.L.** 1977. Fire and soil-plant nutrient relations in a pine-wiregrass savanna on the coastal plain of North Carolina. *Oecologia* 31: 27-44.
7. **Christensen, N.L.** 1977. Changes in structure, pattern, and diversity associated with climax forest maturation in Piedmont, North Carolina. *The American Midland Naturalist* 97:178-188.
6. **Christensen, N.L.** 1977. Fire in southern forest ecosystems. In Proceedings of Symposium: Fire by Prescription. USDA, Forest Service, Atlanta, GA. pp. 17-24.
5. **Christensen, N.L.** 1976. The role of carnivory in *Sarracenia flava* L. with regard to specific nutrient deficiencies. *Journal of the Elisha Mitchell Science Society* 92:144-147.
4. **Christensen, N.L.** 1976. Short-term effects of mowing and burning on soil nutrients in Big Meadows, Shenandoah National Park. *Journal of Range Management* 29:508- 509.
3. **Christensen, N.L.** and C.H. Muller. 1975. Relative importance of factors controlling germination and seedling survival in *Adenostoma* chaparral. *American Midland Naturalist* 93:71-78.
2. **Christensen, N.L.** and C.H. Muller. 1975. Effects of fire on factors controlling plant growth in *Adenostoma* chaparral. *Ecological Monographs* 45: 29-55.
1. **Christensen, N.L.** 1973. Fire and the nitrogen cycle in California chaparral. *Science* 181: 66-68.

BOOKS

1. H. A. Mooney, T. M. Bonnickson, **N. L. Christensen**, J. E. Lotan & W. A. Reiners (eds.) 1981. Fire Regimes and Ecosystem Properties. U.S.D.A. Forest Service. 594 pp.
2. D. Simpson and **N.L. Christensen** (eds.). 1996. Human Activities and Ecosystem Function. Chapman-Hall, Inc., New York.
3. **Christensen, N.L.** et al. 2000. Environmental Issues in Pacific Northwest Forest Management. National Academy Press, Washington, DC. 259 pp.

NON-TECHNICAL PUBLICATIONS

1. **Christensen, N.L.** 1984. Oaks. Article in The World Book Encyclopedia.
2. **Christensen, N.L.** 1984. Pines. Article in the World Book Encyclopedia.
3. **Christensen, N.L.** 1988. Plants. Compton's Encyclopedia. 21 pp.
4. **Christensen, N.L.** 1988. The Nuts and Bolts of Large Lecture Courses. In, L. DeNeef (ed.), The Academic's Handbook, Duke University Press.

BOOK REVIEWS

1. Methods in Plant Ecology by S. B. Chapmann. *Quarterly Review of Biology* 52: 307. 1977.
2. Ecology of Mediterranean-type Shrublands. Review of "Mediterranean-type Shrublands by DiCatri, F., D. W. Goodall, and R. L. Specht. *Ecology* 63: 264-265. 1979
3. National Park Service Scientific Monograph Series. *Ecology* 63: 601-602. 1983

4. Basic and applied fire ecology. Review of Fire in Forestry by C. Chandler, P. Cheney, P. Thomas, L. Trabaud, and D. Williams. *Ecology* 65: 1024-1025. 1983
5. This Land This South: An Environmental History by Albert E. Cowdrey. *The South Atlantic Quarterly*. 1985
6. Landscape Heterogeneity and Disturbance by Monica G. Turner. *Ecology* 70:421-422. 1988
7. Conservation Biology: The Theory and Practice of Nature Conservation, Preservation, and Management by P.L. Fiedler and S.K. Jain. *Quarterly Review of Biology* 68:299. 1993
8. Concepts of Ecosystem Ecology by L.R. Pomeroy and J.J. Alberts (eds.). *Ecology* 1994
9. Clearing the Air: A Concise Tutorial. A review of "The Forgiven Air: Understanding Environmental Change. Richard C.J. Somerville. *American Scientist* 85:275-276. 1998

**THESES AND DISSERTATIONS WRITTEN UNDER CHRISTENSEN'S DIRECTION
(PhD in bold)**

1976. Montes, R.A. Nitrification in soils under three vegetation types in the Piedmont of North Carolina. M.S. Currently Professor at Univesidad Simon Bolivar, Caracas, Venezuela.
- 1980. Martin, C.E.** Field and laboratory studies of crassulacean acid metabolism in the epiphyte *Tillandsia usneoides* L. (Spanish moss). Ph.D. Currently Professor at Univesity of Kansas.
1980. MacAller, T.J. Factors affecting transformation of mineral nitrogen in several piedmont ecosystems. M.S. Currently Teaching at Duke School for Children.
- 1980. Horn, J.C.** Growth and establishment of three understory tree species in piedmont hardwood forests. Ph.D. Currently Professor at St Ambrose College, Iowa.
- 1980. Beaman, B.A.** Factors affecting the establishment, growth, and, survival of white oak, (*Quercus alba* L.) in an upland hardwood forest. Ph.D. Currently Senior Curator, North Carolina Natural History Museum.
- 1982. Lubbers, A.E.** Spatial and temporal variation in the reproductive characteristics of *Thalictrum thalictroides* (L.) Eames and Boivin, a forest herbaceous perennial. Ph.D. Currently Professor at Center College
- 1983. Roberts, M.R.** Variability and mechanisms of secondary forest succession in the aspen ecosystems of northern lower Michigan. Ph.D. (Co-advised with Curtis Richardson). Currently Professor at University of New Brunswick.
- 1983. Gilliam, F.S.** Effects of fire on components of nutrient dynamics in a lower coastal plain watershed ecosystem. Ph.D. (Co-advised with C.W. Ralston). Currently Professor at Franklin and Marshall College.

- 1983. Simms, E.L.** A comparative study of nutrient utilization in two pocosin shrub species. Ph.D. Currently Professor at the University of California, Berkeley.
1983. Schafale, M.S. Vegetation and environmental variation among old fields on the North Carolina piedmont. M.S. Currently Community Ecologist, State of North Carolina
- 1985. Wilbur, R. B.** The effects of fire on nitrogen and phosphorus availability in a North Carolina pocosin. Ph.D. Currently Research Associate at University of Virginia
1986. Rome, A. Spatial variation in vegetation and soils in savannas of the North Carolina Green Swamp. M.S. Currently Steward, The Nature Conservancy, Latin America.
1987. **Raich, J.** Influence of treefall gaps on tree regeneration and microclimate in Malaysian dipterocarp Forests. Ph.D. Currently Professor, University of Iowa.
- 1988. Palmer, M.** Vegetation-environment relationships, scale and species richness patterns in the Duke Forest. Ph.D. Currently Professor, Oklahoma State University
- 1989. Schneider, R.** The ecological consequences of variations in season of burning in a pine-wiregrass savanna. Ph.D. Scientist, The Nature Conservancy, Nebraska.
- 1990. McAlister, S.** Influences on the structure of lignicolous cryptogam communities in the North Carolina Piedmont. Ph.D. Currently Research Associate, Oklahoma State University
- 1991. Powell, D.** Temporal and spatial variation in tree demography and species composition based on forest inventories of Maine. Ph.D. Currently Senior Scientist, USDA, Forest Service.
1991. Rice, S. Impacts of fire on spatial variation in soil and vegetation in Sierra Nevada chaparral. M.S.
- 1992. Peroni, P.** Genetic change and persistence of red maple (*Acer rubrum*) during secondary succession in North Carolina piedmont forests. Ph.D. Currently Professor, Davidson College.
1992. Gebauer, S. Changes in soil properties along a post-fire chronosequence in sequoia-mixed conifer forests of Sequoia National Park. M.S. Currently Director of Stewardship, The Nature Conservancy, New York
1993. Sandler, B. Development of an integrated GIS model to identify natural communities within the lower Roanoke River Ecosystem in North Carolina, U.S.A. M.S. Current position unknown
- 1993. Molofsky, J.** A theoretical and experimental evaluation of pattern development in plant communities. Ph.D. Currently Professor, University of Vermont.

1994. Haney, E. Neighborhood effects of patterns of growth and allocation of biomass in loblolly pine. M.S. Currently Forest manager, State of California.
- 1994. Rice, S.** Ecology and phylogeny of the genus *Sphagnum* in the Coastal Plain of the southeastern United States. Ph.D. (Co-advised with Brent Mishler). Currently Professor, Trinity College.
- 1996. Kjellmark, E.** Vegetation changes and human impacts on Andros Island, Bahamas. Ph.D. Currently Associate Professor, University of South Florida.
- 1997. Kern, R.A.** Climate change and the relative success of tree species in the mixed conifer forests of the Sierra Nevada, California. Ph.D. Currently Associate Professor, California State University, Fresno.
- 1998. Lawrence, D.** Land-use patterns and vegetation diversity in forests of Kalimantan, Indonesia. Ph.D. (Co-advised with William Schlesinger). Currently Assistant Professor, University of Virginia
- 1998. Goslee, Sarah.** Vegetation dynamics and succession in the Bolleswood Natural Area, Connecticut. Ph.D. Currently Researcher, USDA Forest Service.
- 1999. Chang, Chi-ru.** Understanding fire regimes. Ph.D. (Co-advised with Dean Urban). Currently Assistant Professor, National University of Taiwan, Taipei.
- 1999. Adams, Phyllis C.** The dynamics of white spruce populations on a boreal river floodplain. Currently Researcher, National Park Service.
- 2004. Rocca, Monique.** The importance of fire-generated heterogeneity in Sierra Nevada mixed conifer forests. Ph.D. (Co-advised with Dean Urban). Currently Assistant Professor, Colorado State University, Ft. Collins, CO.
- 2005. Benjamin Poulter.** Sea level rise and landscape change on the Pamlico-Albemarle Peninsula of North Carolina. Currently Research Scientist, Department of Global Change and Natural Systems Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany.
- 2006. Alan Weakley.** Change Over Time in our Understanding of the Flora of the Southeastern United States: Implications for Plant Systematics, Bioinformatics, and Conservation. Director of the University of North Carolina Herbarium
- 2007. Miguel Schwarz.** Land Use and Ecological Change on the Piedmont of North Carolina. Ph.D. Postdoctoral Associate, University of Tel Aviv.

- 2007. Charlotte Clark.** Synergy of the Commons: Learning and Collective Action in one Case Study Community. Ph.D. Director of Undergraduate Environmental Programs, Duke University.
- 2008. Nicolette Cagle.** A Multi-scale investigation of snake habitat relationships and snake conservation in Illinois. Ph.D. Temporary Instructor, Duke University.
- 2008. Dalia Conde Amor Ovando.** Assessing and understanding road effects on deforestation and jaguar habitat in the Selva Maya. Ph.D. Postdoctoral position, Max Plank Institute for Demographic Research, Rostock, Germany.
- 2008. Sara Chun.** The Utility of Digital Aerial Surveys in Censusing *Dipteryx panamensis*, the Key Food and Nesting Tree of the Endangered Great Green Macaw (*Ara ambigua*) in Costa Rica.
- 2008. Krithi K. Karanth.** Mammal Diversity, Persistence, and Conservation in India. Postdoctoral associate, Columbia University.
- 2009. Jennifer M. Adeney.** Remote Sensing of Fire, Flooding and White Sand Ecosystems in the Amazon. Postdoctoral associate, Yale University.