

Robert D. Sutter

Conservation Ecologist/Plant Population Ecologist
Senior Conservation Ecologist, Enduring Conservation Outcomes LLC

Rob Sutter has worked over 30 years in the conservation field, 19 of those as the Regional Scientist and as a Senior Manager in the Southern US for The Nature Conservancy. In that position he has worked on terrestrial, freshwater and marine projects across 10 states. Previous to his work with The Nature Conservancy, he was the Endangered Species Botanist for the state of North Carolina and coordinated the state's Plant Conservation Program.

The focus of most of his work has been the integration of science into conservation, taking into account limited resources and need to make decisions in the context of uncertainty. His expertise is in developing ecologically-focused strategic conservation and adaptive management plans to direct and measure the success of conservation actions. Rob has extensive experience managing complex projects. He was chosen as a future leader of The Nature Conservancy and participated in the Leadership Excellence Program.

Rob's role as Regional Scientist in The Nature Conservancy was to provide and facilitate the incorporation of the best available and most current ecological information into the Conservancy's conservation work, from the selection of areas to protect to strategic planning and monitoring ecological change. He lead several expert networks including the Southern Freshwater Team, the regional fire network and the Southern Regional Science Council and numerous regional projects including researching how well ecosystem services protects biodiversity in the Lower Mississippi River Alluvial Plain, assessing conservation strategies for protecting large forest lands and advising Eglin Air Force base on their adaptive management and fire monitoring program. He has worked extensively in adaptive management, with work at several Department of Defense installations and has done ecological research in Southern Appalachian wetlands and forests, longleaf pine forest systems, prairie remnants and isolated wetlands. With others in TNC he was one of the leaders in the development of the Conservation Action Planning process and developed the training workshop on ecological monitoring. He is active teaching Conservation Action Planning and ecological management within TNC and to other conservation organizations (DoD, NPS, USFS, USFWS, local land trusts).

Rob got his undergraduate and Master's degrees in Botany from Duke University, with an emphasis in plant population ecology. He has taught short courses at Duke and is on the selection committee for the Doris Duke Fellowship Program in Duke's Nicholas School of the Environment and Earth Sciences. He is been a member of ESA, SCB, ASB and Natural Areas Association. He has over 40 publications and reports in the conservation literature.

Rob also has a strong interest in teaching and communicating ecology and conservation to the public. Since 1989 he has taught a spring wildflower workshop (Appalachian Spring) to North Carolina public school teachers at the NC Center of the Advancement of Teaching (www.nccat.org). Additionally he has offered workshops at NCCAT on Forests of the Blue Ridge and the Natural and Human History of the North Carolina Coast. Rob has given many presentations to the public on a wide range of conservation and natural history topics. Currently he is working on a book on the Natural and Human History of the South Atlantic Coast (www.naturalandhumanhistory.org).

Rob lives in Savannah, Georgia, with his wife and ecologist, Alison McGee and his stepdaughter Nina. He is the principal of Enduring Conservation Outcomes (www.enduringconservation.com).

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Education:

1980 **M.S. Botany, Duke University**, Durham, North Carolina
1976 **B.S. Botany, Duke University**, Durham, North Carolina

Work History:

1990-2009 **Senior Conservation Ecologist/Regional Scientist**; The Nature Conservancy, Southern U.S. Conservation Region
1979-1990 **Director/Endangered Species Botanist**, Plant Conservation Program, North Carolina Department of Agriculture

Experience:

Rob Sutter has worked for 30 years in the conservation field, 19 of those as the Regional Scientist for the Southern U.S. Region of The Nature Conservancy (TNC) and as a Senior Manager in the organization. Previous to that he was the Endangered Species Botanist for the state of North Carolina and was the first coordinator of the state's Plant Conservation Program. The focus of his work has been the integration of science into conservation practice, taking into account limited resources and need to make decisions in the context of uncertainty. His expertise is in developing ecologically-focused strategic conservation and adaptive management plans to direct and measure the success of conservation actions. He has worked both in the United States and internationally and has over 40 papers in the conservation literature.

Specifically his expertise is in the following areas:

- **Conservation Planning.** One of the developers of The Nature Conservancy's Conservation Action Planning (CAP) process and one of the leading planners in TNC. Proficient in CAP and Conservation Measures Partnership's Miradi software. Planning experience in terrestrial, karst, freshwater and marine systems and with climate change adaptation. Proficient with ecological models, situation diagrams and results chains.
- **Monitoring and Adaptive Management.** Extensive experience teaching and implementing monitoring projects. Co-developer of TNC's monitoring workshops. Has developed monitoring plans and protocols for TNC, Department of Defense (DoD), National Park Service (NPS), US Fish and Wildlife Service (USFWS) and the US Forest Service (USFS).
- **Conservation Training, Workshop Facilitation and Teaching.** Extensive experience developing and leading training workshops in conservation planning and monitoring and adaptive management (over 30 workshops), including teaching for TNC, DoD, NPS, USFWS (National Conservation Training Center in Shepardstown WV.) and USFS. Trained in facilitation. Has taught short courses at Duke University and co-taught a Conservation Biology class at University of North Carolina.
- **Data Analysis.** Experience analyzing, teaching and leading projects analyzing data including parametric and nonparametric statistics, ordination and GRTS sampling design. Advocate of the use of confidence intervals and photographic monitoring.
- **Remote Sensing, Spatial Modeling and GIS.** Experience leading projects using and developing practical application of these tools.
- **Project Management and Science Advisor.** Experience leading complex projects with multiple staff.

The remaining pages list selected publications and presentations, publications in preparation and recent workshops and trainings. All publications are available on request and soon to be available at www.enduringconservation.com.

Selected Publications:

Sutter, Robert, Sonja Kokos and Dianne Bangle. 2009. Improving the Implementation of Ecological Monitoring and Adaptive Management in the Clark County Multiple Species Habitat Conservation Plan. The Desert Conservation Program, Clark County, Nevada

Blanchard, Jon, Naikoa Aguilar-Amuchastegui and Robert Sutter. 2009. Forest Conservation Strategy Effectiveness Study (FoCoSES): Year 1 Report. Durham, North Carolina, Southern Resource Office, The Nature Conservancy

Sutter, Robert, Jon Blanchard and Naikoa Aguilar-Amuchastegui. 2009. Evaluating the Conservation Outcomes of the International Paper Forest Acquisition Project: Year 2 Monitoring Report. Durham, North Carolina, Southern Resource Office, The Nature Conservancy

Wiens, John, Robert Sutter, Mark Anderson, Jon Blanchard, Analie Barnett, Naikoa Aguilar-Amuchastegui, Chadwick Avery and Stephen Laine. 2009. Selecting and conserving lands for biodiversity: the role of remote sensing. *Remote Sensing of Environment*, 113: 1370-1381.

America's Longleaf. 2009. Range-wide Conservation Plan for Longleaf Pine. www.americaslongleaf.org

Sutter, Robert D., Alison McGee, Brett Williams and Michelle Creech. 2008. A framework for restoring longleaf pine ecosystems. Durham, North Carolina, Southern Resource Office, The Nature Conservancy

McEachern, Kathryn, Bruce M. Pavlik, Jon Rebman and Rob Sutter. 2007. San Diego Multiple Species Conservation Program (MSCP) Rare Plant Monitoring Review and Revision. US Geological Survey, Scientific Investigations Report 2007-5016, Reston, Virginia.

Mehlman, David W. Sarah.E. Mabey, Charles Duncan, David N. Ewert, Becky Abel, David Cimprich, Rob Sutter, and Mark Woodrey. 2005. Conserving stopover sites for forest-dwelling migratory landbirds. *The Auk* 122. 1281-1290.

Rudd, N., R.D. Sutter and G. Crichton. 1999. Monitoring protocols for mid-elevation hemlock forests along the Blue Ridge Parkway. The Nature Conservancy: Chapel Hill, NC.

Sutter, R.D., J.J. Bachant, D.R. Gordon and A.R. Litt. 2001. An Assessment of the Desired Ecological Conditions for Focal Conservation Targets on Eglin Air Force Base. The Nature Conservancy, Durham, NC

White, P. and R.D. Sutter. 1999. Managing biodiversity in historic habitats: Case history of the southern Appalachian grassy balds in: *Ecosystem Management for Sustainability*. Edited by Peine, J.D. Lewis Publishers: Boca Raton, FL.

Sutter, R.D. 1996. Monitoring in: *Restoring Diversity, Strategies for Reintroduction of Endangered Plants*. Edited by Falk, D.A., C.I. Millar, and M. Olwell. Island Press: Covelo, CA.

Sutter, R.D. 1997. Monitoring protocols for green pitcher plant (*Sarracenia oreophila*). US Fish and Wildlife Service: Jackson, MS.

Rudd, N. and R.D. Sutter. 1996. Monitoring protocols for rare and endangered species and longleaf pine community types at Fort Bragg and Camp Mackall Military Reservations, NC. The Nature Conservancy: Chapel Hill, NC.

Sutter, R.D. 1995. Monitoring plant populations in coastal parks in: *Coastal Park Inventory and Monitoring Handbook*. Edited by T.R. Simons. National Park Service Technical Report NPS/SERNCSU/NRTR-95/01.

Sutter, R.D. and R. Kral. 1994. The ecology, status, and conservation of two non-alluvial wetland communities in the South Atlantic and Eastern Gulf Coastal Plain. *Biological Conservation* 68:235-243.

Sutter, R.D., S.E. Benjamin, N. Murdock, and B. Teague. 1993. Monitoring the effect of trampling on a low heath bald in the Southern Appalachians. *Natural Areas Journal* 13:250-255.

Travis, J. and R.D. Sutter. 1986. Experimental designs and statistical methods for demographic studies of rare plants. *Natural Areas Journal* 6(3):3-12.

Publications in Preparation:

Govus, T, R. Lyons, R. Sutter, C. Nordman, M. Pyne and T. Hogan. In prep. Monitoring changes in a central US calcareous glade: resampling transects after 15 years.

Sutter, R, C. Hall, N Miller and R. Reiner. In prep. Monitoring the ecological outcomes of conservation easements: guidelines for an effective and efficient approach.

Sutter, R.D., D.R. Gordon, and J.K. Hiers. In prep. The use of desired future conditions in conservation planning: an example from Eglin Air Force Base, Florida.

Sutter, R.D. and M. Boyer. In prep. The seed bank of three rare species in southeastern pond cypress savannas: *Rhexia aristosa*, *Lobelia boykinii*, and *Oxypolis canbyi*.

Sutter, R.D., Bill Crowell, Nathan T.Rudd and Brandon Scarborough. In prep. Vegetation and Hydrologic Monitoring of a Southern Blue Ridge Wetland Adjacent to a Road-widening Project.

Sutter, R.D., Nathan T.Rudd, Karen Colson, Gwynn Crichton, Bill Crowell and Brandon Scarborough. In prep. Vegetation Changes after the Elimination of Grazing in a Southern Blue Ridge Wetland.

Selected Presentations:

Sutter, Robert, D. and Robert L. Bendick. 2003. Challenges for conserving biodiversity in the Southeast United States. Ecological Society of America Annual Meeting, Savannah, GA.

Sutter, R. D. 2003. Sequencing conservation action: a process of linking ecoregional plans to strategic priorities. The Nature Conservancy, All Science Meeting, Duluth, MN.

Szell, Christopher C., R. Sutter, and J. Prince. 2003. Sequencing conservation action tool – a tool to rank conservation areas across ecoregions. The Nature Conservancy, All Science Meeting, Duluth, MN.

Sutter, Robert. 2003. The Perfect Conservation Practitioner. Society for Conservation Biology Annual Meeting, Duluth, MN.

Sutter, Robert, J Kevin Hiers, and Stephen Laine. 2002. Strengthening conservation planning through the use of spatially explicit models: an example from Eglin Air Force Base. Natural Areas Meeting, Asheville, NC.

Sutter, Robert, Nathan Rudd, Karen Geissinger, Gwynn Crichton and Brandon Scarborough. 2002. Vegetation changes after the elimination of grazing in a southern Blue Ridge wetland. ASB Annual Meeting, Boone, NC.

Sutter, Robert and Doria Gordon. 2002. A planning framework for conservation and conservation partnerships, an example from Eglin Air Force Base. ASB Annual Meeting, Boone, NC.

Sutter, Robert D. 2000. Biodiversity and conservation in the Southern Appalachians. World Botanic Gardens Congress, Asheville, NC.

Sutter, Robert D., Gwynn Crichton and Susan Andrew. 1999. Co-occurrence, complementary areas and conservation in the southern Blue Ridge, USA. Ecological Society of America Annual Meeting, Spokane, WA.

Geissinger, K.E., H.S. Neufeld, and R.D. Sutter. 1999. Grazing influences on plants in a southern Appalachian mountain bog. ASB Annual Meeting, Wilmington, NC.

Baumgartner, J., K. Poiani and R. Sutter. 1997. Applying an ecosystem approach to conservation: site conservation planning. Bulletin of the Ecological Society of America 78(4):7. (Abstract)

Rudd, N and R. Sutter. 1997. The development of vegetation monitoring protocols for rare species and communities at Fort Bragg (DOD), North Carolina. Bulletin of the Ecological Society of America 78(4):305. (Abstract)

Sutter, R.D. 1985. Demography of rare species. Bulletin of the Ecological Society of America 66(2). (Abstract)

Sutter, R.D. and L. Mansberg. 1981. Collection pressure, population structure, and survival of Ginseng (*Panax quinquefolius*) in North Carolina: A preliminary report. ASB Bulletin 28(2):74. (Abstract)

Recent Workshops and Trainings:

Vegetation Monitoring in a Management Context. 1991 through 2009, at least once a year. For The Nature Conservancy and the US Forest Service at different venues across the country and the University of Florida at Archbold Biological Station, Lake Placid, Florida.

Conservation of Karst Ecosystems through Conservation Action Plans. 2008. Projects from Arkansas, Indiana, Mexico (Yucatan), Workshops held in Arkansas and Dominican Republic. Co-organizer and facilitator.

Clark County MSHCP Programmatic Effectiveness Workshop. 2008. Held in Las Vegas, NV. Facilitator.

MENTOR workshop on Results Chains and Monitoring, addressing the poaching of Wildlife in Kenya, Southern Sudan, Tanzania and Uganda.
www.abcg.orgwww.mentorfellowshipprogram.org. 2008. Held in Mwaka, Tanzania at the African College of Wildlife Management. Organizer and facilitator.

Clark County Rare Plant Monitoring Workshop, Clark County Multiple Species Habitat Conservation Plan. 2007. Held in Las Vegas, NV. Organizer and teacher.

Arizona Monitoring and Adaptive Management, addressing management of Ponderosa Pine. 2007. Held in Show Low, AZ. Organizer and teacher.

Conservation Planning for Headwater Rivers in the Southern US, a joint TNC and WWF Workshop. 2007. Projects from Alabama, Arkansas, Georgia, North Carolina and Tennessee, Workshops held in Chattanooga, TN and Hot Springs, AR. Co-organizer and facilitator.

Conservation Planning for Marine Project Areas in the South Atlantic. 2006. Projects from North Carolina and South Carolina. Workshops held in Savannah GA, Charleston SC and New Bern NC. Co-organizer and facilitator.

Monitoring and Adaptive Management for Endangered Species Conservation. 2002, 2004, 2006. For the USFWS at the National Conservation Training Center, Sheperdstown, WV.

Southern Blue Ridge Escarpment Conservation Action Plan. 2006. Workshops held in Greenville, SC and Asheville, NC. Organizer and facilitator.

Professional Affiliations

Ecological Society of America, since 1980
Society of Conservation Biology, 1995
Natural Areas Association, 1985
Southern Appalachian Botanical Society, 1980
Association of Southeastern Biologists, 1980
Land Trust Alliance, 1999