## **VITAE: RAYMOND D. DUESER**

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### **EDUCATION**

Undergraduate: B.A. (Anthropology, 1967), The University of Texas at Austin Graduate: M.A. (Zoology, 1970), The University of Texas at Austin Ph.D. (Wildlife Ecology, 1975), University of Michigan

#### PROFESSIONAL EXPERIENCE

- 2015 Visiting Scholar, Department of Environmental Sciences, University of Virginia
- 2009 Professor Emeritus, Department of Wildland Resources, Utah State University
- 2003 2009 Professor of Wildlife Ecology, Department of Wildland Resources, Utah State University
- 1999 2003 Professor and Associate Dean, College of Natural Resources, Utah State University
- 1996 1998 Professor and Director, Watershed Science Program, Utah State University
- 1990 1999 Professor and Department Head, Department of Fisheries and Wildlife, Utah State University
- 1986 1990 Principal Investigator, Virginia Coast Reserve Long-Term Ecological Research Program, University of Virginia
- 1974 1990 Assistant Professor, Associate Professor, Department of Environmental Sciences, University of Virginia

#### **MEMBERSHIPS**

American Association for the Advancement of Science Ecological Society of America The Wildlife Society

#### **SCHOLARSHIPS**

Undergraduate Academic Scholarship, The University of Texas at Austin (1963 - 1967)
NDEA Title IV Fellowship (Zoology), The University of Texas at Austin (1967 - 1970)
NSF Summer Research Fellowship (Zoology), The University of Texas at Austin (1969)
NIH Pre-Doctoral Fellowship in Biomedical Science (Wildlife Management), University
of Michigan (1970 - 1972)

Institute for Environmental Quality Fellowship, University of Michigan (1972 - 1974)

### **RECENT HONORS**

President's Stewardship Award, The Nature Conservancy

Elected Research Associate, Virginia Museum of Natural History

U. S. Fish and Wildlife Service "Recovery Champion" for work with the recently-delisted Delmarva Fox Squirrel

Henry S. Mosby Award of the Virginia Chapter of The Wildlife Society, for contributions to Wildlife Science

#### SERVICE

Community: Board of Directors, Ivy Creek Natural Area (1986 – 1990)

Cooperative Extension Outreach Programming (1990 – 2003)

National: Member, LTER Coordinating Committee (1987 – 1990)

Delmarva Fox Squirrel Recovery Team (Leader 1988 – 1991, Member 2000 – 2017)

Chair, Research Committee, National Association of University Fish and Wildlife Programs (1991 – 1994)

Member: Nominations Committee, Ecological Society of America (1988)

Member, Research Committee, The Wildlife Society (1992 – 1998)

Member, Western Regional Aquaculture Council (1994 – 2002)

Chair, Western Chapter, Ecological Society of America (1998 – 2002)

Chair, Section on Fish and Wildlife, National Association of State Universities and Land Grant Colleges (2001 – 2002)

Instructor, Eastern Shore of Virginia Master Naturalist Program (2011 – 2017)

Chair-elect, Wildlife and Habitat Restoration Working Group, The Wildlife Society (2018)

Advisory: U.S.D.I. Bureau of Land Management, U.S. National Park Service, The Nature Conservancy, U.S.D.I. Fish and Wildlife Service, U.S.D.I. U.S. Geological

Survey (Cooperative Research), Virginia Department of Game and Inland Fisheries,

Virginia State Department of Health, Virginia Coastal Resources Management Program,

U.S.D.A. Animal and Plant Health Inspection Service, U.S.D.A. Forest Service

U.S.D.A. Competitive Grants, Utah Division of Wildlife Resources, Wistar Institute of Philadelphia, Maryland Forest, Park and Wildlife Service, National Science Foundation (DEB)

#### **TEACHING**

Undergraduate: Inventory and Monitoring in Natural Resources Management

Conservation Ecology
Fundamentals of Ecology (with laboratory)

# **TEACHING** (continued)

Undergraduate: Inventory and Monitoring in Natural Resources Management

Conservation Ecology

Fundamentals of Ecology (with laboratory)

Population Ecology (with laboratory)

Fisheries and Wildlife Orientation

Case Studies in Fisheries and Wildlife

Terrestrial Ecology Laboratory

Principles of Wildlife Management

Natural Resources and Environmental Management

Graduate: Terrestrial Ecology (with laboratory)

Conservation Ecology

Community Ecology

Analysis of Model Ecosystems

Theoretical Ecology

Advanced Quantitative Methods

#### PUBLICATIONS AND REPORTS

## 1) Refereed Journal Articles

Dueser, R.D. and H.H. Shugart, Jr. 1978. Microhabitats in a forest-floor small mammal fauna. Ecology 59:89-98.

**PUBLICATIONS AND REPORTS** (continued)

Dueser, R.D., W.C. Brown, G.S. Hogue, C. McCaffrey, S.A. McCuskey and G.J. Hennessey. 1979. Mammals on the Virginia barrier islands. Journal of Mammalogy 60:425-429.

Dueser, R.D. and H.H. Shugart, Jr. 1979. Niche pattern in a forest-floor small mammal fauna. Ecology 60:108-118.

Leavitt, S.W., R.D. Dueser and H.G. Goodell. 1979. Plant regulation of nonessential metals relative to chemically similar micronutrients. Journal of Applied Ecology 16:203-212.

Dueser, R.D. and W.C. Brown. 1980. Ecological correlates of insular rodent diversity. Ecology 61:50-56.

Dueser, R.D. and J.G. Hallett. 1980. Competition and habitat selection in a forest-floor small mammal fauna. Oikos 35:293-297.

Rose, R.K. and R.D. Dueser. 1980. Lifespan of Virginia meadow voles. Journal of Mammalogy 61:760-763.

Dueser, R.D., M.L. Wilson and R.K. Rose. 1981. Attributes of dispersing meadow voles in open-grid populations. Acta Theriologica 26:139-162.

Porter, J.H. and R.D. Dueser. 1982. Niche overlap and competition in an insular small mammal fauna: a test of the niche overlap hypothesis. Oikos 39:228-236.

Dueser, R.D. and H.H. Shugart, Jr. 1982. Reply to comments by Van Horne and Ford and by Carnes and Slade. Ecology 63:1174-1175.

Wolff, J.O., M.H. Freeberg and R.D. Dueser. 1983. Interspecific territoriality in two sympatric species of *Peromyscus* (Rodentia: Cricetidae). Behavioral Ecology and Sociobiology 12:237-242.

Dueser, R.D., R.K. Rose and J.H. Porter. 1984. A body-weight criterion to identify dispersing small mammals. Journal of Mammalogy 65:727-729.

Wolff, J.O., R.D. Dueser and K.S. Berry. 1985. Food habits of sympatric *Peromyscus leucopus* and *Peromyscus maniculatus*. Journal of Mammalogy 66:795-798.

Porter, J.H. and R.D. Dueser. 1986. A test for suppression of body growth and sexual maturity in small male meadow voles (*Microtus pennsylvanicus*) in field enclosures. American Midland Naturalist 115:181-190.

Dueser, R.D. and J.H. Porter. 1986. Habitat use by insular small mammals: relative effects of competition and habitat selection. Ecology 67:195-201.

Wolff, J.O. and R.D. Dueser. 1986. Noncompetitive coexistence between *Peromyscus* species and *Clethrionomys gapperi*. Canadian Field Naturalist 100:186-191.

Harney, B.A. and R.D. Dueser. 1987. Vertical stratification of activity of two *Peromyscus* species: an experimental analysis. Ecology 68:1084-1091.

Porter, J.H. and R.D. Dueser. 1989. A comparison of methods for measuring small mammal dispersal by use of a Monte-Carlo simulation model. Journal of Mammalogy 70:783-793.

Harrison, E.A., B.M. McIntyre and R.D. Dueser. 1989. Community dynamics and topographic controls on forest pattern in Shenandoah National Park, Virginia. Bulletin of the Torrey Botanical Club 116:1-14.

Dooley, J.L., Jr., and R.D. Dueser. 1990. Nest site selection by sympatric *Peromyscus* species. Ecology 71:788-796.

Porter, J.H. and R.D. Dueser. 1990. Selecting a body-mass criterion for measuring dispersal. Journal of Mammalogy 71:470-473.

Dueser, R.D. 1990. Biota of the Virginia barrier islands. Virginia Journal of Science 41:257-258.

McCaffrey, C.A. and R.D. Dueser. 1990. Preliminary vascular floras for the Virginia barrier islands. Virginia Journal of Science 41:259-281.

McCaffrey, C.A. and R.D. Dueser. 1990. Plant associations on the Virginia barrier islands. Virginia Journal of Science 41:282-299.

Hayden, B.P., R.D. Dueser, J.T. Callahan and H.H. Shugart. 1991. Long-Term Research at the Virginia Coast Reserve. BioScience 41:310-318.

Scott, D.E. and R.D. Dueser. 1992. Habitat use by insular populations of *Mus* and *Peromyscus*: What is the role of competition? Journal of Animal Ecology 61:329-338.

Forys E.A. and R.D. Dueser. 1993. Inter-island movements of rice rats (*Oryzomys palustris*). American Midland Naturalist 130:408-412.

Halama, K.J. and R.D. Dueser. 1994. Of mice and habitats: tests for density Dependent habitat selection. Oikos 69:107-114.

Belovsky, G.E., J.A. Bissonette, R.D. Dueser, T.C. Edwards, C.M. Luecke, M.E. Ritchie, J.B. Slade, and F.H. Wagner. 1994. Management of small populations: concepts affecting the recovery of endangered species. Wildlife Society Bulletin 22:307-316.

Dooley, J.L., Jr., and R.D. Dueser. 1996. Experimental tests of nest-site competiton between two *Peromyscus* species. Oecologia 105:81-86.

Lancia, R.A., C.E. Braun, M.W. Collopy, R.D. Dueser, J.G. Kie, C.J. Martinka, J.D. Nichols, T.W. Nudds, W.R. Porath and N.G. Tilghman. 1996. ARM! for the future: Adaptive resource management in the wildlife profession. Wildlife Society Bulletin 24:436-442.

Moncrief, N.D., N.E. Cockett, A.D. Neff, W.L. Thomas and R.D. Dueser. 1997. Polymorphic microsatellites in the meadow vole, *Microtus pennsylvanicus*: conservation of loci across species. Journal of Molecular Ecology 6:299-301.

- Loxterman, J.L., N.D. Moncrief, R.D. Dueser, C.R. Carlson and J.F. Pagels. 1998. Dispersal abilities and genetic population structure of insular and mainland *Oryzomys palustris* and *Peromyscus leucopus*. Journal of Mammalogy 79: 66-77.
- Moncrief, N.D. and R.D. Dueser. 2001. Allozymic variation in the endangered Delmarva fox squirrel (*Sciurus niger cinereus*): Genetics of a translocated population. American Midland Naturalist. 146:37-42.
- Moncrief, N.D., N.E. Cockett, W.L. Thomas and R.D. Dueser. In press. Microsatellite markers distinguish between the Delmarva fox squirrel (*Sciurus niger cinereus*) and the grey squirrel (*Sciurus carolinensis*). Journal of Wildlife Management.
- Jiménez, J.E., M.R. Conover, R.D. Dueser and T.A. Messmer. 2007. Influence of habitat patch characteristics on the success of upland duck nests. Human-Wildlife Conflicts 1:244-256.
- Moncrief, N. D., R. A. Van den Bussche, R. D. Dueser, D. Loftis, N. E. Cockett and M. Culver. 2008. Diagnostic genetic marker that differentiates eastern fox squirrels from eastern gray squirrels. Journal of Wildlife Management 72:320-323.
- Martin, J. D., R. D. Dueser and N. D. Moncrief. 2010. Method for casting large numbers of clay eggs for use in studies of artificial nests. Southwestern Naturalist 55:595-600.
- Dueser, R. D., N. D. Moncrief, O. Keiss, J. D. Martin, J. H. Porter and B. R. Truitt. 2013. Overwater movement of raccoons (*Procyon lotor*) in a naturally fragmented coastal landscape. Northeastern Naturalist 20:511-528.
- Porter, J. H., R. D. Dueser and N. D. Moncrief. 2015. Cost-distance analysis of mesopredators as a tool for avian habitat restoration on a naturally fragmented landscape. Journal of Wildlife Management 79:229-234.
- Moncrief, N. D., J. H. Roberts, E. H. Hallerman, R. A. Van Den Bussche, J. H. Porter and R. D. Dueser. 2017. Landscape genetics of a raccoon (*Procyon lotor*) metapopulation in an undeveloped coastal island system. Journal of Mammalogy 98:1137-1155.
- Dueser, R. D., J. D. Martin and N. D. Moncrief. 2018. Pen trial of estrogen-induced conditioned food aversion to eggs in raccoons (*Procyon lotor*). Applied Animal Behaviour Science 201:93-101.

Dueser, R. D., J. D. Martin and N. D. Moncrief. *In review*. Successes and limitations of estrogen-induced conditioned food aversion to eggs in free-ranging raccoons (*Procyon lotor*). Ecological Applications.

Dueser, R.D., J.D. Martin and N.D. Moncrief. *In preparation*. A critical review of the use of conditioned aversion as a tool for reducing the impact of mammalian predators on threatened and endangered ground-nesting species. Mammalian Biology.

# 2) Symposium Volumes (Invited)

Shugart, H.H., Jr., R.D. Dueser and S.H. Anderson. 1974. Influence of habitat alteration on wildlife populations. In: Symposium on Timber-Wildlife Management -- A Common Opportunity. Missouri Academy of Sciences Occasional Paper 3:92-96.

Dueser, R.D., H.H. Shugart, Jr., and E.F. Connor. 1986. The dynamic landscape approach to habitat management: 106-113. In: D.L. Kulhavy and R.N. Conner (eds.). Wilderness and Natural Areas in the Eastern United States. A Management Challenge.

Dueser, R.D., J.L. Dooley, Jr., and G.J. Taylor. 1988. Habitat structure, forest composition and landscape dimensions as components of habitat suitability for the Delmarva fox squirrel (*Sciurus niger cinereus*): 414-421. In: R.C. Szaro, K.E. Severson and D.R. Patton (eds.). Management of Amphibians, Reptiles and Small Mammals in North America. U.S. For. Serv. Tech. Rept. RM 166.

Dueser, R.D., J.H. Porter and J.L. Dooley, Jr. 1989. Direct tests for competition in North American rodent communities: synthesis and prognosis: 105-125. In: D.W. Morris, Z. Abramsky, B.J. Fox and M.R. Willig (eds.). Patterns in the Structure of Mammalian Communities. Spec. Publ. Mus., Texas Tech. Univ. 29.

Dueser, R.D. (ed.). 1990. Biota of the Virginia barrier islands. Virginia Academy of Science 41. 204 pp.

Dueser, R.D. and C.O. Handley, Jr. 1991. Fox squirrels: *Sciurus niger cinereus*:585-587. In K. Terwilliger (ed.). Virginia's Endangered Species. McDonald and Woodward Publ. Co., Blacksburg, VA 672 pp.

Dueser, R.D. and C.O. Handley, Jr. 1991. Fox squirrels: *Sciurus niger niger*. 587-589. In: K. Terwilliger (ed.). Virginia's Endangered Species. McDonald and Woodward Publ. Co., Blacksburg, VA. 672 pp.

Schmidt, R.H., M.R. Conover, R.D. Dueser, F.K. Knowlton and T.A. Messmer. 1992. Training tomorrow's specialists in wildlife damage management. Proceedings Eastern Wildlife Damage Control Conference 5:216-217.

# 3) Book Chapters

Rose, R.K. and R.D. Dueser. 1999. Species account of *Oryzomys palustris:* 554-555.In: D.E. Wilson (ed.). Complete Book of North American Mammals. Smithsonian Inst. Press, Washington, D.C.

# 4) Monographs and Technical Reports

Dueser, R.D., M.A. Graham, G.J. Hennessey, C. McCaffrey, A.W. Niederoda, T.W. Rice and B. Williams. 1976. Virginia Coast Reserve Study: Ecosystem Description. The Nature Conservancy. Arlington, Virginia. 568 pp.

Dueser, R.D., H.H. Shugart, Jr., and J.C. Randolph. 1976. Structural niches in a forest floor small mammal community. Oak Ridge National Laboratory TM 5004. 116 pp.

# 5) Workshops

Modern Approaches to the Study of Community Ecology. Three-day workshop on multivariate statistical models and multivariate experiments in community ecology. Department of Biology, Bowling Green State University (1988).

Threatened and Endangered Species of Virginia. Moderator for two-day workshop. Virginia Polytechnic Institute and State University (1989).

Forest Management for Wildlife Habitat and Biodiversity. Ten-day shortcourse for mid-career wildlife biologists with the U.S.D.A. Forest Service. Department of Fisheries and Wildlife, Utah State University (1991, 1992, 1993).

### **INVITED SEMINARS AND PRESENTATIONS**

University of Michigan, Arizona State University, Clemson University, Old Dominion University, East Tennessee State University, University of Richmond, Mountain Lake Biological Station, College of William and Mary, U.S. National Zoo, Oak Ridge National Laboratory, Oregon State University, Bowling Green State University, Texas A&M University, Virginia Institute of Marine Science, Humboldt State University, Virginia Tech University, University of California at Riverside, Emory University, University of North Texas, Virginia Commonwealth University, San Diego State University