

## **CURRICULUM VITAE - MALCOLM L. HUNTER, JR.**

Department of Wildlife, Fisheries, and Conservation Biology, University of Maine, Orono, ME 04469  
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### **Education**

1966 - 1970 Lincoln Academy, Newcastle, Maine  
1970 - 1974 B.S. in Wildlife Science, University of Maine, Orono  
1974 - 1978 D. Phil. in Zoology, Edward Grey Institute of Field Ornithology, Department of Zoology, Oxford University. Thesis title: "Environmental effects on the singing behaviour of Great Tits." Stipend from Rhodes Scholarship, Research funds from National Geographic Society

### **Employment**

1971 Research Technician, Maine Dept. of Inland Fisheries and Wildlife  
  
1972-74 Self-employed as ecological consultant. Funding from: Center for Natural Areas, Central New Hampshire Planning Office, Maine Bureau of Public Lands, Maine State Planning Office, Massachusetts Audubon Society, Mid-coast Audubon Society, New England Regional Commission, Smithsonian Institution, Time/Life Books.  
  
1976 Research Assistant, U.S. Forest Service and School of Forest Resources, University of Maine  
  
1978 Zoology Instructor, Oxford University  
  
1978 – pr Department of Wildlife, Fisheries, and Conservation Biology, University of Maine, Current titles: Libra Professor of Conservation Biology and Emeritus Professor of Wildlife Ecology

### **Scholarships and Academic Honors**

1973 Rhodes Scholarship  
1974 Graduated from University of Maine with Highest Distinctions  
1974 P. F. English Award for outstanding wildlife student in northeastern U.S. and eastern Canada  
1974 D. B. Demeritt Award for outstanding student in School of Forest Resources  
1975 Senior Scholar, St. Catherine's College, Oxford University  
1990 Libra Professor of Conservation Biology  
1995 Pew Conservation Fellow  
1996 University of Maine 1996 Distinguished Professor  
1996 University of Maine Commencement Speaker  
2003 Webber Award for Outstanding Forest Resource Research  
2005 President Harris Award for contributions to the University of Maine  
2007 Distinguished Service Award of the Society for Conservation Biology

### **Membership in Professional Societies**

American Ornithological Society (Elective member)  
Ecological Society of America (Editorial board)  
Society for Conservation Biology (President; Board of Governors; Editorial Board)

### **Membership and roles in other organizations**

Doris Duke Charitable Foundation, Chair of Environmental Committee  
Endangered Species Coalition, Scientific Advisory Board

Land for Maine's Future Board (Gubernatorial appointment)

Maine Council on Sustainable Forest Management (Gubernatorial appointment)  
 Maine Forest Biodiversity Project  
 Maine Bureau of Public Lands (Silvicultural Advisory Committee)  
 Maine Dept. Inland Fisheries and Wildlife (Nongame Advisory Council, Advisor for Maine Bird and Amphibian & Reptile Atlases)  
 Maine Governor's Task Force on Management of Public Land (Gubernatorial appointment)  
 Maine Natural Areas Program, Advisory Board  
 Maine Ecological Reserves Scientific Advisory Committee (Gubernatorial appointment)  
 Maine Ecosystems Working Group  
 Nature Conservancy, Maine Chapter (Trustee; Chair, Conservation Priorities and International Comms)  
 Nature Conservancy, International (Science Review Panel; Smith Fellowship Review)  
 Natural Resources Council of Maine (Board of Directors; Forestry Committee)  
 Nova Scotia Dept. of Lands and Forestry Advisor  
 President's Commission on Environmental Quality: Biodiversity Task Force  
 Robert Woodruff Foundation's Jones Ecological Research Center, Scientific Advisory Comm  
 White House Task Force on Spotted Owls (Consultant)  
 William and Flora Hewlett Foundation, Consultant  
 World Conservation Union (IUCN); Species Survival Commission; World Commission on Protected Areas

## **International Experience**

Research, education, and conservation work in Australia, Belize, Botswana, Brazil, Canada, Dominica, D.R. Congo, Finland, France, Germany, Great Britain, Greece, India, Iran, Kenya, Mexico, Morocco, Nepal, Norway, Panama, Peru, Poland, Seychelles, South Africa, Spain, Sweden, Switzerland, Tanzania, Uganda, Zambia, Zimbabwe. Travel to over 40 other countries.

Consultant and reviewer for the U.S. Agency for International Development, Smithsonian Institution, World Wildlife Fund, World Conservation Union, United Nations Environment Program, and a member of the IUCN Species Survival Commission and World Commission on Protected Areas.

Graduate advisor to students from Argentina, Brazil, Canada, Chile, India, Japan, Kenya, Nepal, Romania, Taiwan, United Kingdom, and Zaire.

International funding from: British Overseas Development Administration, Fauna and Flora Preservation Society, National Geographic Society, Rockefeller Foundation, Royal Geographic Society, Toronto Zoo, U.S. Agency for International Development, U.S. Fish and Wildlife Service, Van Tienhoven Foundation, Volkart Foundation, Wildlife Conservation Society, World Pheasant Association, World Wildlife Fund (International and U.S.)

Rudimentary knowledge of Farsi, French, German, and Spanish

## **Books and Monographs**

Calhoun, A. M.L. Hunter, Jr., and K. Redford. In press. Our Maine: exploring its natural heritage. Downeast Books.

Hunter, M.L. Jr., J.P. Gibbs, and V. Popescu. 2021. Fundamentals of conservation biology, 4th edition. Wiley-Blackwell, Oxford, United Kingdom 654 pp.

Hunter, M.L. D. Lindenmayer, and A. J.K. Calhoun. 2016. Saving the earth as a career: Advice on becoming a conservation professional. 2<sup>nd</sup> edition. Wiley-Blackwell, Oxford, United Kingdom.

Hunter, M.L. Jr. and F. Schmiegelow. 2011. Wildlife, forests, and forestry: Principles of managing forests for biological diversity. 2nd edition. Prentice-Hall, Upper Saddle River, NJ. 259 pp.

Gibbs, J., M.L. Hunter, Jr. and E. Sterling. 2008. Problem-solving in conservation biology and wildlife management: Exercises for class, field, and laboratory, 2<sup>nd</sup> edition. Blackwell Publishing, Oxford, United Kingdom. 328 pp.

Hunter, M.L. D. Lindenmayer, and A. J.K. Calhoun. 2007. Saving the earth as a career: Advice on becoming a conservation professional. Blackwell Publishing, Oxford, United Kingdom. 200pp.

Hunter, M.L. Jr. and J.P. Gibbs. 2007. Fundamentals of conservation biology, 3rd edition. Blackwell Publishing, Oxford, United Kingdom, 497pp.

Hunter, M.L. Jr. 2002. Fundamentals of conservation biology, 2nd edition. Blackwell Science, Malden, Massachusetts, 547pp.

Hunter, M.L. Jr. (editor). 1999. Maintaining biodiversity in forest ecosystems. Cambridge University Press, Cambridge, England. 698pp.

Hunter, M.L. Jr., A. Calhoun and M. McCollough.(editors). 1999. Maine amphibians and reptiles. University of Maine Press, Orono, Maine. 252pp.

Gibbs, J., M.L. Hunter, Jr. and E. Sterling. 1998. Problem-solving in conservation biology and wildlife management: Exercises for class, field, and laboratory. Blackwell Science, Malden, Massachusetts. 215pp.

Hunter, M.L. Jr. 1996. Fundamentals of conservation biology. Blackwell Science, Cambridge, Massachusetts, 482pp.

Witham, J., E. Moore, M. Hunter, A. Kimball, and A. White. 1993. Long-term study of an oak-pine forest ecosystem: Techniques manual for the Holt Research Forest. Maine Agricultural Experiment Station Technical Bulletin 153. 164 pp.

Hunter, M.L. Jr., J. Albright and J. Arbuckle 1992. The amphibians and reptiles of Maine. Maine Agricultural Experiment Station Bulletin 838. 188 pp.

Hunter, M.L. Jr. 1990. Wildlife, forests, and forestry: Principles of managing forests for biological diversity. Prentice-Hall, Englewood Cliffs, NJ. 370pp.

Gaston, A.J., M.L. Hunter, Jr, and P.J. Garson. 1981. The wildlife of Himachal Pradesh, Western Himalayas. School of Forest Resources Technical Note No. 82, Orono, ME. 159pp.

Hunter, M.L. Jr. 1976. Maine ecosystems. Center for Natural Areas. Washington, D.C. 224pp.

### Refereed Journals

Dri, G.F., E.J. Blomberg, M.L. Hunter, J.H. Vashon, A. Mortelliti. Developing cost-effective monitoring protocols for track-surveys: an empirical assessment using a 16-year dataset on Canada lynx *Lynx canadensis*. Biological Conservation In press.

Pohlman, C.K., A.M Roth, M.J. Hartley, M.L Hunter Jr., B.J. McGill, and R.S Seymour. 2023. Experimental natural disturbance-based silviculture systems maintain mature forest bird assemblage long-term in Maine (USA). Forest Ecology and Management 528. <https://doi.org/10.1016/j.foreco.2022.120630>

Earl, J.E. et 10 coauthors. 2022. Amphibian biomass export from geographically isolated wetlands: temporal variability, species composition, and potential implications for terrestrial ecosystems. Diversity 14(3): 63 <https://doi.org/10.3390/d14030163>

Dri, G.F., M.L. Hunter, Jr., J. Witham, A. Mortelliti. 2022. Pulsed resources and the resource-prediction strategy: a field-test using a 36-year study of small mammals. Oikos 2022: e09551 doi: 10.1111/oik.09551

Elias, S., J.W. Witham, E.F. Schneider, P.W. Rand, M.L. Hunter, Jr., C. Lubelczyk, and R.P. Smith, Jr. 2021. Emergence of *Ixodes scapularis* (Acari: Ixodidae) in a small mammal population in a coastal oak-pine forest, Maine, USA. Journal of Medical Entomology doi.org/10.1093/jme/tjab209

Hunter, M., S.R. Boone, A.M. Brehm, A. Mortelliti. 2021. Modulation of ecosystem services by animal personalities. Frontiers in Ecology and the Environment 20:58-63 doi.org/10.1002/fee.2418

Angelstam, P. et 27 coauthors. 2021. Frontiers of protected areas versus forest exploitation: assessing

habitat network functionality in 16 case study regions globally. *Ambio* doi.org/10.1007/s13280-021-01628-5

Eakin, C., A.J.K. Calhoun, and M. Hunter, Jr. 2019. Indicators of wood frog *Lithobates sylvaticus* condition in an urbanizing landscape. *Ecosphere* 10. 10.1002/ecs2.2789.

Eakin, C., A.J.K. Calhoun, and M. Hunter, Jr. 2019. Effects of suburbanizing landscapes on vernal pool-breeding amphibian reproductive effort. *Herpetological Conservation and Biology* 14:515–532.

Schrodt, F. et 28 coauthors. 2019. To advance sustainable stewardship, we must document not only biodiversity but geodiversity. *Proceedings of the National Academy of Science* 116:16155-16158.

Eakin, C., M. Hunter, Jr., and A.J.K. Calhoun. 2019. The influence of land cover and within-pool characteristics on larval, froglet, and adult wood frogs along a rural to suburban gradient. *Urban Ecosystems* 22:493-505.

Lindemann, S.B., D.E. Putnam, M.L. Hunter, Jr., and T.B. Persons. 2019. Spotless burnsi pattern in Northern Leopard Frog (*Lithobates pipiens*) in Maine. *Canadian Field-Naturalist* 133(3): 193–195.

Hoffmann, K., M. Hunter, Jr., A.J.K. Calhoun, and J. Bogart. 2018. Post-breeding migration and habitat of unisexual salamanders in Maine, USA. *Journal of Herpetology* 52:273-281.

Eakin, C., M. Hunter, Jr., and A.J.K. Calhoun. 2018. Bird and mammal use of vernal pools along an urban development gradient. *Urban Ecosystems* 21:1029-1041.

Hunter, M. 2017. Conserving small natural features with large ecological roles: an introduction and definition. *Biological Conservation* 211 (Special Issue):1-2.

Hunter, M., et 13 coauthors. 2017. Conserving small natural features with large ecological roles: a synthetic overview. *Biological Conservation* 211 (Special Issue):88-95.

Acuña, V., M.L. Hunter, A. Ruhí. 2017. Managing temporary streams and rivers as unique rather than second-class ecosystems. *Biological Conservation* 211 (Special Issue):12-19.

Ogawa, R. A. Mortelliti, J. W. Witham, and M. L. Hunter, Jr. 2017. Demographic mechanisms linking tree seeds and rodent population fluctuations: insights from a 33-year study. *Journal of Mammalogy* 98:419-427

Feuka, A.B., K. E. Hoffmann, M. L. Hunter, Jr., and A.J.K. Calhoun. 2017. Effects of light pollution on habitat selection in post-metamorphic wood frogs (*Rana sylvaticus*) and unisexual blue-spotted salamanders (*Ambystoma laterale x jeffersonianum*). *Herpetological Conservation and Biology* 12:470-476.

Call, E. and M. Hunter. 2017. Evaluating the framework of a new river-bird survey method. *River Research and Applications* 33: 495-504

Cline, B.B. and M. L. Hunter, Jr. 2016. Initial movements of a dispersing amphibian in response to partial harvesting in the Acadian forest of Maine, USA. *Forest Science* 62:333-342.

Hoffmann, K., A. Calhoun, and M. Hunter. 2016. A deep-water funnel trap for salamanders. *Herpetological Review* 47:205-206.

Cline, B.B. and M.L. Hunter, Jr. 2016. Movement in the matrix: Substrates and distance-to-forest edge affect the post-metamorphic movements of a forest amphibian. *Ecosphere* 7(2):e01202. 10.1002/ecs2.1202

Wood, C.M., J.W. Witham, and M.L. Hunter Jr. 2016. Climate-driven range shifts are stochastic processes at a local level: two flying squirrel species in Maine. *Ecosphere* 7(2):e01240. 10.1002/ecs2.1240

Hunter, M., et 18 coauthors. 2016. Two roles for ecological surrogacy: indicator surrogates and management surrogates. *Ecological Indicators* 63:121-125.

Lindenmayer, D. et 18 coauthors, 2015. A new framework for selecting environmental surrogates. *Science for the Total Environment* 538:1029-1038.

- Beier, P., M.L. Hunter, and M. Anderson. 2015. Conserving nature's stage. *Conservation Biology* 29:613-617.
- Comer, P.J., R. L. Pressey, M. L. Hunter, Jr, C. Schloss, S. Buttrick, N. Heller, J. Tirpak, D. P. Faith, M. Cross, and M. Shaffer. 2015. Incorporating geodiversity into conservation decisions. *Conservation Biology* 29:692-701.
- Gill, J. L., J. Blois, B. Benito, S. Dobrowski, M. L. Hunter, Jr., and J. McGuire. 2015. A 2.5-million-year perspective on coarse-filter strategies for conserving nature's stage. *Conservation Biology* 29:640-648.
- Hjort, J., J. Gordon, M. Gray, M. L. Hunter, Jr. 2015. Why geodiversity matters in valuing nature's stage. *Conservation Biology* 29:630-639.
- Capps, K.A., R. Rancatti, N. Tomczyk, T. Parr, A. Calhoun, and M.L. Hunter, Jr. 2014. Biogeochemical hotspots in forested landscapes: The role of vernal pools in denitrification and organic matter processing. *Ecosystems* 17:1455-1468.
- Hunter, M.L. Jr., K.H. Redford, and D.B. Lindenmayer. 2014. The complementary niches of anthropocentric and biocentric conservationists. *Conservation Biology* 28:641-645.
- Cline, B.B. and M.L. Hunter, Jr. 2014. Juvenile amphibians discriminate among open-canopy habitats: An experimental investigation of habitat permeability. *Journal of Applied Ecology* 51:319-329.
- Colgan, C. M. L. Hunter, B. McGill, and A. Weiskittel. 2014. Managing the middle ground: Forests in the transition zone between cities and remote areas. *Landscape Ecology* 29:1133-1143
- Calhoun, A., J. Jansuwicz, K. Bell. And M. Hunter. 2014. Improving management of small natural features on private lands by negotiating the science-policy boundary of Maine vernal pools. *Proceedings of the National Academy of Science* 111:11002-11006.
- Calhoun, A.J.K., J. Arrigoni, R.P. Brooks, M.L. Hunter, S.C. Richter. 2014. Creating successful vernal pools: a literature review and advice for practitioners. *Wetlands* 34:1027-1038.
- Politi, N., L. Rivera, L. Lizárraga, M. Hunter, Jr., and G.E. DeFosse. 2014. The dichotomy between protection and logging of an endangered and valuable timber species –conservation of *Amburana cearensis* in northwestern Argentina. *Oryx* 49:111-117.
- Wang, G., N.T. Hobbs, N. A. Slade, J. F. Merritt, L. L. Getz, M. L. Hunter, Jr., S. H. Vessey, J. W. Witham and A. Guillaumet. 2013. Comparative population dynamics of large and small mammals in the Northern Hemisphere: Deterministic and stochastic forces. *Ecography* 36:439-446.
- Politi, N., M.L. Hunter, Jr., and L. Rivera. 2012. Assessing the effects of selective logging on birds in Neotropical piedmont and cloud montane forest. *Biodiversity and Conservation* 21:3131-3155.
- Campbell, S.P., J.W. Witham, and M.L. Hunter Jr. 2012. Long-term changes in spatial distribution of birds responding to a group-selection timber harvest. *Wildlife Society Bulletin* 36:313-327.
- Popescu, V.D., B.S. Brodie, M.L. Hunter, and J. Zydlewski. 2012. Use of olfactory cues by newly metamorphosed wood frogs (*Lithobates sylvaticus*) during emigration. *Copeia* 2012(3): 424-431
- Popescu, V.D., D.A. Patrick, M.L. Hunter, and A.J.K. Calhoun. 2012. The role of forest harvesting and subsequent vegetative regrowth in determining patterns of amphibian habitat use. *Forest Ecology and Management* 270:163-174
- Popescu, V.D. and M.L. Hunter. 2011. Clearcutting affects habitat connectivity for a forest amphibian by decreasing permeability to juvenile movements. *Ecological Applications* 21:1283-1295.
- Lindenmayer, D.B. and M.L. Hunter, Jr. 2010. Some guiding concepts for conservation biology. *Conservation Biology* 24:1459-1468.
- Politi, N., M.L. Hunter, Jr., and L. Rivera. 2010. Availability of cavities for avian cavity nesters in selectively logged subtropical montane forests of the Andes. *Forest Ecology and Management* 260:893-906.

- Hunter, M.L., Jr, E. Dinerstein, J. Hoekstra, and D. Lindenmayer. 2010. Conserving biodiversity in the face of climate change: A call to action. *Conservation Biology* 24:1169-1171.
- Campbell, S.P., J.W. Witham, and M.L. Hunter Jr. 2010. Stochasticity in avian habitat use: a test of deterministic explanations for habitat selection. *Ecological Monographs* 80:287-302.
- Blomquist, S.M., and M.L. Hunter Jr. 2010. A multi-scale assessment of amphibian habitat selection: wood frog response to timber harvesting. *Ecoscience* 17:251-264.
- Strojny, C. A. and M. L. Hunter, Jr. 2010. Comparing relative abundance of amphibians in forest canopy gaps of natural origin vs. timber harvest origin. *Animal Biodiversity and Conservation* 33:1-13.
- Beaudry, F., P. G. deMaynadier, M. L. Hunter, Jr. 2010. Identifying hot moments in road mortality risk for freshwater turtles. *Journal of Wildlife Management* 74:152-159.
- Strojny, C. A. and M. L. Hunter, Jr. 2010. Log diameter influences detection of eastern red-backed salamanders (*Plethodon cinereus*) in harvest gaps, but not in closed-canopy forest conditions. *Herpetological Conservation and Biology* 5:80-85.
- Beaudry, F., P. G. deMaynadier, M. L. Hunter, Jr. 2010. Nesting movements and nest site characteristics of spotted turtles (*Clemmys guttata*) and Blanding's turtles (*Emydoidea blandingii*): Implications for the use of artificial nest sites. *Herpetological Conservation and Biology* 5:1-8.
- Politi, N., M.L. Hunter, Jr., and L. Rivera. 2009. Nest selection by cavity-nesting birds in subtropical montane forests of the Andes: some implications for sustainable forest management. *Biotropica* 41:354-360.
- Lindenmayer, D.B., M.L. Hunter, Jr., P.J. Burton, and P. Gibbons. 2009. Effects of logging on fire regimes in moist forests. *Conservation Letters* 2:271-277.
- Blomquist, S.M. and M.L. Hunter, Jr. 2009. A multi-scale assessment of habitat selection and movement patterns by Northern Leopard Frogs (*Lithobates [Rana] pipiens*) in a managed forest. *Herpetological Conservation and Biology* 4:142-160.
- Beaudry, F., P. G. deMaynadier, M. L. Hunter, Jr. 2009. Seasonally-dynamic habitat use by Spotted (*Clemmys guttata*) and Blanding's Turtles (*Emydoidea blandingii*) in Maine. *Journal of Herpetology* 43:636-645.
- Semlitsch, R.D., S.M. Blomquist, A.J.K. Calhoun, J. W. Gibbons, J.P. Gibbs, G. Graeter, E.B. Harper, D. Hocking, M. Hunter, Jr., D.A. Patrick, T.A.G. Rittenhouse, B.B. Rothermel, and B.D. Todd. 2009. Effects of timber management on amphibian populations: understanding mechanisms from forest experiments. *Bioscience* 59:853-862.
- Hunter, M.L. Jr., M.J. Bean, D. B. Lindenmayer, and D. S. Wilcove. 2009. Thresholds and the mismatch between environmental laws and ecosystems. *Conservation Biology* 23:1053-1055.
- Wang, G., J. O. Wolff, S. H. Vessey, N. A. Slade, J. W. Witham, J. F. Merritt, M. L. Hunter, Jr., and S.P. Elias. 2009. Comparative population dynamics of *Peromyscus leucopus* in North America: influences of climate, food, and density dependence. *Population Ecology* 51:133-142.
- Sutherland, W.J. et al. 2009. An assessment of the 100 questions of greatest importance to the conservation of global biological diversity. *Conservation Biology* 23:557-567.
- Beaudry, F., P. G. deMaynadier, M.L. Hunter Jr. 2008. Identifying road mortality threat at multiple spatial scales for semi-aquatic turtles. *Biological Conservation* 141:2550-2563.
- Schwartz, M.W., M. L. Hunter, Jr., P. D. Boersma. 2008. Scientific societies in the 21st century: a membership crisis? *Conservation Biology* 22:1087-1089.
- Patrick, D.A., E.B. Harper, M.L. Hunter Jr, and A.J.K. Calhoun. 2008. Terrestrial habitat selection and strong density-dependent mortality in recently metamorphosed amphibians. *Ecology* 89:2563-2574.

- Patrick, D.A., A.J.K. Calhoun and M.L. Hunter Jr. 2008. The importance of understanding spatial population structure when evaluating the effects of silviculture on spotted salamanders (*Ambystoma maculatum*). *Biological Conservation* 141:807-814
- Blomquist, S.M., J.D. Zydlewski and M.L. Hunter Jr. 2008. Efficacy of PIT tags for tracking the terrestrial anurans *Rana pipiens* and *Rana sylvatica*. *Herpetological Review* 39:174-179.
- Lindenmayer, D. et al. 2008. A checklist for ecological management of landscapes for conservation. *Ecology Letters* 11:78-91.
- Cornelius, C., K. Cockle, N. Politi, I. Berkunsky, L. Sandoval, V. Ojeda, L. Rivera, M.L. Hunter, Jr., and K. Martin. 2008. Cavity-nesting birds in Neotropical forests: cavities as a potentially limiting resource. *Ornitologia Neotropical* 19:253-268.
- Hunter, M.L. 2007. Climate change and moving species: Furthering the debate on assisted colonization. *Conservation Biology* 21:1356-1358.
- Campbell, S.P., J.W. Witham, and M.L. Hunter Jr. 2007. A long-term study on the effects of a selection timber harvest on a forest bird community in Maine. *Conservation Biology* 21:1218-1229.
- Blomquist, S.B. and M. L. Hunter Jr. 2007. Externally attached radio-transmitters have limited effects on the antipredator behavior and vagility of *Rana pipiens* and *R. sylvatica*. *Journal of Herpetology* 41:430-438.
- Patrick, D. A. Calhoun, and M.L. Hunter, Jr. 2007. The orientation of juvenile wood frogs, *Rana sylvatica*, leaving experimental ponds. *Journal of Herpetology* 41:158-163.
- Anderson, M.W. et al. 2007. Attitude changes of undergraduate university students in general education courses. *Journal of General Education* 56: 149-168.
- Elias, S.P., J. W. Witham, and M. L. Hunter, Jr. 2006. Impact of a group-selection timber harvest on a 22-year population fluctuation pattern in *Clethrionomys gapperi*. *Journal of Mammalogy* 87:440-445.
- Perkins, D. W. and M. L. Hunter. 2006. Use of amphibians to define riparian zones along headwater streams in Maine. *Canadian Journal of Forest Research* 36:2124-2130.
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- Schulte, Lisa A., R. J. Mitchell, M. L. Hunter, Jr., J. F. Franklin, R. K. McIntyre, and B. J. Palik. 2006. Evaluating the conceptual tools for forest biodiversity conservation and their implementation in the United States. *Forest Ecology and Management* 232:1-11.
- Hunter, M.L. Jr. 2005. A mesofilter complement to coarse and fine filters. *Conservation Biology* 19:1025-1029.
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- Lindenmayer, D.B., D.R. Foster, J.F. Franklin, M.L. Hunter, R.F. Noss, D. Perry, and F.A. Schmiegelow. 2004. Salvage harvesting policies after natural disturbances. *Science* 303:1303.
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- Hunter, M.L. Jr., A. Calhoun, and D. S. Wilcove. 2004. Goliath Heron fishing with an artificial bait? *Waterbirds* 27:312-313.

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- Noss, R. and M.L. Hunter. 2001. From assemblage to community. *Conservation Biology* 15:1201-1202.
- Plucinski, K.E. and M.L. Hunter, Jr. 2001. Spatial and temporal patterns of seed predation on three tree species in an oak-pine forest. *Ecography* 24:309-317.
- Hunter, M.L. Jr. 2000. Refining normative concepts in conservation. *Conservation Biology* 14:573-574.
- deMaynadier, P.G. and M.L. Hunter, Jr. 2000. Forest roads and amphibian movements in Maine. *Natural Areas Journal* 20:56-65.
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### **Funding (grants over \$10,000)**

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| 2013- pr  | “Of Pools and People: Small natural features with large ecosystem functions in urbanizing landscapes” National Science Foundation, \$1,488,951 (with seven co-PIs)   |
| 2009-pr   | “Maine’s Sustainability Science Initiative”, National Science Foundation, \$20,000,000 (with many co-PIs).   |
| 1983-pr.  | *A long-term forest ecosystem study. Holt Woodlands Research Foundation. Ca. \$100,000/year (with A. J. Kimball, A. S. White, and J. W. Witham).   |
| 2003-2010 | Land use practices and the persistence of amphibian populations. National Science Foundation Collaborative project with U Missouri, U Georgia, and SUNY-ESF; U.Maine’s portion of budget: \$415,000.   |
| 2000      | Role of canopy gaps and down woody material in maintaining biodiversity in the Acadian Forest of Maine. USDA Competitive Grants. \$260,000. (With R. Wagner and S. Woods).   |
| 2003      | Calibration of Conservation Theory and Principles Applied at Various Geographic Scales National Commission on Science for Sustainable Forestry \$99,725 (with Robert Mitchell, Jerry Franklin, Lisa Schulte, Kevin McIntyre, and Brian Palik).   |
| 2003      | "Effects of Roads on Movements and Mortality of Blanding's and Spotted Turtles in Southern Maine" Maine Department of Transportation , U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, Maine Dept Inland Fisheries and Wildlife, The Nature Conservancy \$189,000. (with Phillip deMaynadier), |
| 2001      | AIquiry-based learning modules for conservation biology education@ National Science Foundation \$998,000 plus (with Eleanor Sterling and James Gibbs)  |
| 2002      | Use of Natural Disturbances to Guide Restoration Silviculture. National Commission on Science for Sustainable Forestry \$199,438 ( with Robert Mitchell, Jerry Franklin, and Brian Palik)  |
| 1998      | Amphibian Populations of Acadia National Park: Patterns and Processes in Relation to Anthropogenic and Natural Changes in Wetland Ecosystems. U.S. Geological Survey. \$210,000. (With A. Calhoun and W. Glanz)  |
| 1995-98.  | *Conserving forest biodiversity. Pew Charitable Trusts. \$150,000. (with R. Seymour).  |
| 1993-96.  | The ecology of vernal pools. USDA Forest Service, US Fish and Wildlife Service; U.S. E.P.A, \$39,000 (with M. McCollough)  |
| 1991      | *Ecology and conservation of Blanding's and spotted turtles in Maine. Davis Conservation Foundation, Maine Dept. Inland Fisheries and Wildlife, \$16,000. (with M. McCollough)   |
| 1991      | New England biodiversity project. Part 2. Environmental Protection Agency. \$100,000 (with R. O'Connor, R. Owen, and S. Sader).  |
| 1990      | An ecological reserves system for Maine. Maine Research Fund. \$17,915. (with J. McMahon and G. Jacobson).   |



- 1988           Habitat selection by the African buffalo in Virunga National Park, Zaire. Rockefeller Foundation - \$25,400. (with E. Mugangu and J. R. Gilbert)
- 1985           Nepal-Himalayas red panda project. World Wildlife Fund, Metropolitan Toronto Zoo \$77,000 (with P. Yonzon).
- 1982           \*The peatland wildlife of Maine. Maine Dept. Inland Fisheries and Wildlife Service - \$68,782.
- 1982           \*Effects of acid precipitation on the aquatic habitat and ecology of waterfowl and fish. U.S. Fish and Wildlife Service - \$132,434. (with K. E. Gibbs and J. G. Stanley).
- 1982           \*A long term environmental monitoring program for the spruce budworm suppression project. Maine Forest Service - \$45,998. (with K. E. Gibbs).
- 1971-81\*Monitoring the indirect effects of spruce budworm suppression, the effects of catastrophic food supply depression on the behavior of birds. Maine Forest Service. \$103,000

\*Senior or sole principal investigator.

## **Public Speaking**

Hundreds of presentations in 15 countries, 27 states, and 8 Canadian provinces, mostly on forest biodiversity issues. Some notable talks in recent years:

The ecology and conservation of old-growth. Keynote address to Forests at Risk Conference, Warsaw Poland

Managing highly dynamic forests for biodiversity. Keynote address to IUFRO (International Union of Forestry Research Organizations) conference in Braganca Portugal.

Looking backwards to see forward: SCB, conservation biology, and your career. Keynote address to the International Congress for Conservation Biology, New Zealand

Designing refuges to maintain biodiversity in the face of climate change. National Fish, Wildlife and Plants Climate Adaptation Strategy Team, Washington, D.C. and National Conservation Leadership Forum, West Virginia.

“Reaching beyond the choir” and other career lessons from the history of conservation biology. Keynote address to Student Conference for Conservation Science, New York.

Preparing for Climate Change: Forestry and Assisted Colonization. Invited lecture to National Conference of the Forestry Guild, Vermont

Managing forests for biodiversity. The Carlton Owen Distinguished Lecture, College of Forest Resources, Mississippi State University.

Managing forests for wildlife and people: an historical perspective. International Congress for Conservation Biology, Beijing China

"Biodiversity: buzzword or fundamental concept?" Distinguished Lecturer for Science Day. University of Maine at Presque Isle.

Amphibians and forestry: a 19-year retrospective from Maine. University of Connecticut

## **Teaching**

- 1979-pr           University of Maine Graduate School. Advisor for 21 Ph.D. and 16 Masters students in Wildlife Ecology. Served on 50 graduate committees in 8 departments.

1979-pr	University of Maine, Dept. Wildlife Ecology: Advanced Conservation Biology; Conservation Biology; Conservation planning, Forest Wildlife Management; International Conservation; Landscape Ecology and Conservation; Tropical Ecology field course; Introduction to Wildlife Conservation; Wildlife Management Planning; Behavioral Ecology; Photogrammetry (labs); Senior Seminar.
1978-79	University of Maine Honors Program: Sophomore seminar; Freshman seminar. Supervised four honor's theses.
1986	Wildlife populations and habitat management workshop for Nepali biologists.
1978	Oxford University: Introduction to Ecology.
1972-73	Abenaki Experimental College: Maine Ecosystems; Maine Fauna.