

Curriculum Vitae
RONALD L. MUMME

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(29 June 2009)

EDUCATION

University of California, Berkeley, 1978–1984. Ph. D. in Zoology, 1984.
University of South Florida, Tampa, 1972–1975. B. A. in Biology, 1975.

PROFESSIONAL EXPERIENCE

2004–Present: Professor of Biology, Allegheny College, Meadville, Pennsylvania. Biology Department Chair, 2004-2008.
1995–2004: Associate Professor of Biology, Allegheny College, Meadville, Pennsylvania (on leave 1995–1996). Biology Department Chair, 2001-2004.
1995–1996: Visiting Postdoctoral Research Associate, Department of Zoology, University of Florida.
1995: Visiting Faculty Research Participant, University of Georgia's Savannah River Ecology Laboratory, Aiken, South Carolina.
1990–1995: Assistant Professor of Biology, Allegheny College, Meadville, Pennsylvania.
1992: Faculty Resource Person, Organization for Tropical Studies, Costa Rica.
1984–1990: Assistant Professor of Biology, Memphis State University, Memphis, Tennessee (on leave 1987–1988).
1987–1988: Postdoctoral Fellow, Section of Neurobiology and Behavior, Cornell University, Ithaca, New York.
1979–1984: Graduate Research Assistant, Museum of Vertebrate Zoology, University of California, Berkeley.
1978–1979: Graduate Teaching Assistant, Department of Zoology, University of California, Berkeley.
1976–1978: Biologist, Southwest Florida Water Management District, Brooksville, Florida.
1974–1976: Laboratory Research Assistant, Department of Biology, University of South Florida, Tampa.

GRANTS AND FELLOWSHIPS

2002-2003: Committee for Research and Exploration, National Geographic Society.
"Geographic Variation in a Foraging Adaptation of an Avian Predator" (7194-02). PI (with Piotr G. Jablonski, University of Arizona, and William A. Haber, Missouri Botanical Garden). \$10,000.
1997–1999: National Science Foundation Grant. "The Role of Prolactin in Mediating Parental and Alloparental Care" (IBN-9722823). Co-PI (with Stephen J. Schoech and Ellen D. Ketterson, Indiana University). \$74,564.
1994–1998: Florida Nongame Wildlife Program Grant. "Viability of Translocated Scrub Jays" (Project III-1-5). \$21,889.
1991–1992: Allegheny College, Howard Hughes Medical Research Institute Grant.
"Conservation Biology of the Florida Scrub Jay: Demographic Consequences of Roadside Mortality." \$12,565.

- 1989–1990: Florida Nongame Wildlife Program Grant. "Relocation of Nonbreeding Helpers as a Management Technique for the Threatened Florida Scrub Jay" (NG88-043). \$36,106.
- 1987–1988: National Science Foundation Postdoctoral Fellowship in Environmental Biology. "The Role of Helpers at the Nest in the Florida Scrub Jay" (BSR 86-00174). \$52,800.
- 1985–1986: Faculty Research Grant Award, Memphis State University. "Natural Selection and Its Evolutionary Consequences in the Carolina Wren (*Thryothorus ludovicianus*)." \$3,000.
- 1979–1981, 1982–1983: National Science Foundation Graduate Fellowship.
- 1981–1982: Betty S. Davis Memorial Fellowship, Museum of Vertebrate Zoology, University of California, Berkeley.

AWARDS AND HONORS

- 1997–2000: Research Affiliate, Archbold Biological Station.
- 1990: Fellow of the American Ornithologists' Union.
- 1985: Elective Member of the American Ornithologists' Union.
- 1982: Nellie J. Baroody Student Paper Award, 100th Stated Meeting of the American Ornithologists' Union, Field Museum of Natural History, Chicago, Illinois.

SERVICE TO PROFESSIONAL SOCIETIES AND GOVERNMENT AGENCIES

- 2009–present: Member of American Ornithologists' Union Student Awards Committee.
- 1986–present: Reviewer of grant proposals for the National Science Foundation, Florida Nongame Wildlife Program, and the Center for Field Research.
- 1984–present: Reviewer of manuscripts for *Science*, *Proceedings of the National Academy of Sciences*, *Proceedings of the Royal Society of London (Series B)*, *The American Naturalist*, *Animal Behaviour*, *Behavioral Ecology and Sociobiology*, *Behavioral Ecology*, *Ethology*, *Ecology*, *Evolution*, *The Journal of Wildlife Management*, *American Midland Naturalist*, *Natural Areas Journal*, *The Auk*, *The Condor*, *Journal of Field Ornithology*, *Studies in Avian Biology*, *Current Ornithology*, *Journal of Herpetology*.
- 1992–1995: Member of Animal Behavior Society's Research Grants Committee.
- 1989–1995: Member of American Ornithologists' Union Student Awards Committee.
- 1992–1994: Member of American Ornithologists' Union Committee on Nomination of Fellows and Elective Members (Chair 1993-94).
- 1988–1991: Elective Councilor, American Ornithologists' Union.
- 1984–1988: Member of American Ornithologists' Union Committee on Research Awards.
- 1979–1980: Corresponding Secretary of the Northern California Chapter of the Cooper Ornithological Society.

PROFESSIONAL SOCIETIES

American Association for the Advancement of Science, Animal Behavior Society, International Society for Behavioral Ecology, Society for Conservation Biology, Society for the Study of Evolution, American Ornithologists' Union, Cooper Ornithological Society, Wilson Ornithological Society, Association of Field Ornithologists.

RECENT INVITED LECTURES

- February 2009: State University of New York, Fredonia, Department of Biology.
- June 2007: University of Pittsburgh, Pymatuning Laboratory of Ecology.
- March 2007: Slippery Rock University, Department of Biology.
- October 2004: University of Miami (Florida), Department of Biological Sciences.
- September 2004: Cornell University, Department of Ecology and Evolutionary Biology.

October 2003: University of Pittsburgh, Department of Biological Sciences.
 April 2003: University of Uppsala, Sweden, Center for Evolutionary Biology.
 November 2002: Bucknell University, Department of Biology.

RECENT PRESENTATIONS AT SCIENTIFIC MEETINGS

August 2008: American Ornithologists' Union, Portland, Oregon.
 August 2007: American Ornithologists' Union, Laramie, Wyoming.
 August 2003: American Ornithologists' Union, Champaign, Illinois.
 August 2001: American Ornithologists' Union, Seattle, Washington.
 August 1999: American Ornithologists' Union, Ithaca, New York.
 June 1999: Animal Behavior Society, Lewisburg, Pennsylvania.
 July 1998: International Society for Behavioral Ecology, Asilomar, California.

PUBLICATIONS (Allegheny College student co-authors are **boldfaced**)

- Mumme, R. L. Provisionally accepted, in revision. Breeding biology and nesting success of the Slate-throated Redstart (*Myioborus miniatus*) in Monteverde, Costa Rica. *Wilson Journal of Ornithology*.
- Peréz-Emán, J. L., R. L. Mumme, and P. G. Jablonski. Provisionally accepted, in revision. Contrasting phylogenetic structure to plumage pattern and foraging performance: geographic variation and subspecies in the Slate-throated Redstart (*Myioborus miniatus*). *Ornithological Monographs*.
- Mumme, R. L., **M. L. Galatowitsch**, P. G. Jablonski, T. M. Stawarczyk, and J. P. Cygan. 2006. Evolutionary significance of geographic variation in a plumage-based foraging adaptation: an experimental test in the slate-throated redstart (*Myioborus miniatus*). *Evolution* 60:1086-1097.
- Jablonski, P. G., K. Laseter, R. L. Mumme, M. Borowiecz, J. P. Cygan, J. Pereira, and E. Sergiej. 2006. Habitat-specific sensory-exploitative signals in birds: propensity of dipteran prey to cause evolution of plumage variation in flush-pursuit insectivores. *Evolution* 60:2633-2642.
- Mumme, R. L. 2005. REVIEW. Mock, D. W. More Than Kin and Less Than Kind. *The Auk* 122:366-367.
- Mumme, R. L. 2005. REVIEW. Koenig, W. D., and J. L. Dickinson. Ecology and Evolution of Cooperative Breeding in Birds. *Journal of Field Ornithology* 76:315-316.
- Galatowitsch, M. L.**, and R. L. Mumme. 2004. Escape behavior of neotropical homopterans in response to a flush-pursuit predator. *Biotropica* 36:586-595.
- Kwit, C., D. J. Levey, C. H. Greenberg, S. F. Pearson, J. P. McCarty, S. Sargent, and R. L. Mumme. 2004. Fruit abundance and local distribution of wintering Hermit Thrushes (*Catharus guttatus*) and Yellow-rumped Warblers (*Dendroica coronata*) in South Carolina. *The Auk* 121:46-57.
- Mumme, R. L. 2003. Economic decisions and foraging tradeoffs in chickadees. Pages 231-237 in B. J. Ploger and K. Yasukawa (editors), *Exploring Animal Behavior in Laboratory and Field*. Academic Press.
- Mumme, R. L., J. O. Palmer, and S. M. Rankin. 2003. Costs and benefits of maternal care in earwigs. Pages 321-326 in B. J. Ploger and K. Yasukawa (editors), *Exploring Animal Behavior in Laboratory and Field*. Academic Press, San Diego.
- Mumme, R. L. 2002. Scare tactics in a neotropical warbler: white tail feathers enhance flush-pursuit foraging performance in the Slate-throated Redstart (*Myioborus miniatus*). *The Auk* 119:1024-1035.
- Owen-Ashley, N. T., S. J. Schoech, and R. L. Mumme. 2002. Context-specific response of Florida Scrub-Jay pairs to Northern Mockingbird vocal mimicry. *The Condor* 104: 858-865.

- Gallie, J. A.**, R. L. Mumme, and S. A. Wissinger. 2001. Experience has no effect on the development of chemosensory recognition of predators by tadpoles of the American toad, *Bufo americanus*. *Herpetologica* 57:376-383.
- Mumme, R. L., S. J. Schoech, G. E. Woolfenden, and J. W. Fitzpatrick. 2000. Life and death in the fast lane: demographic consequences of road mortality in the Florida Scrub-Jay. *Conservation Biology* 14:501-512.
- Mumme, R. L., and T. H. Below. 1999. Evaluation of translocation for the threatened Florida Scrub-Jay. *Journal of Wildlife Management* 63:833-842.
- Mumme, R. L. 1999. Do helpers increase reproductive success? Pp. 321-336 in *Readings in Ecology* (S. I. Dodson et al., eds). Oxford University Press, New York. [Reprint of paper published originally in 1992 in *Behavioral Ecology and Sociobiology*.]
- Koenig, W. D., and R. L. Mumme. 1997. The great woodpecker egg-destruction derby. *Natural History* 106 (5): 32-37.
- Schoech, S. J., R. L. Mumme, and J. C. Wingfield. 1997. Corticosterone, reproductive status, and body mass in a cooperative breeder, the Florida Scrub-Jay (*Aphelocoma coerulescens*). *Physiological Zoology* 70: 68-93.
- Mumme, R. L. 1996. A bird's-eye view of mammalian cooperative breeding. Pp. 364-388 in *Cooperative Breeding in Mammals* (N. G. Solomon and J. A. French, eds.). Cambridge University Press.
- Grasso, M. J.**, U. M. Savalli, and R. L. Mumme. 1996. Status signaling in Dark-eyed Juncos: perceived status of other birds affects dominance interactions. *The Condor* 98: 636-639.
- Schoech, S. J., R. L. Mumme, and J. C. Wingfield. 1996. Prolactin and helping behaviour in the cooperatively breeding Florida scrub jay (*Aphelocoma c. coerulescens*). *Animal Behaviour* 52: 445-456.
- Schoech, S. J., R. L. Mumme, and J. C. Wingfield. 1996. Delayed breeding in the cooperatively breeding Florida scrub-jay (*Aphelocoma coerulescens*): inhibition or the absence of stimulation? *Behavioral Ecology and Sociobiology* 52: 445-456.
- Koenig, W. D., R. L. Mumme, M. T. Stanback, and F. A. Pitelka. 1995. Patterns and consequences of egg destruction among joint-nesting acorn woodpeckers. *Animal Behaviour* 50: 607-621.
- Koenig, W. D., P. B. Stacey, M. T. Stanback, and R. L. Mumme. 1995. Acorn Woodpecker (*Melanerpes formicivorus*). In *The Birds of North America*, No. 194 (A. Poole and F. B. Gill, eds.). The Academy of Natural Sciences, Philadelphia, and The American Ornithologists' Union, Washington, D. C.
- Terrick, T. D.**, R. L. Mumme, and G. M. Burghardt. 1995. Aposematic coloration enhances chemosensory recognition of noxious prey in the garter snake, *Thamnophis radix*. *Animal Behaviour* 49: 857-866.
- Barg, J. J.**, and R. L. Mumme. 1994. Parental recognition of juvenile begging calls in the Florida Scrub Jay. *The Auk* 111: 459-464.
- Koenig, W. D., J. M. H. Knops, W. J. Carmen, M. T. Stanback, and R. L. Mumme. 1994. Estimating acorn crops using visual surveys. *Canadian Journal of Forest Resources* 24: 2105-2112.
- Koenig, W. D., R. L. Mumme, W. J. Carmen, and M. T. Stanback. 1994. Acorn production by oaks in central coastal California: variation within and among years. *Ecology* 75: 99-109.
- Speedy, E. D.**, and R. L. Mumme. 1994. Effects of reduced food intake and loss of body mass on sprint speed in *Anolis carolinensis*. *Journal of Herpetology* 28: 395-399.
- Mumme, R. L. 1993. REVIEW. Marzluff, J. M., and R. P. Balda. The Pinyon Jay: Behavioral Ecology of a Colonial and Cooperative Corvid. *The Auk* 110: 957-958.
- Ritke, M. E., and R. L. Mumme. 1993. Choice of calling sites and oviposition sites by gray treefrogs (*Hyla chrysoscelis*) – a comment. *Ecology* 74: 623-626.

- Tiersch, T. R., and R. L. Mumme. 1993. An evaluation of the use of flow cytometry to identify sex in the Florida Scrub Jay. *Journal of Field Ornithology* 64: 18-26.
- Koenig, W. D., F. A. Pitelka, W. J. Carmen, R. L. Mumme and M. T. Stanback. 1992. Ecological factors and the evolution of delayed dispersal in cooperative breeders. *Quarterly Review of Biology* 67: 111-150.
- Mumme, R. L. 1992. Do helpers increase reproductive success? an experimental analysis in the Florida Scrub Jay. *Behavioral Ecology and Sociobiology* 31: 319-328.
- Mumme, R. L. 1992. Cooperative breeding and delayed dispersal in the Seychelles Warbler. *Trends in Ecology and Evolution* 7: 330-331.
- Schaub, R., R. L. Mumme, and G. E. Woolfenden. 1992. Predation on the eggs and nestlings of Florida Scrub Jays. *The Auk* 109: 585-593.
- Koenig, W. D., M. T. Stanback, P. N. Hooge, and R. L. Mumme. 1991. Distress calls in the Acorn Woodpecker. *The Condor* 93: 637-643.
- Koenig, W. D., W. J. Carmen, M. T. Stanback, and R. L. Mumme. 1991. Determinants of acorn productivity among five species of oaks in central coastal California. Pp. 136-142 in *Proceedings of the Symposium on Oak Woodlands and Hardwood Rangeland Management*. Pacific Southwest Forest and Range Experiment Station General Technical Report, U. S. Department of Agriculture.
- Mumme, R. L. 1991. Helping behaviour in the Florida Scrub Jay: nonadaptation, exaptation, or adaptation? Pp. 1317-1324 in *Acta XX Congressus Internationalis Ornithologici* (B. D. Bell *et al.*, ed.). New Zealand Ornithological Congress Trust Board.
- Mumme, R. L., and W. D. Koenig. 1991. Explanations for avian helping behavior. *Trends in Ecology and Evolution* 6: 343-344.
- Schoech, S. J., R. L. Mumme, and M. C. Moore. 1991. Reproductive endocrinology and mechanisms of breeding inhibition in cooperatively breeding Florida Scrub Jays (*Aphelocoma c. coerulescens*). *The Condor* 93: 354-364.
- Tiersch, T. R., R. L. Mumme, R. W. Chandler, and D. Nakamura. 1991. The use of flow cytometry for rapid identification of sex in birds. *The Auk* 108: 206-208.
- Koenig, W. D., and R. L. Mumme. 1990. Levels of analysis and the functional significance of helping behavior. Pp. 268-303 in *Interpretation and Explanation in the Study of Animal Behavior*. Volume II: Explanation, Evolution, and Adaptation (M. Bekoff and D. Jamieson, eds.). Boulder, Colorado: Westview Press.
- Mumme, R. L., W. D. Koenig, and F. A. Pitelka. 1990. Individual contributions to cooperative nest care in the Acorn Woodpecker. *The Condor* 92: 360-368.
- Mumme, R. L., W. D. Koenig, and F. L. W. Ratnieks. 1989. Helping behaviour, reproductive value, and the future component of indirect fitness. *Animal Behaviour* 38: 331-343.
- Koenig, W. D., S. J. Hannon, R. L. Mumme, and F. A. Pitelka. 1988. Parent-offspring conflict in the Acorn Woodpecker. Pp. 1221-1230 in *Acta XIX Congressus Internationalis Ornithologici* (H. Ouellet, ed.). University of Ottawa Press.
- Mumme, R. L. 1988. REVIEW. Skutch, A. F. 1987. Helpers at Birds' Nests. *The Auk* 105: 402-403.
- Mumme, R. L., W. D. Koenig, and F. A. Pitelka. 1988. Costs and benefits of joint nesting in the Acorn Woodpecker. *The American Naturalist* 131: 654-677.
- Strain, J. G., and R. L. Mumme. 1988. Effects of food supplementation, song playback, and temperature on vocal territorial behavior of Carolina Wrens. *The Auk* 105: 11-16.
- Carmen, W. J., W. D. Koenig, and R. L. Mumme. 1987. Acorn production by five species of oaks over a seven year period at the Hastings Reservation, Carmel Valley, California. Pp. 429-434 in *Multiple Use Management of California's Hardwood Resources* (T. R. Plumb and N. H. Pillsbury, eds.). Berkeley: Pacific Southwest Forest and Range Experiment Station, U. S. Department of Agriculture.

- Hannon, S. J., R. L. Mumme, W. D. Koenig, S. Spon, and F. A. Pitelka. 1987. Poor acorn crop, dominance, and decline in numbers of Acorn Woodpeckers. *Journal of Animal Ecology* 56: 197-207.
- Koenig, W. D., and R. L. Mumme. 1987. Population ecology of the cooperatively breeding Acorn Woodpecker. Monographs in Population Biology 24, Princeton University Press.
- Mumme, R. L. 1987. Eastern indigo snake preys on juvenile Florida Scrub Jay. *Florida Field Naturalist* 15: 53-54.
- Hannon, S. J., R. L. Mumme, W. D. Koenig, and F. A. Pitelka. 1985. Replacement of breeders and within-group conflict in the cooperatively breeding Acorn Woodpecker. *Behavioral Ecology and Sociobiology* 17: 303-312.
- Mumme, R. L., and A. de Queiroz. 1985. Individual contributions to cooperative behaviour in the Acorn Woodpecker: effects of reproductive status, sex, and group size. *Behaviour* 95: 290-313.
- Mumme, R. L., W. D. Koenig, R. M. Zink, and J. A. Marten. 1985. Genetic variation and parentage in a California population of Acorn Woodpeckers. *The Auk* 102: 305-312.
- Koenig, W. D., R. L. Mumme, and F. A. Pitelka. 1984. The breeding system of the Acorn Woodpecker in central coastal California. *Zeitschrift für Tierpsychologie* 65: 289-308.
- Koenig, W. D., R. L. Mumme, and F. A. Pitelka. 1983. Female roles in cooperatively breeding Acorn Woodpeckers. Pp. 235-261 in *Social Behavior of Female Vertebrates* (S. K. Wasser, ed.). New York: Academic Press.
- Mumme, R. L., W. D. Koenig, and F. A. Pitelka. 1983. Reproductive competition in the communal Acorn Woodpecker: sisters destroy each other's eggs. *Nature* 306: 583-584.
- Mumme, R. L., W. D. Koenig, and F. A. Pitelka. 1983. Mate guarding in the Acorn Woodpecker: within-group reproductive competition in a cooperative breeder. *Animal Behaviour* 31: 1094-1106.
- Mumme, R. L., W. D. Koenig, and F. A. Pitelka. 1983. Are Acorn Woodpecker territories aggregated? *Ecology* 64: 1305-1307.
- Joste, N. E., W. D. Koenig, R. L. Mumme, and F. A. Pitelka. 1982. Intragroup dynamics of a cooperative breeder: an analysis of reproductive roles in the Acorn Woodpecker. *Behavioral Ecology and Sociobiology* 11: 195-201.
- Mumme, R. L., and G. E. Woolfenden. 1976. Tufted Titmouse feeds young in fallen external squirrel nest. *Florida Field Naturalist* 4: 18.
- Woolfenden, G. E., S. C. White, R. L. Mumme, and W. B. Robertson, Jr. 1976. Aggression among starving Cattle Egrets. *Bird-Banding* 47: 48-53.