

JOHN L. HOOGLAND

Present position

Professor of biology, The University of Maryland

Mailing address

The University of Maryland, Appalachian Laboratory, Frostburg, Maryland, 21532.

Telephone: 301-689-7130. FAX: 301-689-7200. E-mail: hoogland@al.umces.edu

Academic degrees

B.S. in zoology, The University of Michigan, 1971

Ph.D. in zoology, The University of Michigan, 1977

Academic positions

1997-present, Professor, The University of Maryland

1987-1997, Associate professor, The University of Maryland

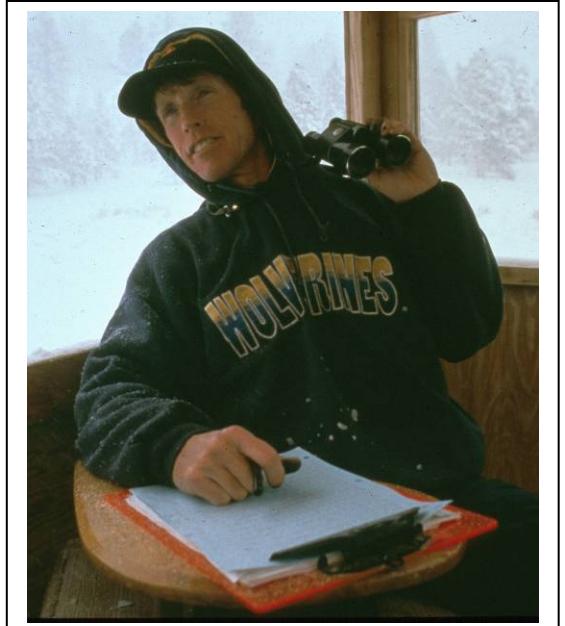
1985-1986, Assistant professor, The University of Maryland

1979-1985, Assistant professor, Princeton University

1977-1979, National Science Foundation postdoctoral fellow, The University of Minnesota

Publications—Books

- 3) Hoogland, J. L. 2020. Prairie dog societies: 45 years of research on behavioral ecology (in preparation).
- 2) Hoogland, J. L., editor. 2006. Conservation of the black-tailed prairie dog: Saving North America's western grasslands. Island Press, Washington, District of Columbia.
- 1) Hoogland, J. L. 1995. The black-tailed prairie dog: Social life of a burrowing mammal. University of Chicago Press, Chicago, Illinois.



Publications—Journal articles and book chapter

- 78) Hoogland, J. L., D. E. Biggins, N. Blackford, D. A. Eads D. Long, M. Rivera Rodriguez, L. M. Ross, S. Tobey, and E. M. White. 2017. Plague in a colony of Gunnison's prairie dogs despite three years of infusions of burrows with 0.05% deltamethrin to kill fleas. Journal of Wildlife Diseases (in press).
- 77) Eads, D. A., and J. L. Hoogland. 2017. Precipitation, climate change, and parasitism of prairie dogs by fleas that transmit plague. Journal of Parasitology, 103:309-319.
- 76) Hoogland, J. L. 2017. Prairie dogs are charming and cute, but they are also serial killers. Scientia 113: 51-55.

- 75) Hoogland, J. L. 2016. Meet the scientists. *Invited submission* for Math4Science, July 2016. <http://math4science.org/john-hoogland/>
- 74) Hirschler, I. M., J. L. Gedert, J. Major, T. Townsend, J. L. Hoogland. 2016. What is the best way to estimate vigilance? A comparison of two methods for Gunnison's prairie dogs (*Cynomys gunnisoni*). *Animal Behaviour* 121: 117-122.
- 73) Hoogland, J. L., and C. R. Brown. 2016. Prairie dogs kill ground squirrels to improve reproductive success. *Invited submission* for Atlas of Science 2016.05.12 (<http://atlasofscience.org/prairie-dogs-kill-ground-squirrels-to-improve-reproductive-success/>).
- 72) Hoogland, J. L., and A. J. Hoogland. 2016. When competitors collide. *Invited submission* for Biosphere, April 2016: 56-63.
- 71) Eads, D. A., and J. L. 2016. Factors that affect parasitism of black-tailed prairie dogs by fleas. *Ecosphere* 7:1-12.
- 70) Hoogland, J. L., and C. R. Brown. 2016. Prairie dogs increase fitness by killing interspecific competitors. *Proceedings of the Royal Society B* 283:1-7.
- 69) Hoogland, J. L., S. L. Hale, A. D. Kirk, and Y. D. Sui. 2013. Individual variation in vigilance among white-tailed prairie dogs (*Cynomys leucurus*). *Southwestern Naturalist* 58:279-285.
- 68) Hoogland, J. L. 2013. Why do females mate with more than one male?—Insights from longterm research. *Journal of Mammalogy* 94:731-744.
- 67) Hoogland, J. L. 2013. Prairie dogs disperse when all close kin have disappeared. *Science* 339:1205-1207.
- 66) Hoogland, J. L., J. F. Cully, L. S. Rayor, and J. P. Fitzgerald. 2012. Conflicting research on the demography, ecology, and social behavior of Gunnison's prairie dogs (*Cynomys gunnisoni*). *Journal of Mammalogy* 93:1075-1085.
- 65) Hoogland, J. L. 2009. Nursing of own and alien offspring by Utah prairie dogs (*Cynomys parvidens*). *Behavioral Ecology and Sociobiology* 63:1621-1634.
- 64) Winterrowd, M. F., F. S. Dobson, J. L. Hoogland, and D. W. Foltz. 2009. Social subdivision influences effective population size in the colonial-breeding black-tailed prairie dog. *Journal of Mammalogy* 90:380-387.
- 63) Hoogland, J. L., D. A. James, and L. Watson. 2009. Prairie dogs in captivity. Pages 255-266 in L. Hess and N. Antinoff, editors. *Nutrition and Diseases of Unusual Exotic Pets*. W. B. Saunders, Elsevier, Philadelphia, Pennsylvania.
- 62) Miller, B. J., R. P. Reading, D. E. Biggins, J. K. Detling, S. C. Forrest, J. L. Hoogland, J. Javersak, S. D. Miller, J. Proctor, J. Truett, and D. W. Uresk. 2007. Prairie dogs: An ecological review and current biopolitics. *Journal of Wildlife Management* 71:2801-2810.
- 61) Hoogland, J. L. 2007a. Alarm calling, multiple mating, and infanticide among black-tailed Gunnison's, and Utah prairie dogs. Pages 438-449 in: J. O. Wolff and P.W. Sherman, editors. *Rodent Societies*. University of Chicago Press. Chicago, Illinois.
- 60) Hoogland, J. L. 2007b. Conservation of prairie dogs. Pages 472-477 in: J. O. Wolff and P.W. Sherman, editors. *Rodent Societies*. University of Chicago Press. Chicago, Illinois.
- 59) Hoogland, J. L. 2007c. Ecology and social behavior of white-tailed prairie dogs. Annual report to Colorado Division of Wildlife. 19 pages.
- 58) Manno, T. G., F. S. Dobson, J. L. Hoogland, and D. W. Foltz. 2007. Social group fission and

- gene dynamics among black-tailed prairie dogs (*Cynomys ludovicianus*). *Journal of Mammalogy* 88:448-456.
- 57) Hoogland, J. L., K. E. Cannon, L. M. DeBarbieri, and T. G. Manno. 2006. Selective predation on Utah prairie dogs. *The American Naturalist* 168:546-552.
- 56) Hoogland, J. L. 2006. Why care about prairie dogs? Pages 1-4 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 55) Hoogland, J. L. 2006. Natural history of prairie dogs. Pages 5-6 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 54) Hoogland, J. L. 2006. Social behavior of prairie dogs. Pages 7-26 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 53) Hoogland, J. L. 2006. Demography and population dynamics of prairie dogs. Pages 27-52 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 52) Hoogland, J. L. 2006. Why have so many prairie dogs disappeared? Pages 89-93 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 51) Hoogland, J. L. 2006. Saving prairie dogs: Can we? Should we? Pages 261-266 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 50) Hoogland, J. L. 2006. Glossary of prairie dog terms. Pages 279-288 in J. L. Hoogland, editor. *Conservation of the Black-tailed Prairie Dog*. Island Press, Washington, District of Columbia.
- 49) Hoogland, J. L., S. Davis, S. Benson-Amram, D. LaBruna, B. Goossens, and M. A. Hoogland. 2004. Pyraperm halts plague among Utah prairie dogs. *Southwestern Naturalist* 49:376-383.
- 48) Dobson, F. S., R. K. Chesser, J. L. Hoogland, D. W. Sugg, and D. W. Foltz. 2004. The influence of social breeding groups on effective population size. *The Journal of Mammalogy* 85:58-66.
- 47) Hoogland, J. L. 2004. Infanticide. In: M. Bekoff and J. Goodall, editors. *Encyclopedia of Animal Behavior*.
- 46) Hoogland, J. L. 2004. The prairie dog. World Book Encyclopedia, Volume P, pages 732-733.
- 45) Hoogland, J. L. 2003. Black-tailed prairie dog. *Cynomys ludovicianus* and allies. Pages 232-247 in G. A. Feldhamer, B. C. Thompson, and J. A. Chapman, editors. *Wild Mammals of North America*. Johns Hopkins University Press, Baltimore, Maryland.
- 44) Hoogland, J. L. 2003. Sexual dimorphism in five species of prairie dogs. *Journal of Mammalogy* 84:1254-1266.
- 43) Haynie, M. L., R. A. van den Bussche, J. L. Hoogland, and D. A. Gilbert. 2003. Parentage, multiple paternity, and breeding success in Gunnison's and Utah prairie dogs. *Journal of Mammalogy* 84:1244-1253.
- 42) Hoogland, J. L. 2001. Black-tailed, Gunnison's, and Utah prairie dogs all reproduce slowly. *Journal of Mammalogy* 82:917-927.

- 41) Miller, B., R. Reading, J. Hoogland, T. Clark, G. Ceballos, R. List, S. Forrest, L. Hanebury, P. Manzano, J. Pacheco, and D. Uresk. 2000. The role of prairie dogs as keystone species: A response to Stapp. *Conservation Biology* 14:318-321.
- 40) Hoogland, J. L. 1999. Philopatry, dispersal, and social organization of Gunnison's prairie dogs. *Journal of Mammalogy* 80:243-251.
- 39) Dobson, F. S., R. K. Chesser, J. L. Hoogland, D. W. Sugg, and D. W. Foltz. 1998. Breeding groups and gene dynamics in a socially structured population of prairie dogs. *Journal of Mammalogy* 79:671-680.
- 38) Hoogland, J. L. 1998. Estrus and copulation among Gunnison's prairie dogs. *Journal of Mammalogy* 79:887-897.
- 37) Hoogland, J. L. 1998. Why do female Gunnison's prairie dogs copulate with more than one male? *Animal Behaviour* 55:351-359.
- 36) Hoogland, J. L. 1997. Duration of gestation and lactation for Gunnison's prairie dogs. *Journal of Mammalogy* 78:173-180.
- 35) Dobson, F. S., R. K. Chesser, J. L. Hoogland, D. W. Sugg, and D. W. Foltz. 1997. Do black-tailed prairie dogs minimize inbreeding? *Evolution* 51:970-978.
- 34) Sugg, D. W., R. K. Chesser, F. S. Dobson, and J. L. Hoogland. 1996. Behavioral ecology meets population genetics. *Trends in Ecology and Evolution* 11:338-342.
- 33) Hoogland, J. L. 1996. The black-tailed prairie dog. *Mammalian Species* 535:1-10.
- 32) Hoogland, J. L. 1996. Why do Gunnison's prairie dogs give antipredator calls? *Animal Behaviour* 51:871-880.
- 31) Hoogland, J. L. 1995. *The Black-tailed Prairie Dog: Social Life of a Burrowing Mammal*. The University of Chicago Press. Chicago, Illinois. (17 chapters, 557 pages, 66 tables, 204 figures, 102 photographs, and 2,100 references).
- 30) Grossmann, J., and J. L. Hoogland. 1994. Home on the range. *BBC Wildlife* 12:28-36.
- 29) Hoogland, J. L. 1994. Nepotism and infanticide among prairie dogs. Pages 321-337 in S. Parmigiani and F. S. vom Saal, editors. *Infanticide and Parental Care*. Harwood Academic Publishers. New York, New York.
- 28) Hoogland, J. L. 1992. Levels of inbreeding among prairie dogs. *American Naturalist* 139:591-602.
- 27) Fiorello, C. V., and J. L. Hoogland. 1991. Why are some prairie dogs especially good mothers? *American Zoologist* 31:A94.
- 26) Hoogland, J. L., R. H. Tamarin, and C. K. Levy. 1989. Communal nursing in prairie dogs. *Behavioral Ecology and Sociobiology* 24:91-95.
- 25) Hoogland, J. L., D. K. Angell, J. G. Daley, and M. C. Radcliffe. 1988. Demography and population dynamics of prairie dogs. Pages 18-22 in D. W. Uresk, G. L. Schenbeck, and R. Cefkin, editors. *Proceedings of the Eighth Great Plains Wildlife Damage Control Workshop*. U.S.D.A. Forest Service, Technical Report RM-154. Fort Collins, Colorado.
- 24) Foltz, D. W., J. L. Hoogland, and G. M. Koscielny. 1988. Effects of sex, litter size, and heterozygosity on juvenile weight in black-tailed prairie dogs (*Cynomys ludovicianus*). *Journal of Mammalogy* 69:611-614.
- 23) Hoogland, J. L., and J. M. Hutter. 1987. Aging live prairie dogs from molar attrition. *Journal of Wildlife Management* 51:393-394.
- 22) Brown, C. R., and J. L. Hoogland. 1987. Risk in mobbing for solitary and colonial swallows. *Animal Behaviour* 34:1319-1323.
- 21) Hoogland, J. L. 1986. The Prairie Dog. *World Book Encyclopedia*, volume P.

- 20) Hoogland, J. L. 1986. Nepotism in prairie dogs varies with competition but not with kinship. *Animal Behaviour* 34:263-270.
- 19) Grady, R. M., and J. L. Hoogland. 1986. Why do male prairie dogs (*Cynomys ludovicianus*) give a mating call? *Animal Behaviour* 34:108-112.
- 18) Hoogland, J. L. 1985. Infanticide in prairie dogs: Lactating females kill offspring of close kin. *Science* 230:1037-1040.
- 17) Hoogland, J. L. 1985. Sociobiology of the black-tailed prairie dog (Sciuridae: *Cynomys ludovicianus*). *National Geographic Society Research Reports* 1978:353-363.
- 16) Hoogland, J. L. 1983. Nepotism and alarm calling in the black-tailed prairie dog (*Cynomys ludovicianus*). *Animal Behaviour* 31:472-479.
- 15) Hoogland, J. L. 1983. Black-tailed prairie dog coteries are cooperatively breeding units. *The American Naturalist* 121:275-280.
- 14) Foltz, D. W., and J. L. Hoogland. 1983. Genetic evidence of outbreeding in the black-tailed prairie dog (*Cynomys ludovicianus*). *Evolution* 37:273-281.
- 13) Hoogland, J. L. 1982. Prairie dog lore. *Wall Street Journal*, 22 September.
- 12) Garrett, M. G., J. L. Hoogland, and W. L. Franklin. 1982. Demographic differences between an old and a new colony of black-tailed prairie dogs (*Cynomys ludovicianus*). *American Midland Naturalist* 108:51-59.
- 11) Hoogland, J. L., and D. W. Foltz. 1982. Variance in male and female reproductive success in a harem-polygynous mammal, the black-tailed prairie dog (Sciuridae: *Cynomys ludovicianus*). *Behavioral Ecology and Sociobiology* 11:155-163.
- 10) Hoogland, J. L. 1982. The black-footed ferret and the evolution of prairie dog coloniality: Reply to a comment by Powell. *Ecology* 63:1968-1969.
- 9) Hoogland, J. L. 1982. Prairie dogs avoid extreme inbreeding. *Science* 215:1639-1641.
- 8) Foltz, D. W., and J. L. Hoogland. 1981. Analysis of the mating system of the black-tailed prairie dog (*Cynomys ludovicianus*) by likelihood of paternity. *Journal of Mammalogy* 62:706-712.
- 7) Hoogland, J. L. 1981. Sex ratio and local resource competition. *The American Naturalist* 117:796-797.
- 6) Hoogland, J. L. 1981. The evolution of coloniality in white-tailed and black-tailed prairie dogs (Sciuridae: *Cynomys leucurus* and *C. ludovicianus*). *Ecology* 62:252-272.
- 5) Hoogland, J. L. 1981. Nepotism and cooperative breeding in the black-tailed prairie dog (Sciuridae: *Cynomys ludovicianus*). Pages 283-310 in: R. D. Alexander and D. W. Tinkle, editors. *Natural Selection and Social Behavior*. Chiron Press. New York, New York.
- 4) Hoogland, J. L. 1979. Aggression, ectoparasitism, and other possible costs of prairie dog (Sciuridae: *Cynomys* spp.) coloniality. *Behaviour* 69:1-35.
- 3) Hoogland, J. L. 1979. The effect of colony size on individual alertness of prairie dogs (Sciuridae: *Cynomys* spp.). *Animal Behaviour* 27:394-407.
- 2) Alexander, R. D., J. L. Hoogland, R. D. Howard, K. M. Noonan, and P. W. Sherman. 1979. Sexual dimorphisms and breeding systems in pinnipeds, ungulates, primates, and humans. Pages 402-435 in: N. A. Chagnon and W. Irons, editors. *Evolutionary Biology and Human Social Behavior*. Duxbury Press.
- 1) Hoogland, J. L., and P. W. Sherman. 1976. Advantages and disadvantages of Bank Swallow (*Riparia riparia*) coloniality. *Ecological Monographs* 46:33-58.

Grants (for which I am/have been the principal investigator)

Denver Zoo Foundation, 2017, 2016, 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2007, 2006, 2005, 2002, 2001, 1999, 1998
New Mexico Department of Game and Fish, 2014, 2013
National Science Foundation (NSF), 2014, 2007, 2002, 1996, 1992, 1987, 1983, 1981, 1979, 1977, 1975
NSF, Research Experiences Undergraduates (REU), 2017, 2016, 2015, 2014, 2008, 2004, 2003, 2002, 1998, 1997, 1994
Colorado Parks and Wildlife (2012, 2011, 2010, 2009, 2008, 2007)
National Fish and Wildlife Foundation, 2005
Environmental Defense, 2002
Ted Turner Foundation, 1999
National Geographic Society, 1999, 1996, 1990, 1984, 1979, 1978
American Philosophical Society, 1990
Earthwatch, 1986, 1985, 1983, 1977, 1976
Max McGraw Wildlife Foundation, 1985
Eppley Foundation, 1985
National Institutes of Health, 1983
American Philosophical Society, 1983
Theodore Roosevelt Memorial Fund, 1977
Horace H. Rackham Graduate School, 1976, 1973
NSF Doctoral Dissertation Grant, 1975
Sigma-Xi, 1975

Awards

Prairie Dog Protector of the Year Award, 2015
Science, News and Analysis, 08 March 2013
Capstone Lecture, American Society of Mammalogists Annual Meeting, 2010
Harry Frank Guggenheim Career Development Award, 1986
American Society of Mammalogists Alma Shadle Award, 1976
Distinguished Teaching Fellow Award, 1975
Phi Beta Kappa, 1971
Peter Okkelberg Award for outstanding achievement in biology, 1971

Citations to my publications by other scientists

The cumulative number of citations to my publications through October 2017 is 5528, which span 120 journals; 12 articles have generated >100 citations. Most of these citations are by behavioral ecologists, but many are by conservation biologists.

Popular articles and videos that feature my research

Popular journals

National Geographic, 2016; *ScienceNews*, 2016; *DiscoveryNews*, 2016; *New Scientist*, 2016; *The Atlantic*, 2016; *Smithsonian*, 2016; *Atlas Obscura*, 2016; *Daily Mail* 2016; *Onion*, 2016; *Biosphere*, 2016; *ABC News*, 2013; *Science*, 2013; *New Scientist*, 2006; *ScienceNow*, 2006;

Current Science, 2004; *Terre Sauvage*, 1998 (French); *Smithsonian*, 1998; *National Geographic*, 1998; *Ripley's Believe It or Not*, 1996; *Marquis Who's Who in America*, 1996; *German Wildlife*, 1995; *National Geographic Magazine*, 1998; *Natural History*, 1995; *New Scientist*, 1995; *Discover*, 1988; *Geo*, 1988 (German); *Maryland Today*, 1988; *Ranger Rick*, 1988, 1992, 1996; *The Scientist*, 1988; *Maryland Today*, 1988; *BBC Wildlife*, 1986, 1994; *Audubon*, 1987; *Omni*, 1986; *Earthwatch*, 1985; *National Wildlife*, 1985, 1996; *Discover*, 1982; *Science 82*, 1982; *Science News*, 1981, 1985; *Chemical and Electrical News*, 1977; *Popular Mechanics*, 1977; *U.S. News and World Report*, 1976, 1995;

Textbooks

Feldhamer et al.'s *Mammalogy: Adaptation, Diversity, Ecology* (2015); Freeman's *Biological Science* (2005); Freeman and Herron's *Evolutionary Analysis* (2004); Birkhead's *Promiscuity* (2000); Alcock's *Animal Behavior* (2001); Krebs and Davies's *Introduction to Behavioral Ecology* (1993); numerous others

Books about conservation

Wilkinson's *Last Stand: Ted Turner's Quest to Save a Troubled Planet* (2013)
Williams's *Finding Beauty in a Broken World* (2008)

Newspapers

Austrian Times (Austria), *Chicago Sun-Times*, *Cleveland Plain Dealer*, *Detroit Free Press*, *Le Generaliste* (France), *New York Times*, *Saint Paul Pioneer Press*, *USA Today*, *Wall Street Journal*, *Washington Post*, and hundreds of others

Radio

Quirks and Quarks, 2016, 2006
National Public Radio, 2013, 2012
Public Radio Tulsa, 2012
ScienceUpdate, 2006
Flagstaff Public Radio, 2003
Denver Public Radio, 2002
Earth and Sky, 1994

Movies and videos

Romance in prairie dogs and other animals (BBC Television, 2014)
Behavioral Ecology of Prairie Dogs (National Geographic Television, 2014)
Population Biology of Prairie Dogs (Japanese Television, 2003)
Prairie Dog Squad (National Geographic Society, 2002)
Celebrity Crusaders (Animal Planet Network, 1999)
Underdogs: Prairie Dogs Under Attack (Turner Television, 1998)
Maryland's Prairie Dog Companion (Maryland Public Television, 1997)
Catching the Last Prairie Dog (Australian Wildlife, 1996)
Plague in Prairie Dog Colonies (Utah Television Network, 1995)
The Badlands (National Geographic Society, 1994)

Recent invited lectures (last 5 years)

American Society of Mammalogists, Capstone Lecture	
Bryce Canyon National Park	University of Florida
Cornell University	University of Kansas
Denver Zoological Foundation	University of Michigan
Guadalupe Mountains National Park	University of Nebraska
Miami University of Ohio	University of Tulsa
National Zoological Park	Washington University in Saint Louis
Shepherd University	Valles Caldera National Preserve

Teaching experience

Animal behavior	Introductory biology	Behavioral ecology of prairie dogs
Evolutionary ecology	Population biology	Broader impacts of your research
Field ecology	Wildlife management	

Undergraduates who have worked under my direction

Working with me in the field has helped students gain acceptance into the following graduate schools: Arizona, Auburn, Boston University, British Columbia, Brown, Central Florida, Colorado State University, Columbia, Cornell, Idaho State University, Massachusetts, McMaster, Michigan, Michigan State, Mississippi State, New England, Oklahoma, Oklahoma State, Penn State, Princeton, Simon Fraser, Southern Illinois, Southern Mississippi, SUNY at Brockport, Texas A&M, UC-Davis, UC-San Diego, Washington, Washington State, Woods Hole, and Yale.

In addition, I have helped several other former research assistants to secure biology-related jobs with wildlife or conservation organizations.

Ten of my recent students have been recipients of NSF-REU Fellowships, six have co-authored publications with me over the last several years, and four others are currently preparing manuscripts with me for submission.

Websites

Summary of research and teaching: <https://www.umces.edu/john-hoogland>

101 Questions and Answers about Prairie Dogs: <http://pdlover.webs.com/askapdexpert.htm>

Journals and agencies for which I have been a reviewer/consultant

<i>American Naturalist</i>	<i>London Zoo</i>
<i>Animal Behaviour</i>	Mike Birkhead Filmmakers
<i>Auk</i>	National Academy of Sciences
Australian Wildlife Filmmakers	National Geographic Society
<i>BBC Wildlife</i>	National Park Service
<i>Behavioral Ecology and Sociobiology</i>	National Science Foundation
Boston Zoo	<i>National Wildlife</i>
British Foundation for Scientific Research	National Zoological Park
<i>Canadian Journal of Zoology</i>	<i>Natural History</i>
Center for Field Research	<i>Nature</i>
Earthwatch	People for the Ethical Treatment or Animals
Environmental Protection Agency	<i>Ranger Rick</i>
<i>Ethology</i>	Royal Society of England
<i>Ethology, Ecology, and Evolution</i>	<i>Science</i>
<i>Ethology and Sociobiology</i>	U.S. Department of Agriculture
Harry Frank Guggenheim Foundation	<i>World Book Encyclopedia</i>
<i>Journal of Mammalogy</i>	World Wildlife Foundation

Hobbies

My hobbies include tennis, soccer, ultimate Frisbee, mountain-biking, ping-pong, chess, and Lionel trains.