

CURRICULUM VITAE

NAME: Jeffrey P. Copeland

DATE: May, 2013

RANK OR TITLE: Wildlife Biologist

DEPARTMENT: USDA Forest Service, Rocky Mountain Research Station, retired; The Wolverine Foundation

OFFICE LOCATION: 4444 Packsaddle Road, Teton, Idaho, USA, 83452

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DATE AND PLACE OF BIRTH: 4 August 51, Winamac, Indiana

EDUCATION BEYOND HIGH SCHOOL:

B.S. 1978, University of Idaho

M.S. 1996, University of Idaho

EXPERIENCE:

Teaching and Research:

- 1979-1980: Research Assistant, University of Idaho
- 1992-1996: M.S. Graduate Assistant, University of Idaho
- 1992-1996: Senior Wildlife Research Biologist, Idaho Department of Fish and Game
- 1998-2000: Member, Interagency Grizzly Bear Study Team
- 2000-2003: Senior Wildlife Research Biologist, Idaho Department of Fish and Game/USDA Forest Service, Rocky Mountain Research Station, Missoula, MT
- 2001-2010: Member, Interagency Wolverine Science Team
- 2003-2011: Wildlife Biologist, USDA Forest Service, Rocky Mountain Research Station, Missoula, MT
- 1996-present: Co-Founding Director, The Wolverine Foundation

Employment:

- 1980-1992: Conservation Officer, Idaho Department of Fish and Game
- 1992-1996: Senior Wildlife Research Biologist, Idaho Department of Fish and Game
- 1996-2000: Regional Wildlife Biologist, Idaho Department of Fish and Game
- 2000-2003: Senior Wildlife Research Biologist, Idaho Department of Fish and Game
- 2003-2011: Wildlife Biologist, USDA Forest Service Rocky Mountain Research Station

Consulting:

- Western Air Research: Survey of pronghorn antelope in central Wyoming, 1992.
- Provide technical assistance in development of wolverine survey sampling protocol to: Kootenae, Wallowa-Whitman, Mt. Hood, Targhee, Challis, Sawtooth, Okanogan, Coeur d Alene, and Wenatchee National Forests, Wyoming Department of Game and Fish, Montana Department of Fish, Wildlife, and Parks, Colorado Division of Wildlife, and Oregon Division of Wildlife, 1996

to present.

- Technical Advisor for *The Last Phantom*. A Discovery Channel documentary produced by Laulima Films, Bozeman, Montana, 1996.
- Upper Columbia River Basin Ecosystem Study, 1997
- Science Advisor for Conservation Biology Institute Western Carnivore , 1998 to present
- Technical Advisor to Colorado Division of Wildlife/Denver Zoological Foundation Lynx/Wolverine Translocation Project, 1998.
- Investigated the status and distribution of wolverine in Mongolia by invitation of the Mongolian Academy of Sciences, 2004
- Technical Advisor, Discovery Canada, 2006
- Technical Advosor, PBS Nature, 2011

Membership in Professional and Scholarly Organizations:

- The Wildlife Society
- The American Society of Mammalogists
- Co-Founder, The Wolverine Foundation, Inc.

Other Professional and Scholarly Activities:

- Presenter, Western States Carnivore Workshop, Boise, ID, 1993
- Presenter, Western States Carnivore Workshop, Spokane, WA, 1994
- Species Team Leader, Sensitive Species and Prelisting Conservation Program Workshop, Boise, ID, 1994
- Presenter, The Wildlife Society Second Annual Conference, Spokane, WA, 1995
- Presenter, Idaho Chapter, The Wildlife Society Annual Meeting, Boise, ID, 1996
- Presenter, Northern Furbearer Conference, Yellowknife NWT, CA, 1997
- Presenter, Northern California Mesocarnivore Workshop, Humboldt University, Arcada, CA, 1997
- Presenter, Wyoming Chapter, The Wildlife Society Annual Meeting, 1997
- Presenter, Denver Museum Monthly Seminar Series, Denver, CO, 1997
- Presenter, Wild Idaho, Idaho Conservation League Annual Meeting, Stanley, ID, 1997
- Presenter, Western Forest Carnivore Committee, Whitefish, MT, 1999, 2002, 2004
- Invited Speaker, Annual Meeting, American Society of Mammalogists, Missoula, MT, 2001
- Invited Speaker, Monthly Wildlife Seminar Series, University of Montana, Missoula, Mt, 2001
- Session Moderator and Presenter, Carnivores 2002, Defenders of Wildlife, Monterey, CA, 2002
- Session Moderator and Presenter, 1st International Symposium on Wolverine Research and Management, Jokkmokk, Sweden, 2005
- Session Moderator and Invited Speaker, Carnivores 2006, Defenders of Wildlife, St. Petersburg, FL, 2006.
- Presenter, Montana Chapter, The Wildlife Society Annual Meeting, 2008
- Invited Speaker, Crown of the Continent Forum, Somors, Montana, 2008

Other Experience:

Armed Forces:

4 years active duty, U.S. Air Force. Honorable Discharge 1974

PUBLICATIONS:

Refereed Publications:

Aubry, K. L., K. S. McKelvey, and J. P. Copeland. 2007. Geographic distribution and broad-scale habitat associations of the wolverine in the United States: an historical analysis. *Journal of Wildlife Management*. 71(7).

Copeland, J. P. 1978. Small mammal communities in selected sites of northern Idaho. Idaho Forest, Wildlife and Range Experiment Station. 5pp.

Copeland, J. P., E. Cesar, J. M. Peek, C. E. Harris, and D. L. Hunter. 1994. A live trap for wolverine and other forest carnivores. *Wildlife Society Bulletin*, 23:535-538.

Magoun, A. J., and J. P. Copeland. 1998. The reproductive den of the wolverine. *Journal of Wildlife Management* 62:1313-1320.

Edelmann, F. and J. P. Copeland. 1999. Wolverine distribution in the northwestern United States and a survey in the Seven Devils Mountains of Idaho. *Northwest Science*, 73:295-300.

Rowland, M. M., M. J. Wisdom, D. H. Johnson, B. C. Wales, J. P. Copeland, and F. B. Edelmann. 2003. Evaluation of landscape models for wolverines in the interior Northwest, United States of America. *Journal of Mammalogy*, 84:92-105.

Copeland, J. P. and J. S. Whitman. 2003. Wolverine. Pages 672-682, in G. A. Feldhamer, B. C. Thompson, and J. A. Chapman eds. *Wild mammals of North America. Biology, Management, and Economics*. Johns Hopkins University Press.

Krebs, J. E. Lofroth, J. Copeland, V. Banci, D. Cooley, H. Golden, A. Magoun, R. Mulders, B. Shultz. 2003. Synthesis of survival rates and causes of mortality in North American wolverines. *Journal of Wildlife Management*, 68:493-502.

Gunther, K. A., M. A. Haroldson, K. Frey, S. L. Cain, J. Copeland, and C. C. Schwartz. 2004. Grizzly bear-human conflicts in the Greater Yellowstone ecosystem, 1992-2000. *Ursus*, 15:1-9.

Wood, W. F., M. N. Terwilliger, and J. P. Copeland. 2006. Volatile compounds from anal glands of the wolverine, *Gulo gulo*. *Journal of Chemical Ecology*, 12:2111-2117.

Copeland, J. P., J. M. Peek, C. R. Groves, W. E. Melquist, K. S. McKelvey, G. S. McDaniel, C. D. Long, and C. E. Harris. 2007. Seasonal habitat associations of the wolverine in central Idaho. *Journal of Wildlife Management*. 71(7).

Squires, J. R., J. P. Copeland, T. J. Ulizio, M. K. Schwartz, and L. F. Ruggiero. 2007. Sources and patterns of wolverine mortality of western Montana. *Journal of Wildlife Management*. 71(7).

Schwartz, M. K., K. B. Aubry, K. S. McKelvey, K. L. Pilgrim, J. P. Copeland, J. S. Squires, R. M. Inman, S. M. Wisely, L. F. Ruggiero. 2007. Inferring geographic isolation of wolverines in California using historical DNA. *Journal of Wildlife Management* 71(7).

Ruggiero, L. F., K. S. McKelvey, K. B. Aubry, J. P. Copeland, M. G. Hornocker, D. H. Pletscher. 2007. Wolverine conservation and management. *Journal of Wildlife Management* 71(7).

Wood, W. F., J. P. Copeland, R. E. Yates, I. K. Horsey, and L. R. McGreevy. 2009. Potential

semiochemicals in urine of free-ranging wolverines (*Gulo gulo* Pallas 1780). *Biochemical systematics and ecology* 37:574-578.

Moriarty, K. M., W. J. Zielinski, A. G. Gonzales, T. E. Dawson, K. M. Boatner, C. A. Wilson, F. V. Schlexer, K. L. Pilgrim, J. P. Copeland, and M. K. Schwartz. 2009. Wolverine confirmation in California after nearly a century: native or long-distance immigrant? *Northwest Science* 83(2): 154–162.

Diedrich, C. D., and J.P. Copeland. 2010. Upper Pleistocene *Gulo gulo* (Linne', 1758) remains from the Srbsko Chlum-Komin hyena den cave in the Bohemian Karst, Czech Republic, with comparisons to contemporary wolverines. *Journal of Cave and Karst Studies* 72:122–127

Copeland, J. P., K. S. McKelvey, K. B. Aubry, A. Landa, J. Persson, R. M. Inman, J. Krebs, E. Lofroth, H. Golden, J. R. Squires, A. Magoun, M. K. Schwartz, J. Wilmot, C. L. Copeland, R. E. Yates, I. Kojola, and R. May. 2010. The bioclimatic envelope of the wolverine (*Gulo gulo*): Do climatic constraints limit its geographic distribution. *Canadian Journal of Zoology* 88:233-246.

McKelvey, K. S., Loforth, E. C., Copeland, J. P., Aubry, K. B., and Magoun, A. J. 2011. Comments on Brodie and Post: climate-driven declines in wolverine populations: causal connection or spurious correlation. *Population Ecology* 53:263-266.

McKelvey, K. S., Copeland, J. P., Schwartz, M. K., Littell, J. S., Aubry, K. B., Squires, J. R. , Parks, S. A., Elsner, M. M., Mauger, G. S. 2011. Climate change predicted to shift wolverine distributions, connectivity, and dispersal corridors. *Ecological Applications* 21:2882-2897

Other Publications:

Copeland J. P. 1992. Wolverine: the misunderstood mustelid. *Idaho Wildlife*, Fall 1992, Idaho Dept. Fish and Game, pp20-23.

Copeland, J. P. and C. R. Groves. 1992. Wolverine ecology and habitat use in central Idaho. Progress Report, Idaho Depart. Fish and Game. 26pp.

Copeland, J. P. 1993. Assessment of snow-tracking and remote camera systems to document presence of wolverines at carrion bait stations. Idaho Dept. Fish and Game. 8pp.

Copeland, J. P. and C. Harris. 1993. Wolverine ecology and habitat use in central Idaho. Progress Report, Idaho Dept. Fish and Game. 26pp.

Copeland, J. P. and C. Harris. 1993. Wolverine ecology and habitat use in central Idaho. Progress Report, Idaho Dept. Fish and Game. 26pp.

Hunter, D., J. P. Copeland, and C. D. Long. 1994. Field implantation of intraperitoneal transmitters in wolverine (*Gulo gulo*). *Telonics Workshop, Program Abstracts, Zimbabwe, Africa.*

Hunter, D., J. P. Copeland, C. D. Long. 1994. Surgical procedures and efficacy of intraperitoneal transmitters in a wolverine (*Gulo gulo*) study in Idaho. *Wildlife Disease Association, Program Abstracts.*

Copeland, J. P., and T. Kucera. 1997. Wolverine (*Gulo gulo*). Pages 23-33 in J. E. Harris, and C. V. Ogan, eds. *Mesocarnivores of Northern California: Biology, Management, and Survey Techniques,*

Workshop Manual. Humboldt State Univ., Arcata Ca.

Hart, M. M., J. P. Copeland, and R. L. Redmond. 1997. Mapping wolverine habitat in the Northern Rockies using a GIS. The Wildlife Society 4th Ann. Conf.

Gunther, K.A., M.T. Bruscino, S. Cain, J. Copeland, K. Frey, M.A. Haroldson, and C. C. Schwartz. 2000. Grizzly bear-human conflicts, confrontations, and management actions in the Yellowstone ecosystem, 1999. Pages 55-108 *in* C.C. Schwartz and M.A. Haroldson, editors. Yellowstone grizzly bear investigations: annual report of the Interagency Grizzly Bear Study Team, 1999. U.S. Geological Survey, Bozeman, Montana, USA.

Professional Interests:

My current interest is in developing an improved understanding of wolverine ecology from an aspect of life history, biogeography, intraspecific sociality, semiochemistry, and habitat relationships, and how the species may be impacted by various human-related activities and the impacts of global warming. The wolverine exists and persists on the fringes of our environment, and our consciousness. Without an understanding of our impact on this special creature, it will disappear from the wild places it inhabits without our knowing it was even present.