

## Leah M. Vucetich

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### Research Interests

Isle Royale wolf genetics  
Isle Royale moose genetics  
Isle Royale moose foraging ecology  
Moose ticks  
Field Research Methods

### Education

Ph.D., Forest Science, Michigan Technological University, 2000  
B.S., Biology, Colorado State University, Fort Collins, 1985

### Positions Held

2012 – present: Research Scientist, School of Forest Resources and Environmental Science,  
Michigan Technological University  
2000 – 2012: Research Assistant Professor, School of Forest Resources and  
Environmental Science, Michigan Technological University  
1996 – Visiting Scholar, Department of Zoology, Ohio State University

### University Teaching Experience

Wildlife Habitat Relationships (FW3600), MTU, 2001 - 2005  
Isle Royale Field Ecology Camp (FW4630), MTU, 2002 – 2003  
Southwest Field Ecology Camp (FW4630), MTU, 2003

### Peer – Reviewed Publications

1. Jacqueline A. Robinson, Jannikke RañäikköÄänen, Leah M. Vucetich, John A. Vucetich, Rolf O. Peterson, Kirk E. Lohmueller<sup>1</sup>, Robert K. Wayne. 2019. Genomic signatures of extensive inbreeding in Isle Royale wolves, a population on the threshold of extinction. *Science Advances* 29 May 2019, Vol. 5, no. 5, eaau0757 DOI: [10.1126/sciadv.aau0757](https://doi.org/10.1126/sciadv.aau0757)
2. Hoy SR, Vucetich JA, Liu R, DeAngelis DL, Peterson RO, Vucetich LM, Henderson JJ. 2019. Negative frequency-dependent foraging behaviour in a generalist herbivore (*Alces alces*) and its stabilizing influence on food-web dynamics. *Journal of Animal Ecology* [doi.org/10.1111/1365-2656.13031](https://doi.org/10.1111/1365-2656.13031)
3. Peterson, R. O., Hoy, S. R., Vucetich, L. M., Vucetich, J. A., Kraus, V. B., & Huebner, J. L. (2018). Urinary biomarkers to non-invasively evaluate health in wild moose (*Alces alces*). *Osteoarthritis and Cartilage*, 26, S196-S197.
4. Long-term trends in prevalence and ecology of *Echinococcus* in wolves (*Canis lupus*) in Isle Royale National Park, Michigan, USA. JR Cerda, D Buttke, LR Ballweber, RO Peterson, LM Vucetich, JA Vucetich. 2014. Poster to be presented at the European Scientific Counsel Companion Animal Parasites conference, Lithuania, October, 2014.

5. Hedrick, P.W., Peterson, R.O., Vucetich, L.M., Adams, J.R., & Vucetich, J.A. (2014). Genetic rescue in Isle Royale wolves: genetic analysis and the collapse of the population. *Conserv. Genet.* DOI 10.1007/s10592-014-0604-1
6. Räikkönen J, Vucetich JA, Peterson RO, Nelson MP, Vucetich LM. 2013. What the inbred Scandinavian wolf population tells us about the nature of conservation. *PLOS ONE* 8(6): e67218. doi:10.1371/journal.pone.0067218. (June 2013)
7. Peterson RO, JA Vucetich and LM Vucetich. 2013. Osteoarthritis in nature: osteoarthritis phenotypes are sexually dimorphic in moose (*Alces alces*). *Osteoarthritis and Cartilage* 21:S69.
8. Marucco F, Vucetich LM, Peterson RO, Adams JR, Vucetich JA. 2012. Evaluating the efficacy of non-invasive genetic methods and estimating wolf survival during a ten-year period. *Conservation Genetics* (DOI 10.1007/s10592-012-0412-4) (Sept 2012) 13(6):1611-1622.
9. Vucetich JA, Huntzinger BA, Peterson RO, Vucetich LM, Hammill JH, Beyer DE. 2012. Intra-seasonal variation in wolf *Canis lupus* kill rates. *Wildlife Biology* 18:1-12. (July 2012)
10. Vucetich JA, Vucetich LM, Peterson, RO. 2012. The causes and consequences of partial prey consumption by wolves preying on moose. *Behavioral Ecology and Sociobiology* 66: 295-303, DOI: 10.1007/s00265-011-1277-0. (on-line Oct 2011; print Feb 2012).
11. Adams JR, LM Vucetich, PW Hedrick, RO Peterson, JA Vucetich. in 2011. Genomic sweep and potential genetic rescue during limiting environmental conditions in an isolated wolf population. *Proceedings Royal Soc B* 278:3336-3344 (doi:10.1098/rspb.2011.0261) (March 2011).
12. Nelson, MP, JA Vucetich, RO Peterson, LM Vucetich. 2011. The Isle Royale Wolf-Moose Project (1958-present) and the Wonder of Long-Term Ecological Research. *Endeavour* 35(1):30-38.
13. Oelfke, J, RO Peterson, JA Vucetich, & LM Vucetich. 2003. Wolf handling at Isle Royale: Can we find another approach? *George Wright Soc.* 20(3):50-58.
14. Vucetich, LM; JA Vucetich, CP Joshi, TA Waite, RO Peterson. 2001. Genetic (RAPD) diversity in *Peromyscus maniculatus* in a naturally fragmentation landscape. *Mol. Ecol.* 10(1): 35-40.
15. Vucetich, LM, Vucetich, JA, Cleckner, LB, Gorski, PR, & RO Peterson. 2001. Mercury concentrations in deer mouse (*Peromyscus maniculatus*) tissues from Isle Royale National Park. *Environmental Pollution* 14(1):113-118.

### Reports

Paquet, P, JA Vucetich, MK Phillips, LM Vucetich. 2001. Mexican wolf recovery: three-year program review and assessment. Prepared by the Conservation Breeding Specialist Group for the United States Fish and Wildlife Service.

Oelfke, J, RO Peterson, JA Vucetich, and LM Vucetich. 2000. Wolf research in the Isle Royale wilderness: Do the ends justify the means? In Cole, D. and S. McCool (eds.). *Proceedings: Wilderness Science in a time of change*. Proc. RMRS-P-000, UT: U.S. Dept of Agriculture, Forest Service, Rocky Mountain Research Station.