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Clevenger, A.P.

Current research – Banff National Park, Alberta, Road-related research: Nov 1996 – present.

~ **Published articles and books** ~

SUBMITTED

Gunson, K., A.P. Clevenger, A.T. Ford, B. Chruszcz, C. Mata, F. Caryl. In prep. Scalability of ungulate-vehicle collision models in four watersheds of a forested mountain ecosystem.

PUBLISHED (or ACCEPTED FOR PUBLICATION)

Ford, AT, AP Clevenger, MP Huisjer, A Dibb. Accepted. Planning and prioritization strategies for phased highway mitigation using wildlife-vehicle collision data. *Wildlife Biology*.

Kociolek, A., A.P. Clevenger, C.C. St Clair, D. Proppe. 2011. Effects of the road transportation network on bird populations. *Conservation Biology* 25:241-249.

Van der Ree, R, J Jaeger, AP Clevenger, E Van der Grift (eds.). 2010. Effects of roads and traffic on wildlife populations and landscape function. Special issue, *Ecology and Society (online)*.

Ford, AT, AP Clevenger. 2010. Validity of the prey trap hypothesis for carnivore-ungulate interactions at wildlife crossing structures. *Conservation Biology* 24:1679-1685.

Beckmann, J, AP Clevenger, M Huijser, J Hilty (eds.). 2010. *Safe passages: Highways, wildlife and habitat connectivity*. Island Press, Washington D.C., USA.

Clevenger, AP, AT Ford. 2010. Terrestrial mitigation: Wildlife crossing structures, fencing and other highway design considerations. Pages 17-50, in *Safe passages: Highways, wildlife and habitat connectivity*. J Beckmann, AP Clevenger, M Huijser, J Hilty (eds.). Island Press, Washington D.C., USA.

Ford, AT, AP Clevenger, K Rettie. 2010. Banff Wildlife Crossings, Trans-Canada Highway, Alberta – An international public-private partnership. Pages 157-172 in *Safe passages: Highways, wildlife and habitat connectivity*. J Beckmann, AP Clevenger, M Huijser, J Hilty (eds.). Island Press, Washington D.C., USA.

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Huijser, M.P, J. W. Duffield, A.P. Clevenger, R.J. Ament, P.T. McGowen. 2009. Cost-benefit analyses of mitigation measures aimed at reducing collisions with large ungulates in North America; a decision support tool. *Ecology and Society* 14(2): 14. [online] URL: <http://www.ecologyandsociety.org/viewissue.php?sf=41>.

Ford, A.T., A.P. Clevenger, A. Bennett. 2009. Comparison of non-invasive methods for monitoring wildlife crossing structures on highways. *Journal of Wildlife Management* 73:1213-1222.

Rettie, K, AP Clevenger, AT Ford. 2009. Innovative approaches for managing conservation and use challenges in the national parks: An example from Canada. Pages 396-415. In: T. Jamal and M. Robinson (eds.). *In: Handbook of Tourism Studies*. Sage Publications Inc.

Gunson, K, A. Clevenger, A. Ford, J. Bissonette, A. Hardy. 2009. A comparison of data sets varying in spatial accuracy used to predict the occurrence of wildlife-vehicle collisions. *Environmental Management* 44:268-277.

Ament, R, AP Clevenger, O Yu, A Hardy. 2008. An assessment of road impacts on wildlife populations in U.S. National Parks. *Environmental Management* 42, 480-496.

Clevenger, A.P, J. Wierzchowski. 2006. Maintaining and restoring connectivity in landscapes fragmented by roads. Pages 502-535. In *Connectivity Conservation* (Eds. K. Crooks, M. Sanjayan). Cambridge University Press.

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NRC (National Research Council). 2005. *Assessing and Managing the Ecological Impacts of Paved Roads*. The National Academies Press, Washington, DC.
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Clevenger, A.P., N. Waltho. 2005. Performance indices to identify attributes of highway crossing structures facilitating movement of large mammals. *Biological Conservation* 121:453-464.

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- Chruszcz, B., Clevenger, A.P., Gunson, K., Gibeau, M.L. 2003.** Relationships among grizzly bears, highways and habitat in the Banff-Bow Valley, Alberta. *Canadian Journal of Zoology* 81:1378-1391.
- Clevenger, A.P., B. Chruszcz, K. Gunson 2003.** Spatial patterns and factors influencing small vertebrate fauna road-kill aggregations. *Biological Conservation* 109:15-26.
- Forman, R.T.T., Sperling, D., Bissonette, J., Clevenger, A., Cutshall, C., Dale, V., Fahrig, L., France, R., Goldman, C., Heanue, K., Jones, J., Swanson, F., Turrentine, T., Winter, T. 2003.** *Road ecology: Science and solutions*. Island Press, Washington, DC. **Little, S.J., Harcourt, R.G., Clevenger, A.P. 2002.** Do wildlife passages act as prey-traps? *Biological Conservation* 107:135-145.
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- Gibeau, M.L, Clevenger, A.P., Herrero, S & Wierzchowski, J. 2002.** Grizzly bear response to human development and activities in the Bow River watershed, Alberta. *Biological Conservation* 103:227-236.
- Clevenger, A.P., Chruszcz, & Gunson, K. 2001.** Drainage culverts as habitat linkages and factors affecting passage by mammals. *Journal of Applied Ecology* 38:1340-1349.
- Clevenger, A.P., McIvor, M., McIvor, D., Chruszcz, B., Gunson, K. 2001.** Tiger salamander, *Ambystoma tigrinum*, movements and mortality on the Trans-Canada highway in southwestern, Alberta. *Canadian Field-Naturalist* 115:199-204.
- Clevenger, A.P., Chruszcz, B., Gunson, K. 2001.** Highway mitigation fencing reduces wildlife-vehicle collisions. *Wildlife Society Bulletin* 29:646-653.
- Gloyne, C.C., Clevenger, A.P. 2001.** Cougar use of wildlife crossing structures on the Trans-Canada highway in Banff National Park, Alberta. *Wildlife Biology* 7:117-124.
- Clevenger, A.P., Waltho, N. 2000.** Factors influencing the effectiveness of wildlife underpasses in Banff National Park, Alberta, Canada. *Conservation Biology* 14:47-56.

~ Theses ~

- Sawaya, M. In prep.** *Evaluating the demographic and genetic benefits of wildlife crossing structures for grizzly and black bear populations in the Bow Valley of Banff National Park, Alberta*. PhD thesis. Montana State University.
- Dorsey, B. In prep.** Factors affecting bear and ungulate train collisions in Banff and Yoho National Parks. MSc thesis. Montana State University.

Caryl, F.M. 2003. *Ungulate mortality on a forested highway*. MSc thesis, University of East Anglia, Norwich, UK, 42 pp. [Supervised]

Hansen, M. 2000. *Road impacts on plants – spread of introduced species in Banff National Park, Canada* MSc thesis. Uppsala University, Sweden. [Supervised]

Goldthorpe, G. 2000. *Reducing the impacts of highways on large carnivores*. MSc thesis. University of East Anglia, Norwich, UK, 45 pp. [Supervised]

Gloyne, C.C. 1999. *Cougars and roads: their use of wildlife crossing structures on the Trans-Canada highway, in Banff National Park, through analysis of their tracks*. MSc thesis. University of East Anglia, Norwich, UK, 65 pp. [Supervised]

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Clevenger, A.P., A.T. Ford, and M.A. Sawaya. 2009. *Banff wildlife crossings project : Integrating science and education in restoring population connectivity across transportation corridors*. Final report to Parks Canada Agency, Radium Hot Springs, British Columbia, Canada. 165 pp.

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Clevenger, A.P., B. Chruszcz, K. Gunson and M. Brumfit. 2002. *Highway Mitigation Monitoring, Three Sisters Parkway Interchange*. Final report. Alberta Environment, Canmore, Alberta.

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~ **Non-peer reviewed articles** ~

Clevenger, A.P. 2010. Environment fund to aid « Wolverine Watch ». *Gazette (Alpine Club of Canada) 25 :12*.

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Clevenger, A.P. 1998. Roads, wildlife & public safety in Banff National Park. *Safety Counselor 22 :8-10.*

Clevenger, A.P. 1997. Highway effects on wildlife in Banff National Park. *Research Links 5:1-2.*

Clevenger, A.P. & K. Wells (eds.). 1997. *Proceedings of the Second Roads, Rails and the Environment Workshop.* Columbia Mountains Institute of Applied Ecology, Revelstoke, B.C. 100 pp.