

Assessing the Effectiveness of the Directions in the Forest Management Guide for Natural Disturbance in accordance with Environmental Assessment Condition 39c

Publications

1. Background

Perera, A.H., L.J. Buse and R.G. Routledge. 2004. **An analysis of literature on natural fire disturbances in relation to Ontario's Forest Management Guide for Natural Disturbance Pattern Emulation.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., For. Res. Inf. Pap. No. 159. 62 p. -----

Perera, A.H. and L.J. Buse. 2006. **Multiple-scale research studies on boreal forest fire regimes to inform Ontario's policies for emulating natural forest disturbances: A prospectus.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Inf. Pap. No. 164. 24 p + append.

2. Residual trees and patches

Perera, A.J., L.J. Buse and R.G. Routledge. 2007. **A review of published knowledge on post-fire residuals relevant to Ontario's policy directions for emulating natural disturbance.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., For. Res. Inf. Pap. No. 168. 37 p. + append.

Routledge, R.G. 2007. **Sampling methodology for studying boreal post-fire residual stand structure with high resolution aerial photography and field plots.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., For. Res. Inf. Pap. No. 169. 37 p. + append. -----

Smith, T., B. Dalziel and R.G. Routledge. 2008. **A proposed method to rank the intensity of boreal forest fires in Ontario using post-fire high resolution aerial photographs.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Inf. Pap. No. 170. 23 p.

Perera, A.H., L.J. Buse, R.G. Routledge, B.D. Dalziel and T. Smith. 2008. **An assessment of tree, snag, and downed wood residuals in boreal fires in relation to Ontario's policy directions for emulating natural forest disturbance.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 168. 59 p + append. -----

Dalziel, B.D. and A.H. Perera. 2009. **Tree mortality following boreal forest fires reveals scale-dependant interactions between community structure and fire.** *Ecosystems* 12: 973-981.

Perera, A.H., B.D. Dalziel, L.J. Buse and R.G. Routledge. 2009. **Spatial variability of stand-scale residuals in Ontario's boreal forest fires.** *Can. J. For. Res.* 39: 945-961.

Perera, A.H. T.K. Remmel, L.J. Buse and M.R. Ouellette. 2009. **An assessment of residual patches in boreal fires in relation to Ontario's policy directions for emulating natural disturbance.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 169. 65 p. + append.

Remmel, T.K. and A.H. Perera. 2009. **Mapping natural phenomena: boreal forest fires with non-discrete boundaries.** *Cartographica* 44(4): 274-288. -----

Perera, A.H., B.D. Dalziel, L.J. Buse, R.G. Routledge and M. Briennesse. 2011. **What happens to tree residuals in boreal forest fires and what causes the changes?** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 174. 24 p.

3. Boreal fire regime and succession

Cui, W. and A.H. Perera. 2006. **Forest fire size distribution in North American boreal forests: A state of knowledge.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., For. Res. Inf. Pap. No. 163. 22 p.

Drescher, M., A.H. Perera, L.J. Buse, K. Ride, and S. Vasiliauskas. 2006. **Identifying uncertainty in practitioner knowledge of boreal forest succession in Ontario through a workshop approach.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 165. 53 p. + append. -----

Cui, W. and A.H. Perera. 2008. **What do we know about forest fire size distribution, and why is this knowledge useful for forest management?** *Int. J. Wild. Fire* 17: 234-244.

Cui, W. and A.H. Perera. 2008. **A study of simulation errors caused by algorithms of forest fire growth models.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 167. 17 p.

Drescher, M., A.H. Perera, L.J. Buse, K. Ride and S. Vasiliauskas. 2008. **Uncertainty in expert knowledge of forest succession: A case study from boreal Ontario.** For. Chron. 84(2): 194-209.

Drescher, M., A.H. Perera, L.J. Buse, R. Arnup, C. Bowling, D. Etheridge, G. Niznowski, K. Ride and S. Vasiliauskas. 2008. **Boreal forest succession in Ontario: An analysis of the knowledge space.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 171. 51 p. + append.

Perera, A.H., M. Ouellette, W. Cui, M. Drescher and D. Boychuck. 2008. **BFOLDS 1.0: A spatial simulation model for exploring large scale fire regimes and succession in boreal forest landscapes.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 152. 50 p.

Cui, W., M.R. Ouellette, A.H. Perera and M. Gluck. 2009. **Using BFOLDS to characterize fire regimes: A case study from a boreal forest landscape.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 173. 41 p.

Perera, A.H., W. Cui and M.R. Ouellette. 2009. **Size class distribution and spatial proximity of fires in a simulated boreal forest fire regime in relation to Ontario's policy directions for emulating natural disturbance.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Rep. No. 170. 29 p.

Cui, W. and A.H. Perera. 2010. **Quantifying spatio-temporal errors in forest fire spread modelling explicitly.** J. Environ. Inform. 16(1): 19-26.

Drescher, M.D. and A.H. Perera. 2010. **A network approach for evaluating and communicating forest change models.** J. Appl. Ecol. 47(1): 57-66.

Drescher, M. and A.H. Perera. 2010. **Comparing two sets of forest cover change knowledge used in forest landscape management planning.** J. Environ. Plan. Manage. 53(6): 591-613.

Ouellette, M. and M.D. Drescher. 2010 **Succession Pathway Tool user's guide.** Ont. Min. Nat. Resour., Ont. For. Res. Inst., Sault Ste. Marie, ON. For. Res. Info. Pap. No. 173. 39 p + append.

Perera, A.H. and W. Cui. 2010. **Emulating natural disturbances as a boreal forest management goal: lessons from fire regime simulations.** For. Ecol. Manage. 259: 1328-1227.