

APPENDIX D: Selected bibliography on climate change

The following is a bibliography of climate change publications pertaining to fire regimes in the Alaskan and Canadian tundra as of 2012. For additional resources, see also the annotated climate change bibliography at the [Climate Change Resource Center](#).

Alaska Fire Science Consortium. (2012). Research summary: Alaska climate change adaptation series--wildfires, (Online). In: Library--Newsletters, fact sheets and summaries. Fairbanks, AK: Alaska Fire Science Consortium (Producer). Available:

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Asselin, Hugo; Payette, Serge. 2005. Late Holocene deforestation of a tree line site: estimation of pre-fire vegetation composition and black spruce cover using soil charcoal. *Ecography*. 28(6): 801-805.

Bachelet, D.; Lenihan, J.; Neilson, R.; Drapek, R.; Kittel, T. 2005. Simulating the response of natural ecosystems and their fire regimes to climatic variability in Alaska. *Canadian Journal of Forest Research*. 35(9): 2244-2257.

Brown, Carissa D. 2010. Tree-line dynamics: adding fire to climate change prediction. *Arctic*. 63(4): 488-492.

Brubaker, Linda B.; Higuera, Philip E.; Rupp, T. Scott; Olson, Mark A.; Anderson, Patricia M.; Hu, Feng Sheng. 2009. Linking sediment-charcoal records and ecological modeling to understand causes of fire-regime change in boreal forests. *Ecology*. 90(7): 1788-1801.

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Chapin, F. Stuart, III; Shaver, Gaius R.; Giblin, Anne E.; Nadelhoffer, Knute J.; Laundre, James A. 1995. Responses of arctic tundra to experimental and observed changes in climate. *Ecology*. 76: 694-711.

Chapin, F. Stuart, III; Starfield, Anthony M. 1997. Time lags and novel ecosystems in response to transient climatic change in Arctic Alaska. *Climatic Change*. 35(4): 449-461.

Cronan, James; McKenzie, Donald; Olson, Diana. (2012). Fire regimes of the Alaska boreal forest. Draft manuscript. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 124 p. In cooperation with: Seattle, WA: University of Washington, School of Forest Resources; New Haven, CT: Yale School of Forestry and Environmental Studies; Moscow, ID: University of Idaho; Fairbanks, AK: U.S. Department of the Interior, Bureau of Land Management, Alaska Fire Service.

Available online:

http://www.frames.gov/documents/alaska/fire_history/fire_regimes_alaskan_boreal_forest_draft_gtr.zip

(2012, September 4).

de Groot, W. J.; Wein, Ross W. 1999. *Betula glandulosa* Michx. response to burning and postfire growth temperature and implications of climate change. *International Journal of Wildland Fire*. 9(1): 51-64.

de Lafontaine, Guillaume; Payette, Serge. 2011. Shifting zonal patterns of the southern boreal forest in eastern Canada associated with changing fire regime during the Holocene. *Quaternary Science Reviews*. 30(7-8): 867-875.

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Goetz, Scott J.; Bunn, Andrew G.; Fiske, Gregory J.; Houghton, R. A. 2005. Satellite-observed photosynthetic trends across boreal North America associated with climate and fire disturbance. *Proceedings of the National Academy of Sciences*. 102(3): 13521-13525.

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Lloyd, Andrea H.; Fastie, Christopher L.; Eisen, Hilary. 2007. Fire and substrate interact to control the northern range limit of black spruce (*Picea mariana*) in Alaska. *Canadian Journal of Forest Research*. 37(12): 2480-2493.

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Payette, Serge; Filion, Louise; Delwaide, Ann. 2008. Spatially explicit fire-climate history of the boreal forest-tundra (eastern Canada) over the last 2000 years. *Philosophical Transactions of the Royal Society*. 363: 2299-2314.

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