CROWN FIRES ARE "*HOT*": INTRODUCING THE INTERNATIONAL CROWN FIRE MODELING EXPERIMENT

Martin E. Alexander,[1] Brian J. Stocks[2] and Brian D. Amiro[1]
Canadian Forest Service
[1]Northern Forestry Centre, 5320-122 Street, Edmonton, AB, Canada T6H 3S5
[2]Great Lakes Forestry Centre, P.O. Box 490, Sault Ste. Marie, ON, Canada P6A 5M7
E-mail: malexand@nrcan.gc.ca

Rick A. Lanoville
Government of Northwest Territories, Department of Resources, Wildlife and Economic Development, Forest Management Division, P.O. Box 7, Fort Smith, NT, Canada X0E 0P0

ABSTRACT

The International Crown Fire Modelling Experiment (ICFME) constitutes a major, cooperative, global undertaking involving coordination by the Canadian Forest Service Fire Research Network (CFS-FRN) and the Government of the Northwest Territories' Forest Management Division combined with participation of collaborating scientists and operational fire personnel, principally from Canada and the USA, but with representation from several other countries as well. The initial impetus for the ICFME was oriented towards the testing and calibration of a newly developed physical model for predicting the spread rate and flame front intensity of crown fires. However, the ICFME has also provided the opportunity to examine other aspects or implications of crown fire behavior, without compromising this primary objective, including linkages to fire-fighter safety/personal protective equipment (PPE) and wildland-urban interface or intermix issues as well as certain ecological and environmental impacts or effects, including concerns about atmospheric chemistry from biomass burning.

The 11 experimental crown fires that have taken place in the last three years (1997-99) are providing valuable new data and insights into the nature and characteristics of crowning forest fires needed for dealing with the management problems and opportunities that will be affecting both people and ecosystems in the coming century.

The 8-minute video "International Crown Fire Modelling Experiment, Northwest Territories, 1997" shown during the conference poster session was produced by James L. Kautz, USDA Forest Service, Missoula Technology & Development Center, Building 1-Fort Missoula, Missoula, MT, USA 59804-7294. Copies are available upon request.

For more information on this CFS-FRN endeavor check out the ICFME web site at: http://www.nofc.cfs.nrcan.gc.ca/fire/fmn/nwt/

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