

Thermal Responses to Exercise While Wearing Industrial Protective Headwear

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Abstract

The Faculty of Physical Education and Recreation at the University of Alberta in cooperation with the Forest Engineering Research Institute of Canada's (FERIC) Wildland Fire Operations Research Group undertook a study designed to evaluate the effects of selected safety headwear products. Three conditions were compared: no helmet, a standard helmet, and helmet with side impact protection. Thermal responses to exercise and the effects of exercise-induced thermal stress and fatigue were investigated. This poster summarizes the results of a FERIC publication by Peterson et al. (2002) which is available for downloading from the FERIC Wildland Fire Operations Research Group's website (<http://fire.feric.ca>) and has also been including in these proceedings

Reference

Petersen S, Maraj B, Eves N, Strickland M, Gilpin M, Dreger R (2002) Thermal responses to exercise while wearing industrial protective headwear. Forest Engineering Research Institute of Canada Advantage Report. Vol. 3 No. X. Pointe Claire, QC and Vancouver, BC. 4 pp.

The Presenting Author

After high school Ray Ault went to work the summer of 1978 for the British Columbia Forest Service on the Salmon Arm District fire suppression crew. In 1980 the BC rapattack crew moved to Salmon Arm, becoming a provincial resource and Ray was one of the locals hired. He stayed with rapattack for three seasons until an opportunity to join Alberta's newly formed provincial helitack program came along. As a coordinator he developed the operations manual, trained rappellers and shared in the supervising of conventional and rappel crews. Ray and two friends started Wilderness Fire Management Inc. (WFMI), a contract initial attack and prescribed burning company in 1985. He left Alberta in 1986 to manage WFMI. At the peak of operations, WFMI employed 130 seasonal firefighters from nine bases and actioned up to 350 fires a season. It was a terrific experience. Changes in provincial politics ended the privatization initiatives within government and the opportunity for contracting. Ray closed down operations after the 1992 fire season and enrolled at Asia Pacific Institute to earn an MBA in International Business. Ray returned to the as the Superintendent of Fire Equipment with the BC Ministry of Forests (BCMF) in Victoria in 1994. Ray and his partner moved to Jasper in 1996, where he worked seasonally for the BCMF as a Protection Assistant in the summers. In the winter months he consulted and taught business at Lethbridge Community College. Ray was hired as the Group Supervisor for the FERIC Wildland Fire Operations Research Group in January 2001.

Stewart Petersen, Brian Maraj, Neil Eves, Michael Stickland, Michael Gilpin and Randy Dreger at the time this study was conducted were all with the Faculty of Physical Education and Recreation, University of Alberta, Edmonton, Alberta. Ray Ault is the Group Supervisor of the Wildland Fire Operations Research Group, Forest Engineering Research Institute of Canada – Western Division, Hinton, Alberta. email: ray.ault@gov.ab.ca

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