

Marmot Creek Research Basin Workshop

50+ Years of Mountain Hydrology and Climate Research

U of C Biogeoscience Institute Barrier Lake Field Station | 21-22 February 2013

(former Kananaskis Experimental Forest Station)

Background

Marmot Creek Research Basin in the Kananaskis Valley, Alberta was established as an experimental basin in 1962 by the Canadian and Alberta Governments. It became an outdoor research laboratory to examine the principles of mountain hydrology and how forest management could be used to influence streamflow generation. Research flourished for 25 years and provided the basis for a better understanding of hydrology, hydrochemistry and forest management that influenced headwater basin management for many years. In 2004, the basin was reactivated by the University of Saskatchewan, University of Calgary and Environment Canada and has since been the subject of process hydrology, climatology, ecohydrology and hydrological modelling research that is underpinning the next generation of hydrological models and forest management strategies. The Coldwater Laboratory was established in 2009 at the University of Calgary Barrier Lake Field Station to maintain intensive research in the basin. The long term record of high altitude streamflow, precipitation, snowpack, groundwater, vegetation and mountain meteorology observations in Marmot Creek makes it a unique laboratory for understanding and assessing environmental change in the Canadian Rockies. Current weather can be viewed here: <http://hydrology-telemetry.usask.ca/>.

Workshop Objectives

This workshop is designed to celebrate the half century of knowledge and technology that has derived from Marmot Creek, to review the challenges, designs and results of the early research period and of the recent period, and to anticipate and plan for future science in the basin. Talks and poster papers are solicited on

1. reviews of observations, expectations and management for the experimental basin 1962-1987
2. results of field and modelling studies in the basin
3. changes that have been observed or modelled in the basin over time
4. forest management and policy implications of research in Marmot Creek.
5. future studies and plans for Marmot Creek.

There will be an evening speaker on the history of research in the area and a field visit to Marmot Creek to see recent research installations. The workshop will result in a popular science book on the history and implications of the science at Marmot Creek, based on interviews, presentations and discussions at the workshop.

Abstract Submission | Registration | Travel Support

- To propose an oral or poster paper please submit an Abstract of 500 words or less with title, authors and author institutions/addresses and note the preferred session (list above).
- To express interest in attending the workshop please indicate your name, affiliation and interest.
- On-site costs will be covered and a contribution to travel expenses can be applied for those without institutional support to attend. Please indicate expected travel costs.

Submit abstract, register and indicate need for travel support to centre.hydrology@usask.ca by **Jan 15, 2013**

Science Committee: John Pomeroy, Axel Anderson, Jim Bruce, John Diiwu, Ed Johnson

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