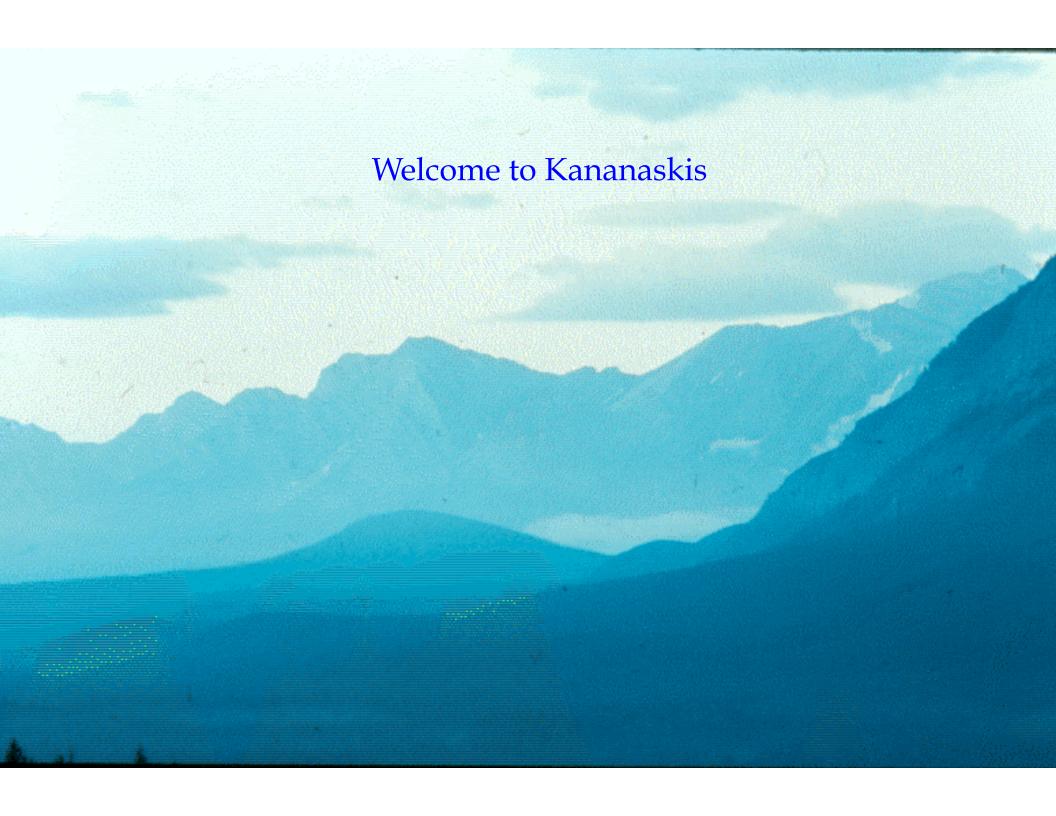
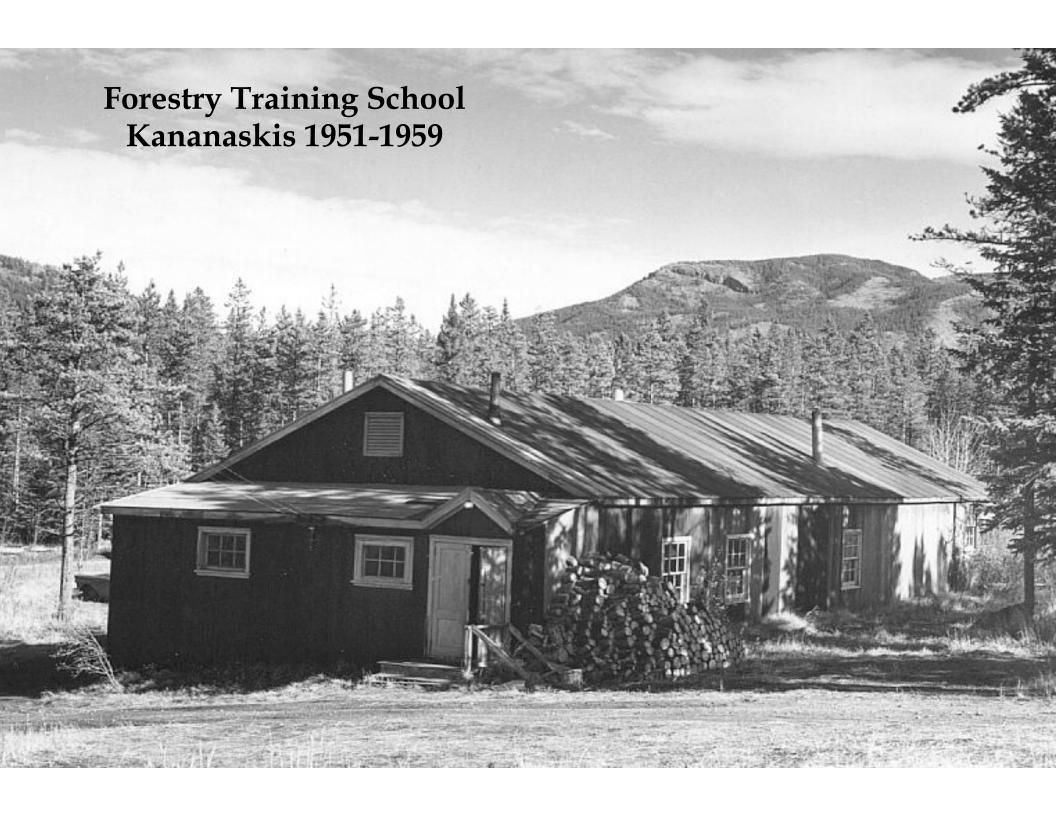
"Aren't we there yet?":

Reflections on the Forest Fire Management Journey

Wildland Fire Canada Conference &

Canadian Interagency Forest Fire Centre Kananaskis – Alberta 1 October 2012

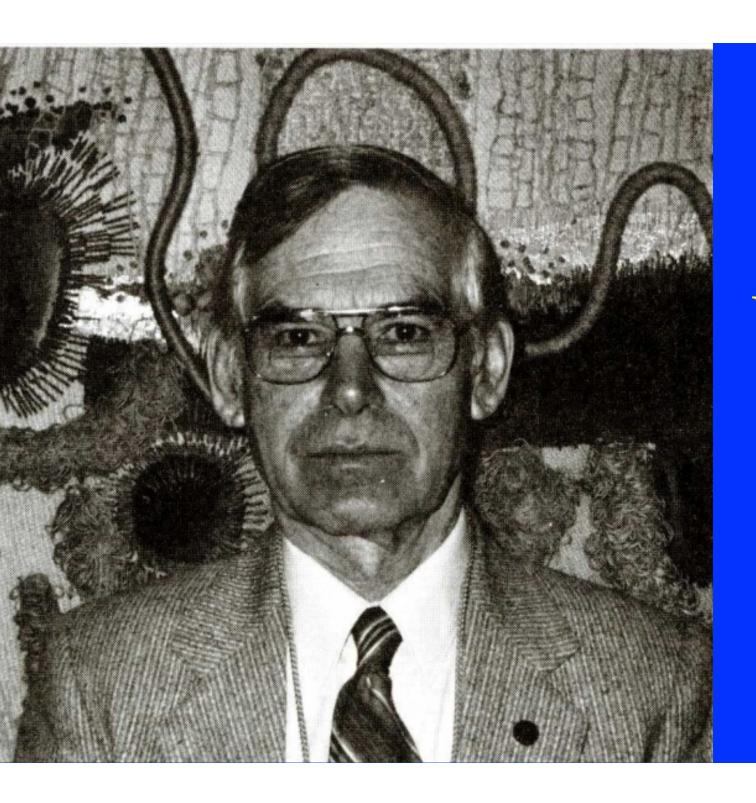






1957

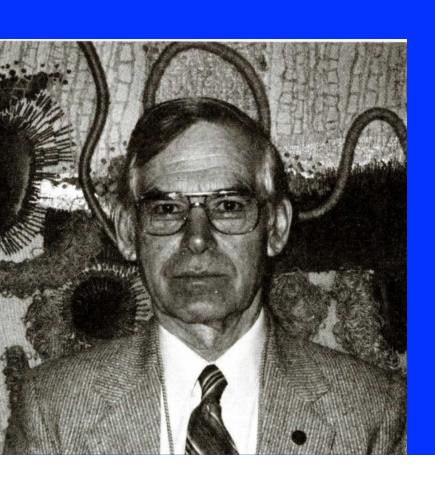
With thanks to ALL our spouses, partners and families



Charles E. Van Wagner

1987

"we are well advised to look backward first every time we contemplate a look forward."

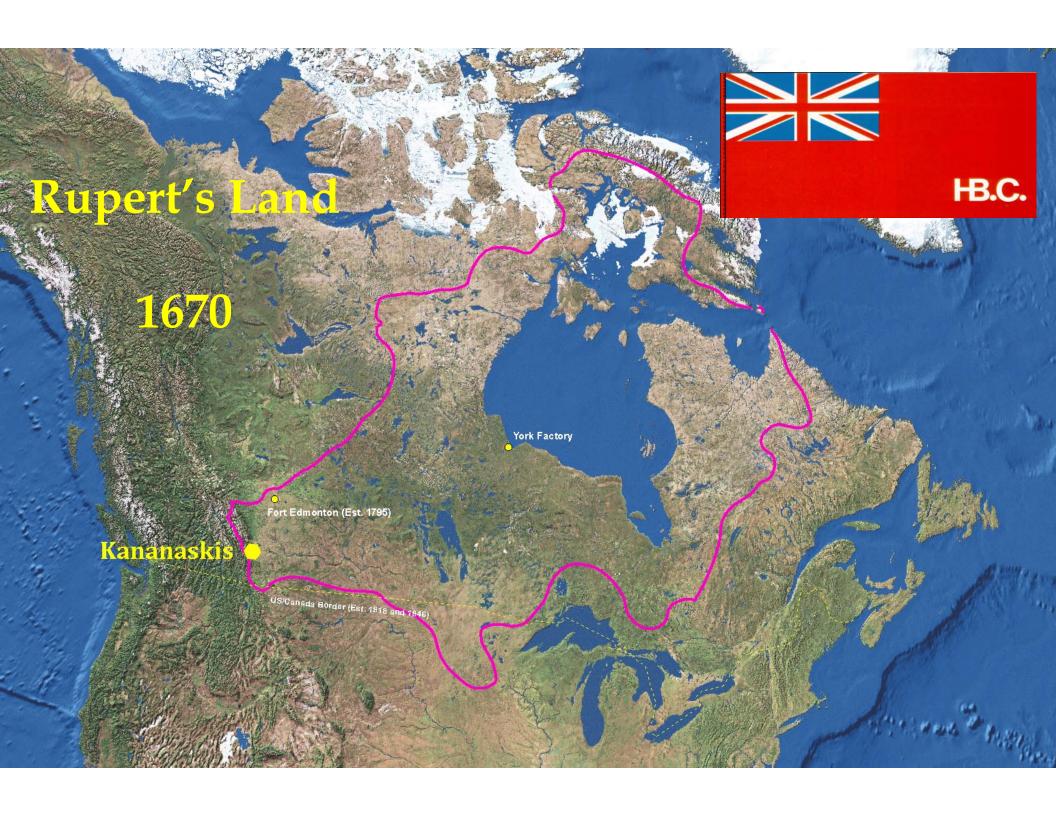


Charles E. Van Wagner

1987

Hudson's Bay Company 1670



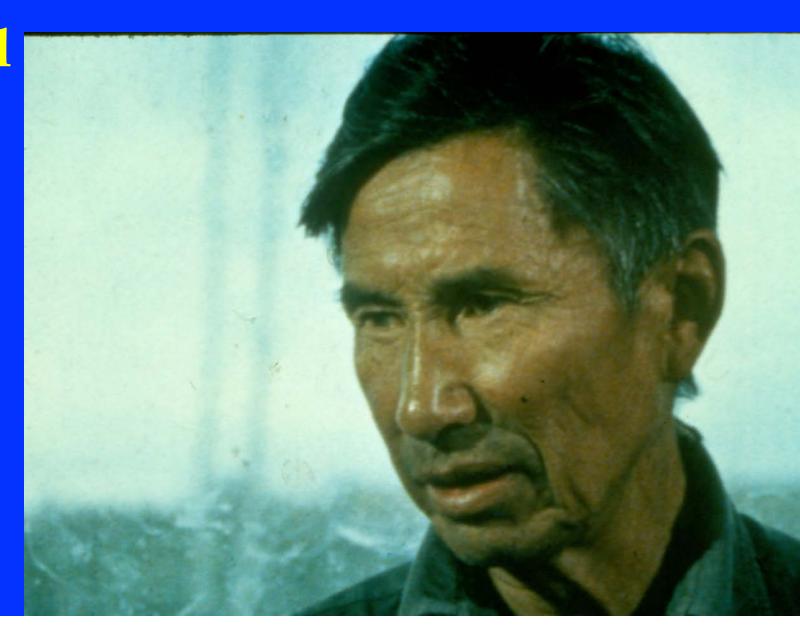


In the meantime – before & during HBC --

Aboriginal burning

Hank Lewis 1970s

Over 10 categories of burning



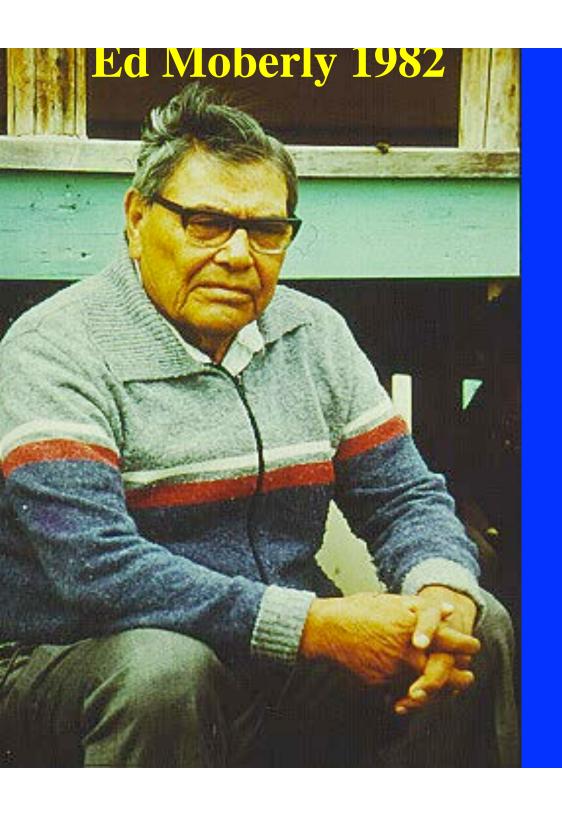


"Indians ...
wilfully set the
prairies on fire
[in the autumn]

1874

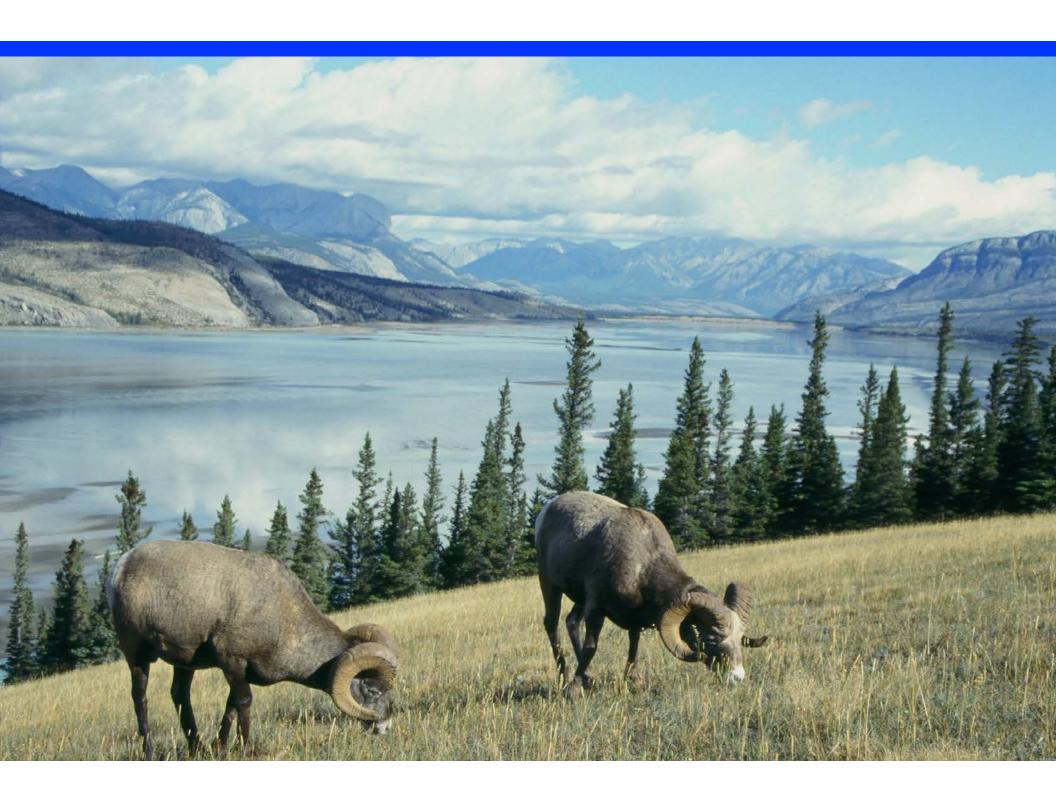
Superiorendent Sum B. Sorde, 1983.





"... in the spring that's the first thing everybody does is burn the meadows."

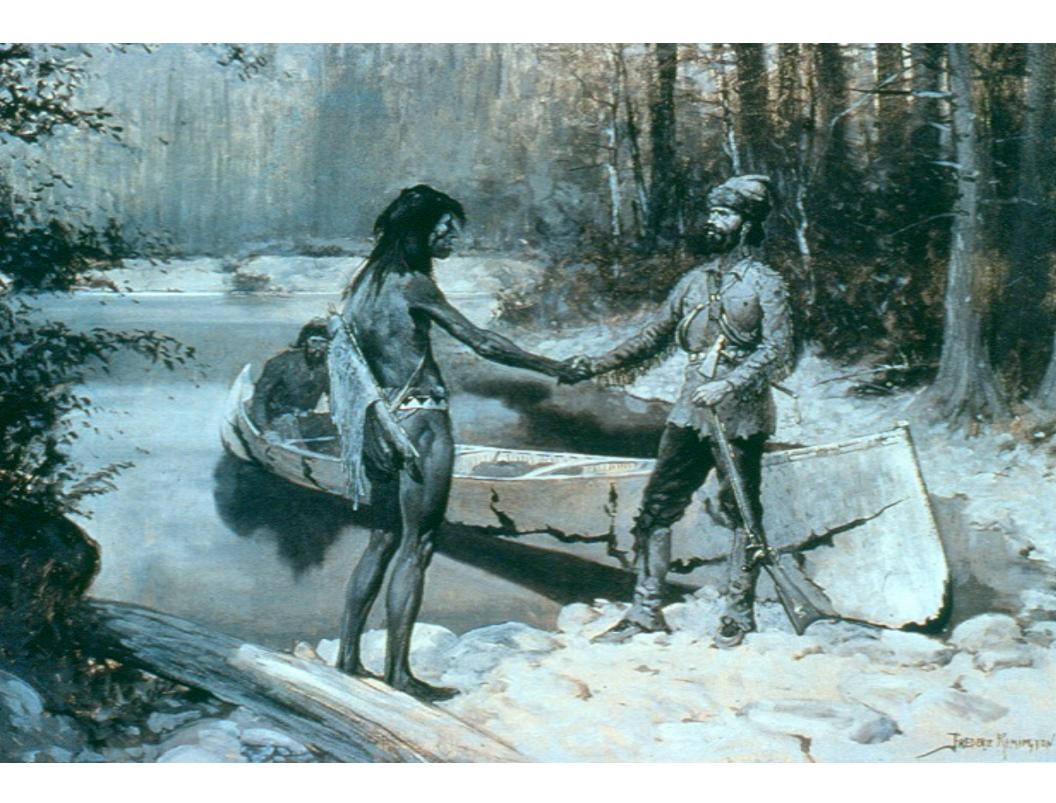


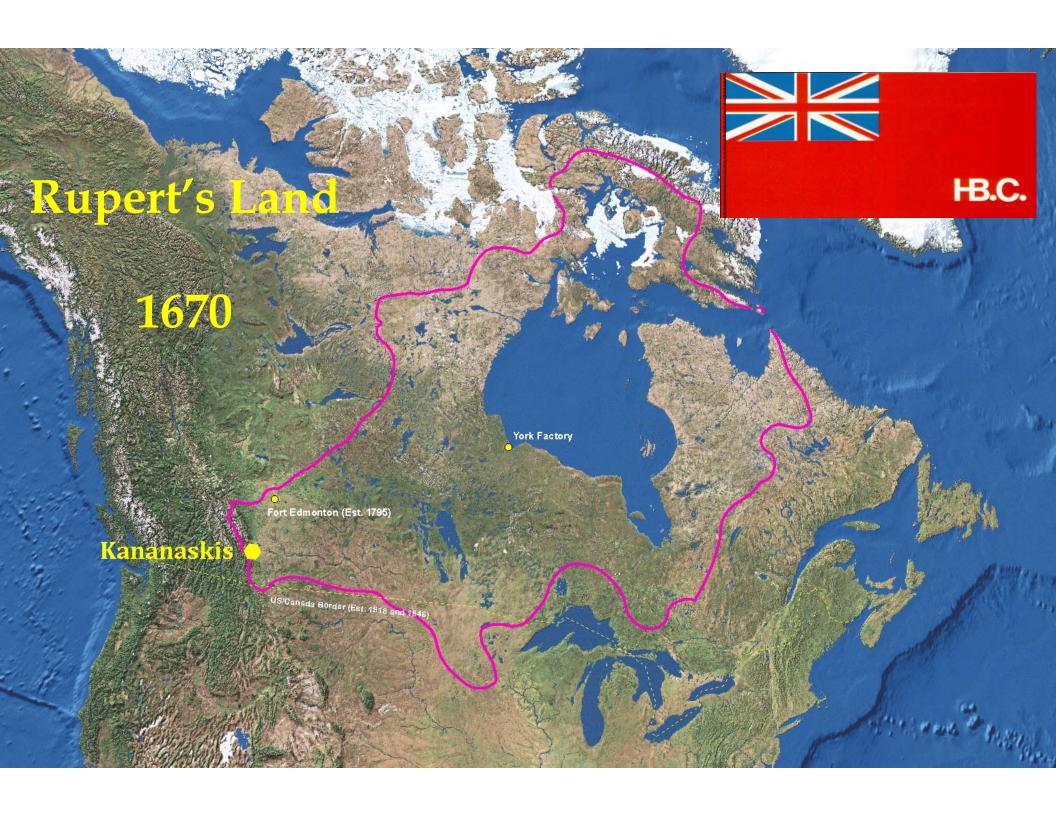


"Why would they not exploit fully the most indispensable element of their toolkit?"

Stephen Pyne 1999-09-26



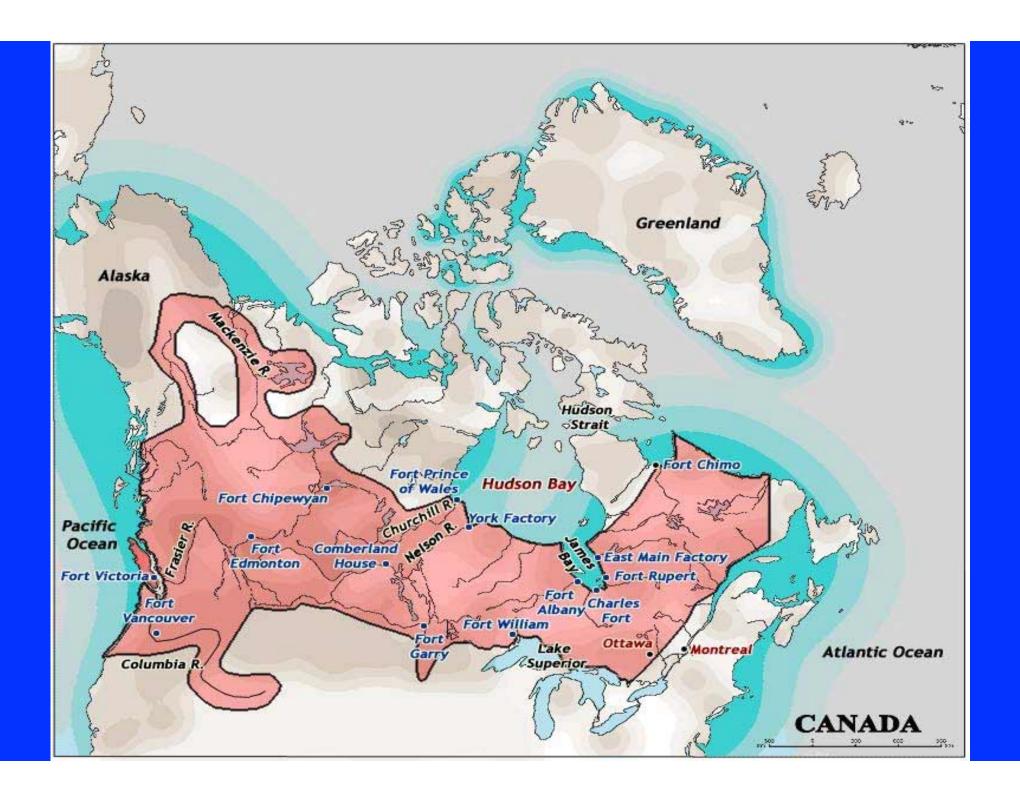




North West Company

"Perseverance"



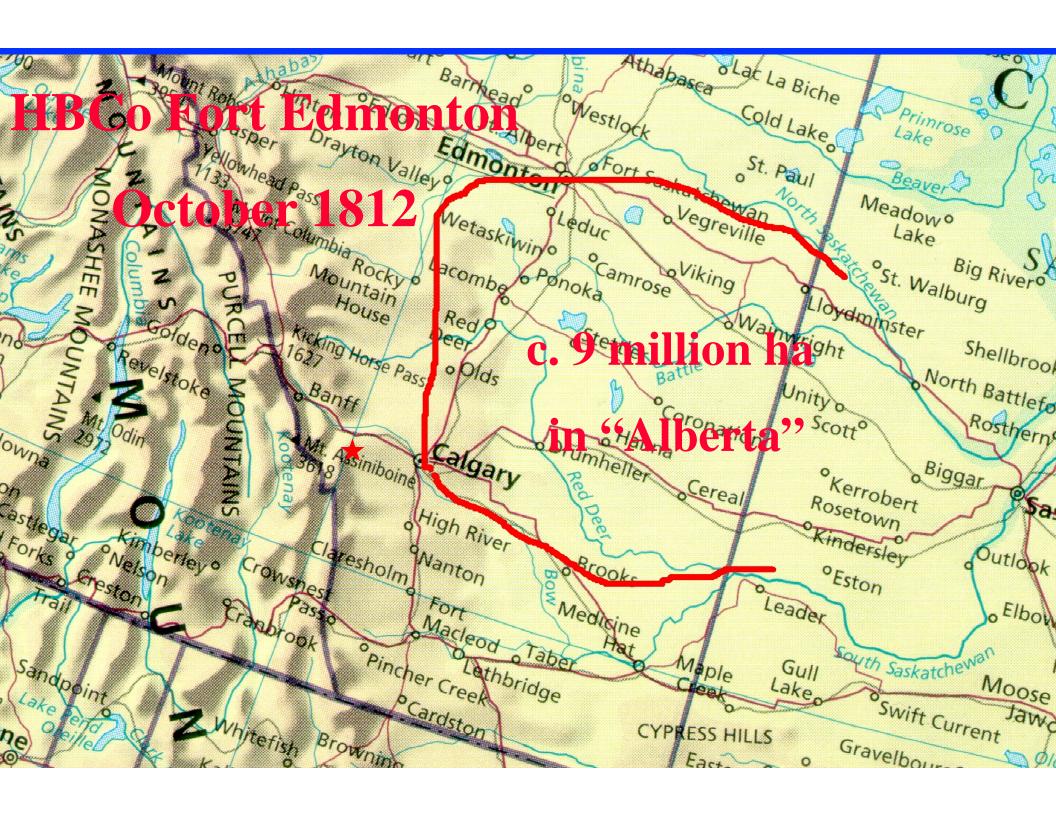


Hudson's Bay Company Fort Edmonton

12 October 1812



The Plains are, and have been these several Days past, burning in a most dreadful manner. Fires are raging in all Directions, and the sun obscured with Smoke that covers the whole Country





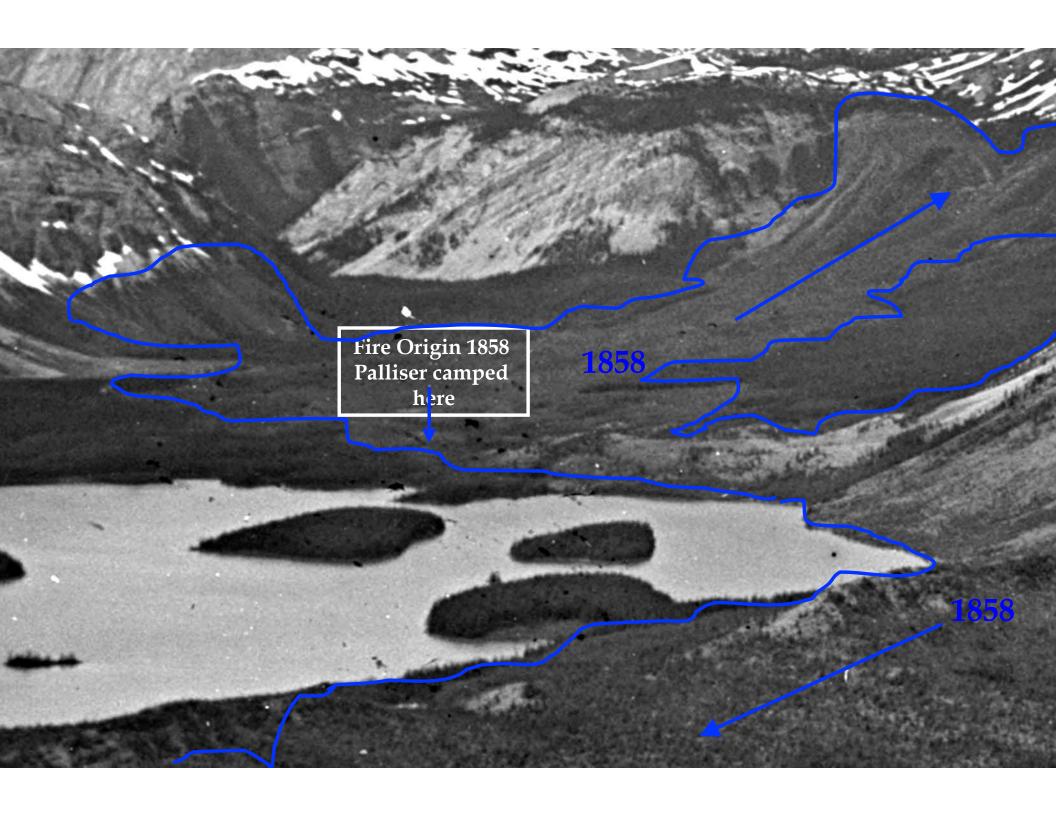
John Palliser and James Hector -- 1858

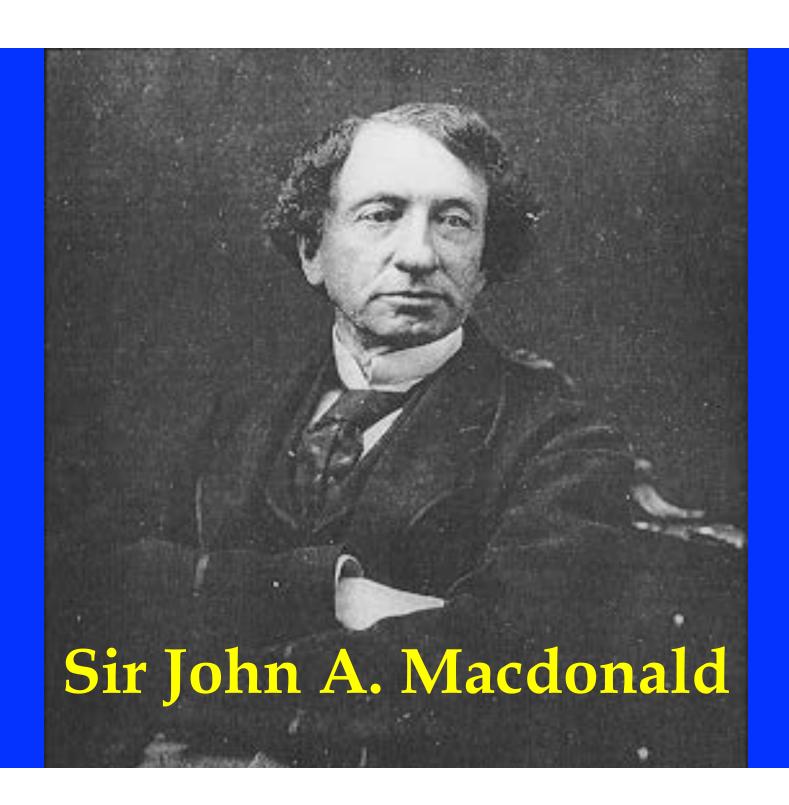


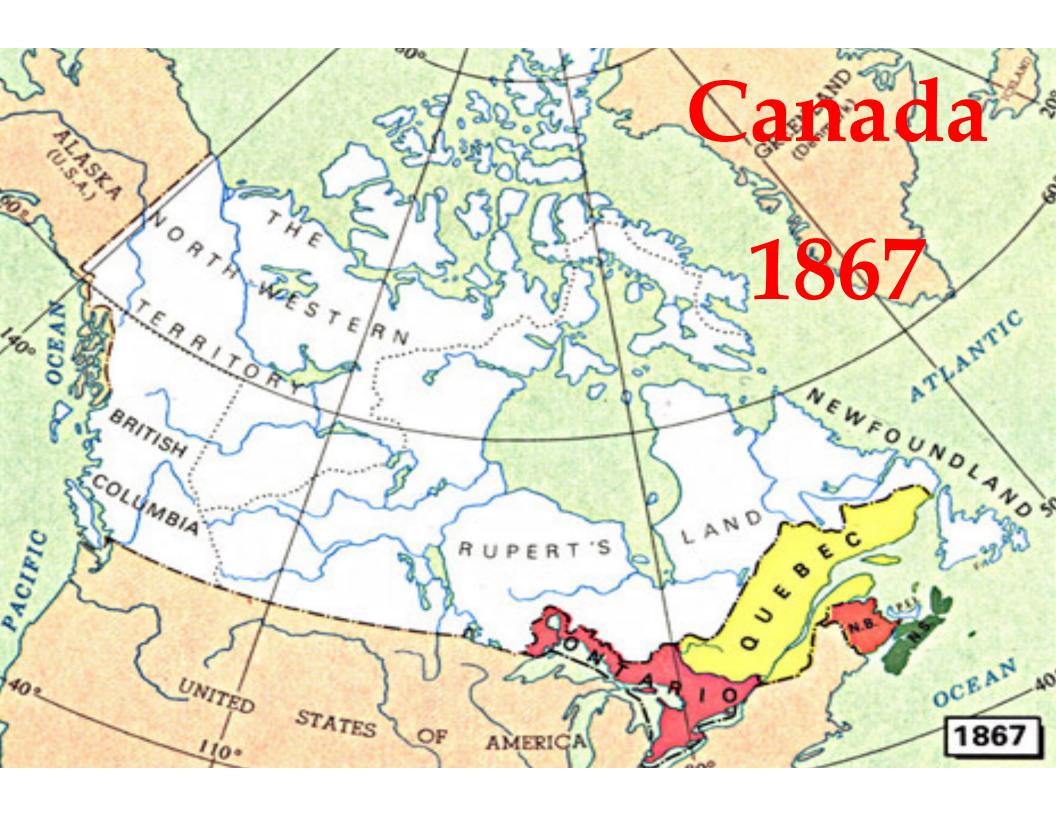




Brad and Lorraine Hawkes -- 1977





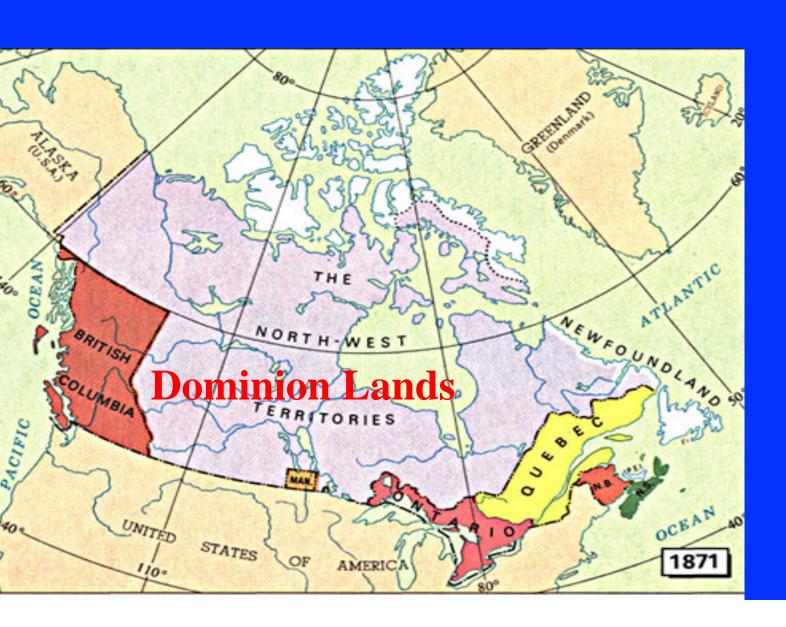


British North America Act 1867

Provincial Right:

"the management and sale of the public lands, including forests --- and of the timber and wood thereon."

Dominion of Canada -- 1871



Crown forest lands belong to provinces 1871 **North West Territories** became **Dominion** Lands











The Governor in Council may 1884

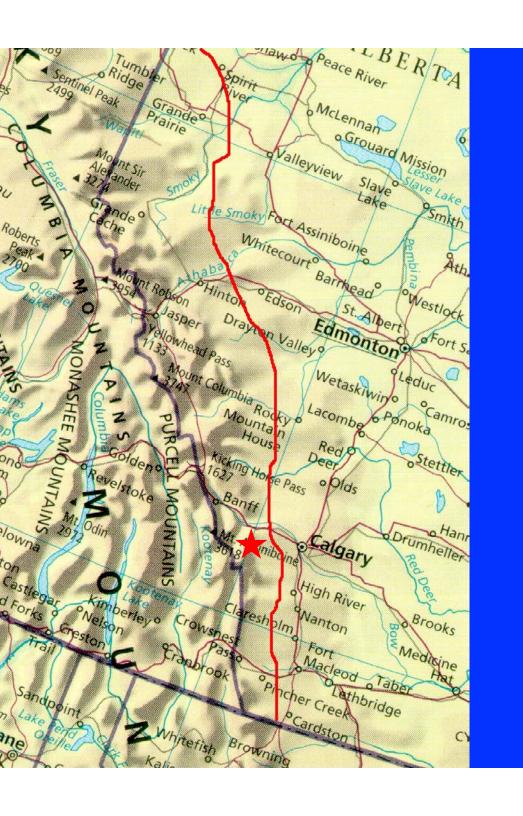
- set aside for forest parks
- for the preservation of forest trees
- on the crests and slopes of the Rocky Mountains
- maintain volume of water in rivers and streams
- that traverse the North-West Territories

Banff





Hot Springs Reserve 1885



Fires of the 1880s & 1890s

Grande Prairie and Eastern Slopes

900 km

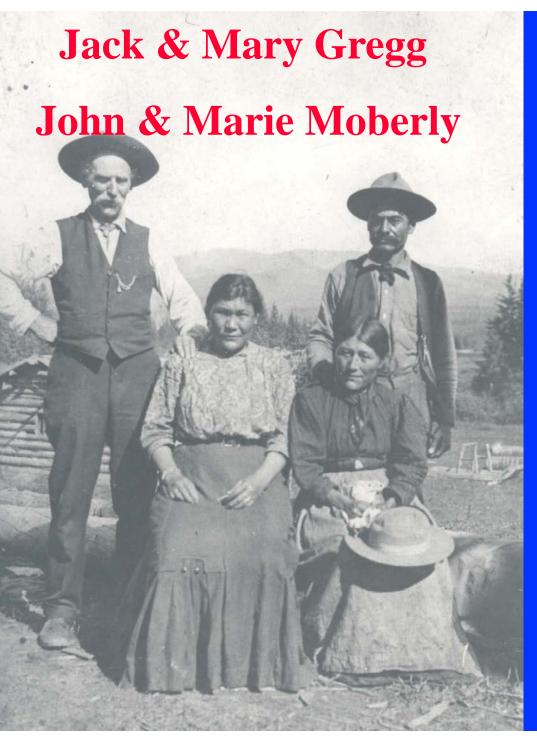


"Large game is scarce" HBC 1890



Grande Prairie HBC Post Journal:

- Indians starving a number died that year
- ate over 20 of their horses and 4 of HBC
 credit offered



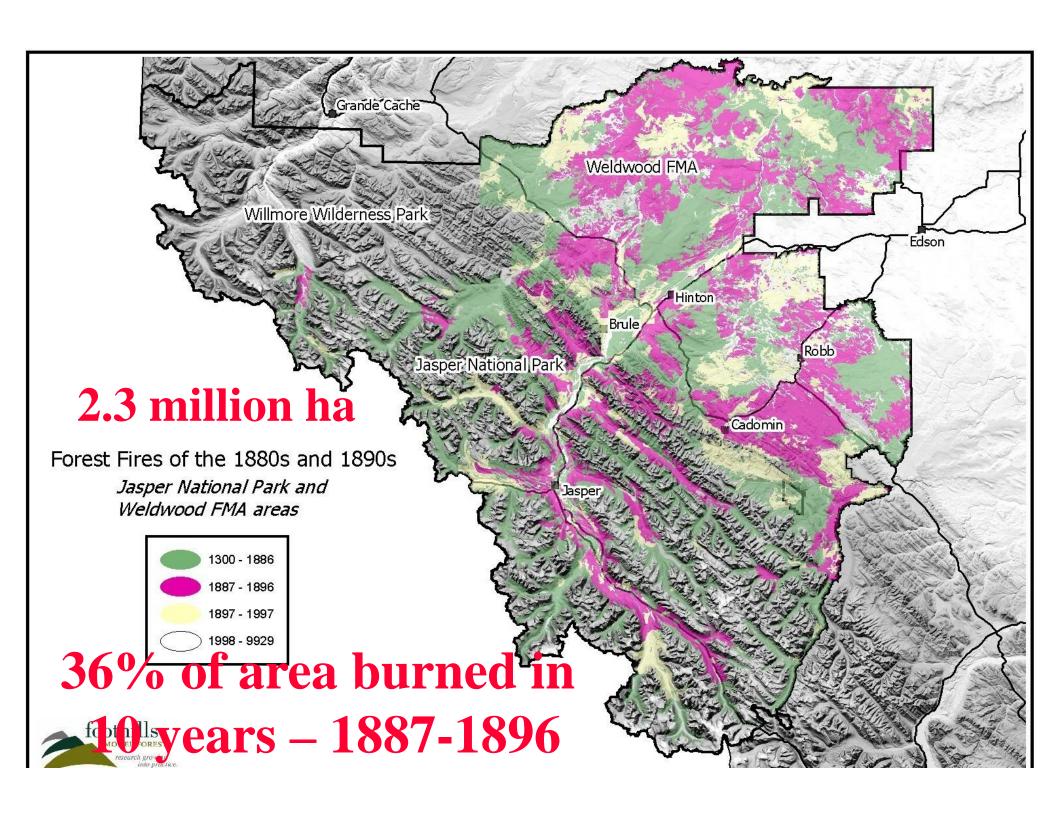
Marie Moberly

... about the big fires:

"We had to escape into the river."

John Moberly Homesite – Jasper – 1910

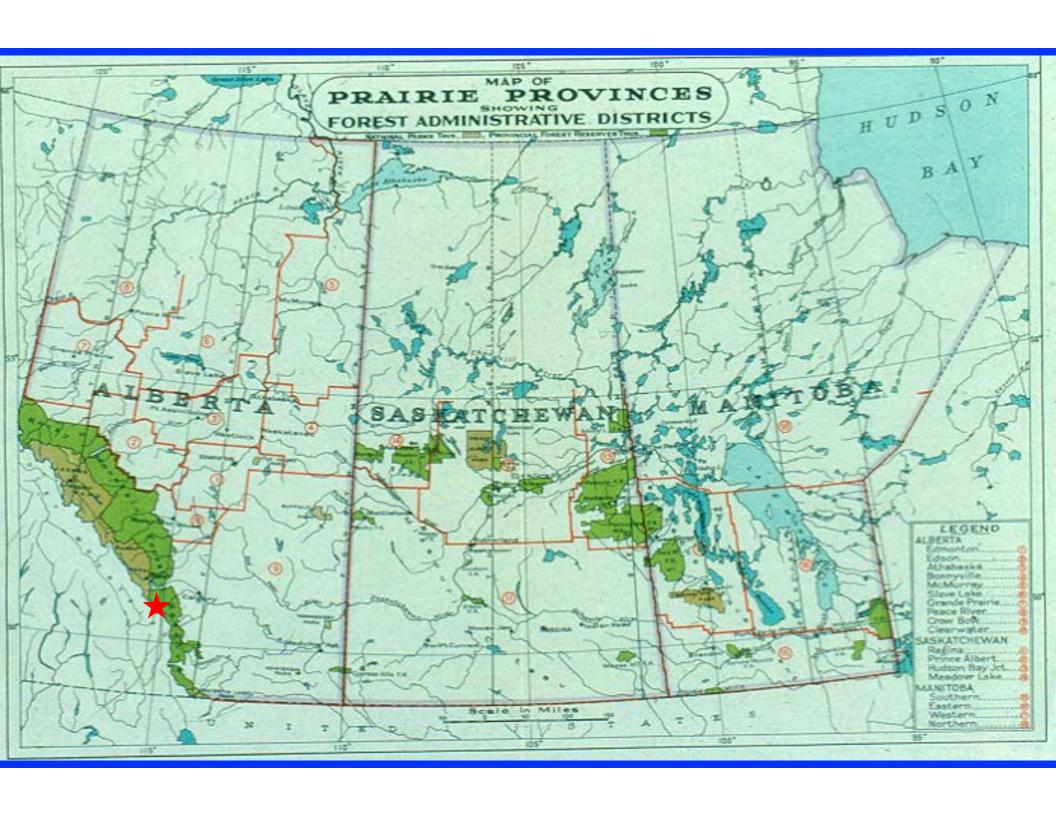




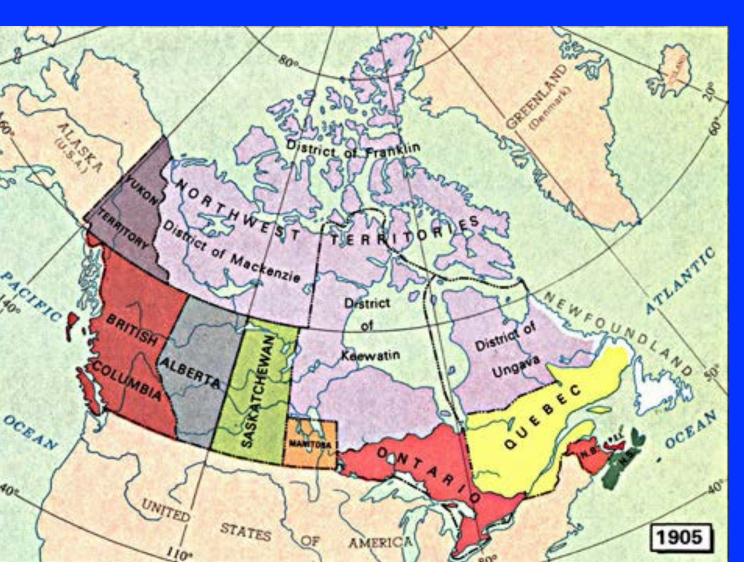
Dominion Forestry Branch



1899
Elihu Stewart
First Dominion
Forester



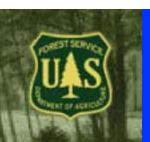
Alberta & Saskatchewan Provinces in 1905





Dominion
Lands and
Mines
remained
Federal to
1930

U.S. Forest Service History



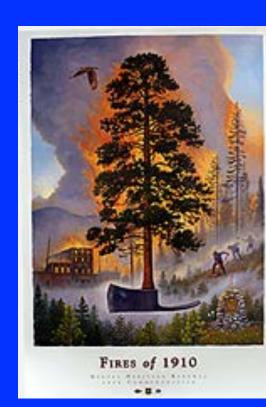


"The Big Blowup"

Fires of 1910

1,210,000 ha

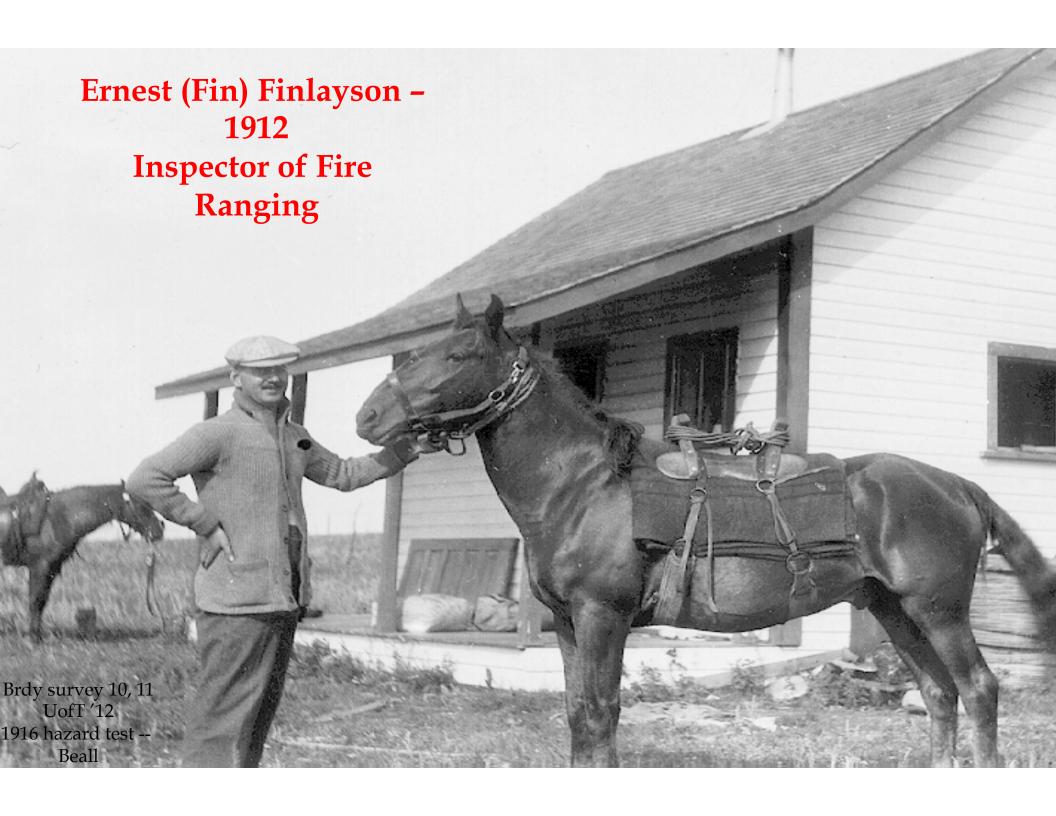
87 fatalities



1910 Burn - Highwood River







Dominion Forest Reserves and Parks

1912



Dominion Forest Reserves and Parks

&

Northern Alberta Fire Ranging District

1912

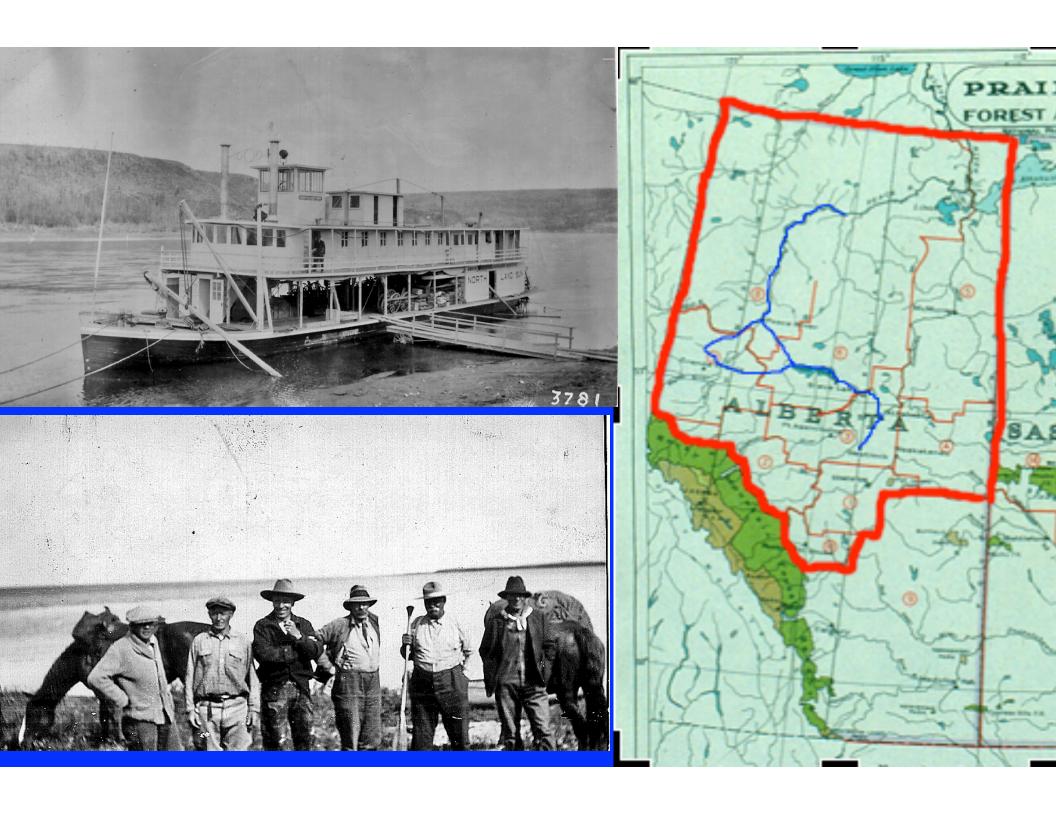


Lt. Col. Robert H. Palmer

DSC, Croix de Guerre

Commander 22nd Regiment



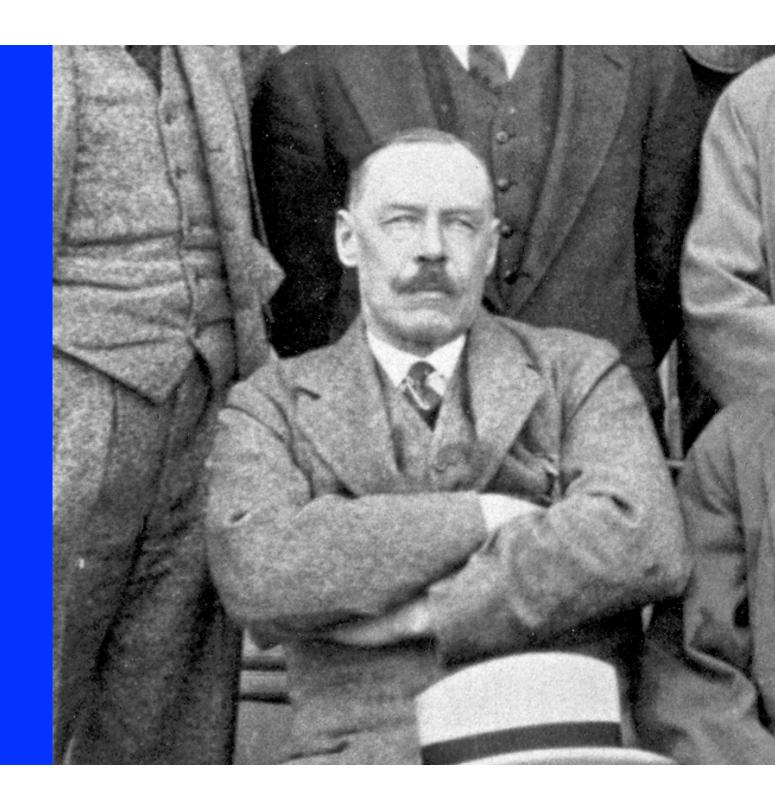


Lt. Col. Robert Palmer

> Chief Fire Ranger

Northern Alberta Fire Ranging District

1912-1930

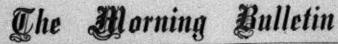


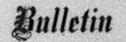
Lac La Biche Village in Ashes

Entire District is Homeless

19 May 1919







Lac La Biche Village in Ashes; Entire District Is Homeless; **Condition of People Perilous**

FOREST FIRE SWEEPS OVER





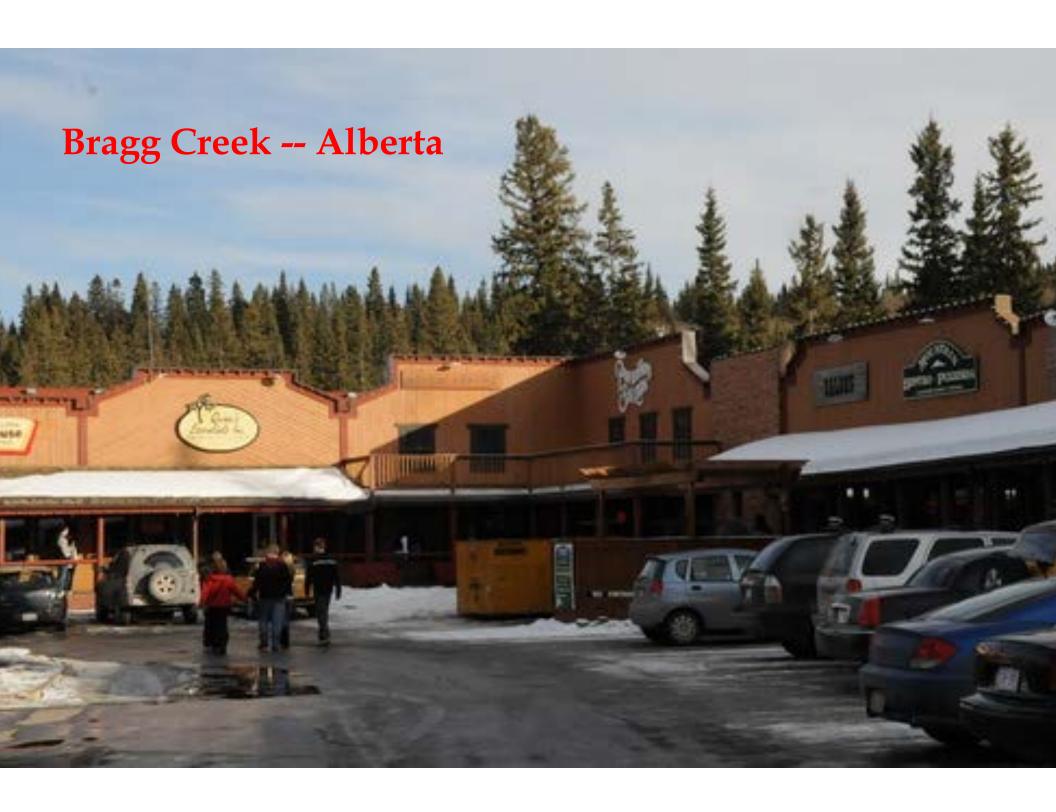


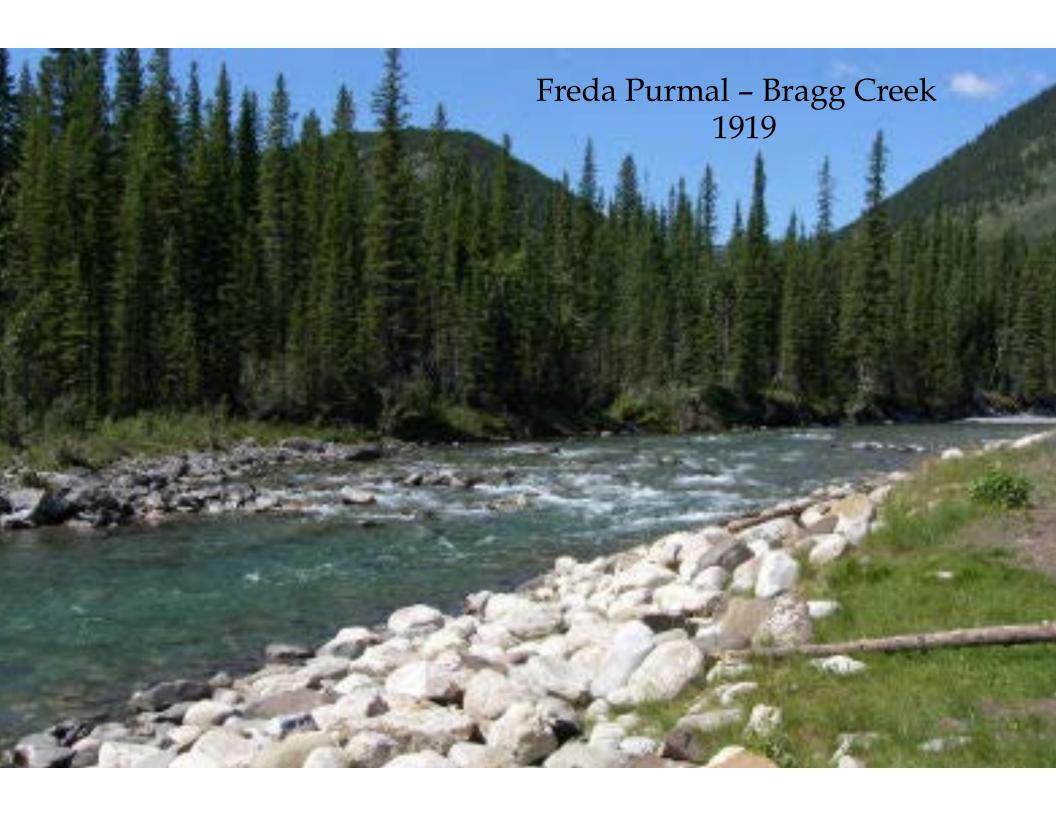


Island Lake 1919

"Only twelve of us survived that fire and we lost eleven; those who did survive bore the marks of their burns for life."

Theresa Desjarlais

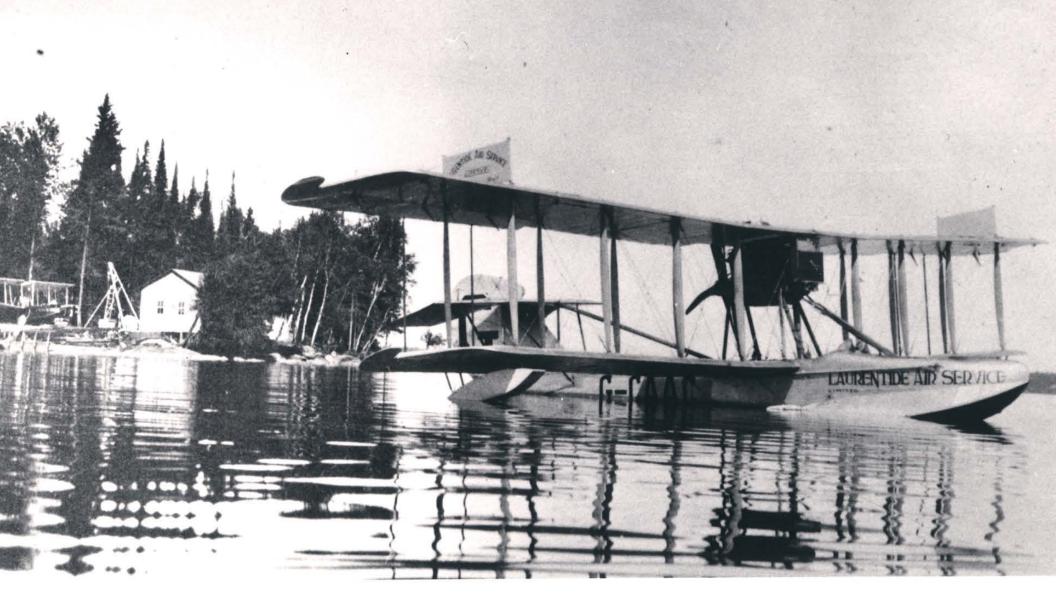




"We had seen pictures of ocean liners all lit up at night and that is what that big hill looked like at night – just millions of lights – all over as far as you could see" Freda Purmal -- 1985



St. Maurice Forest Protection Association Quebec -- 1917 HS2L - First Aerial Fire Patrols



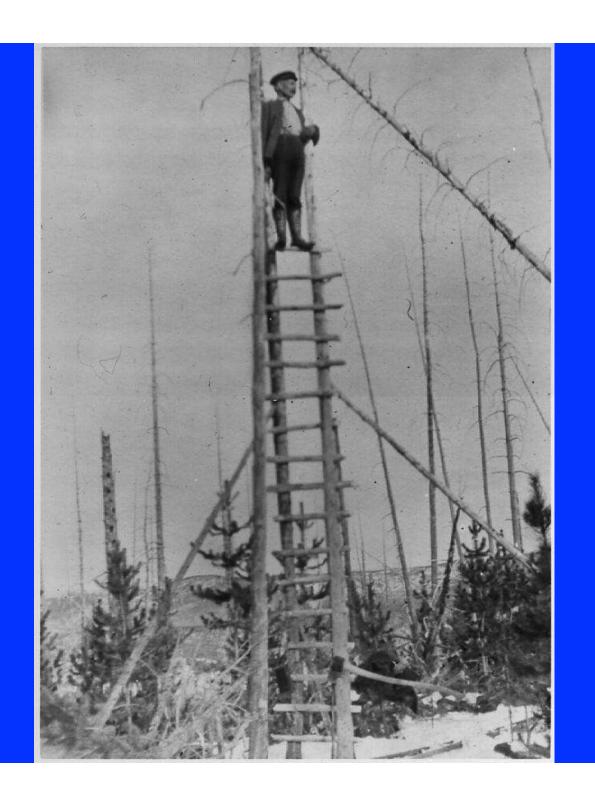












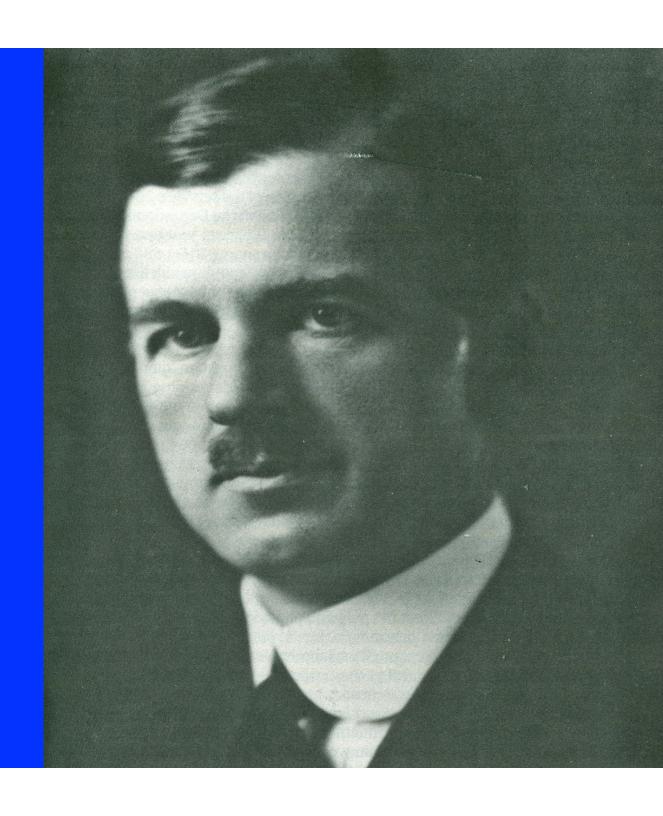
Ernest (Fin) Finlayson

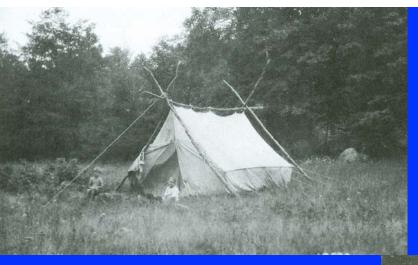
Director of Dominion Forest Service

1924-1936

Supported forest fire research

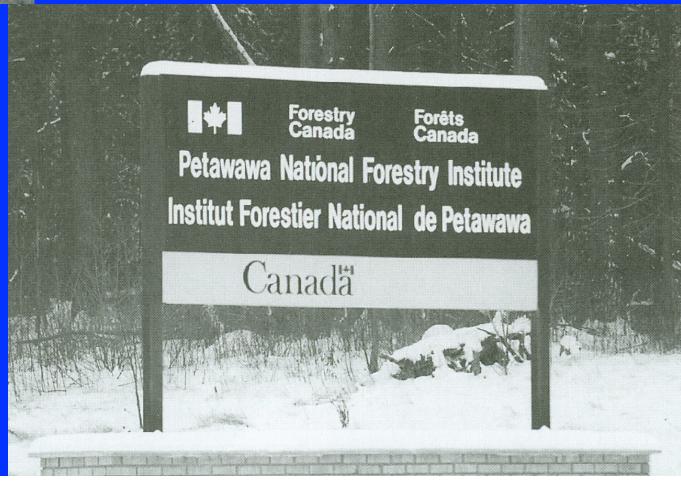
1916 tests

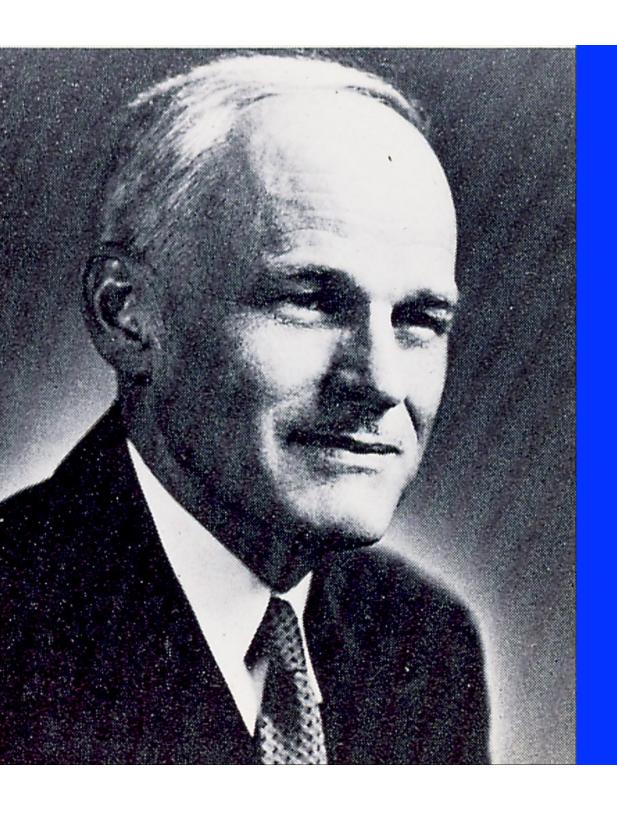




Petawawa National Forestry Institute

1917 to 1993





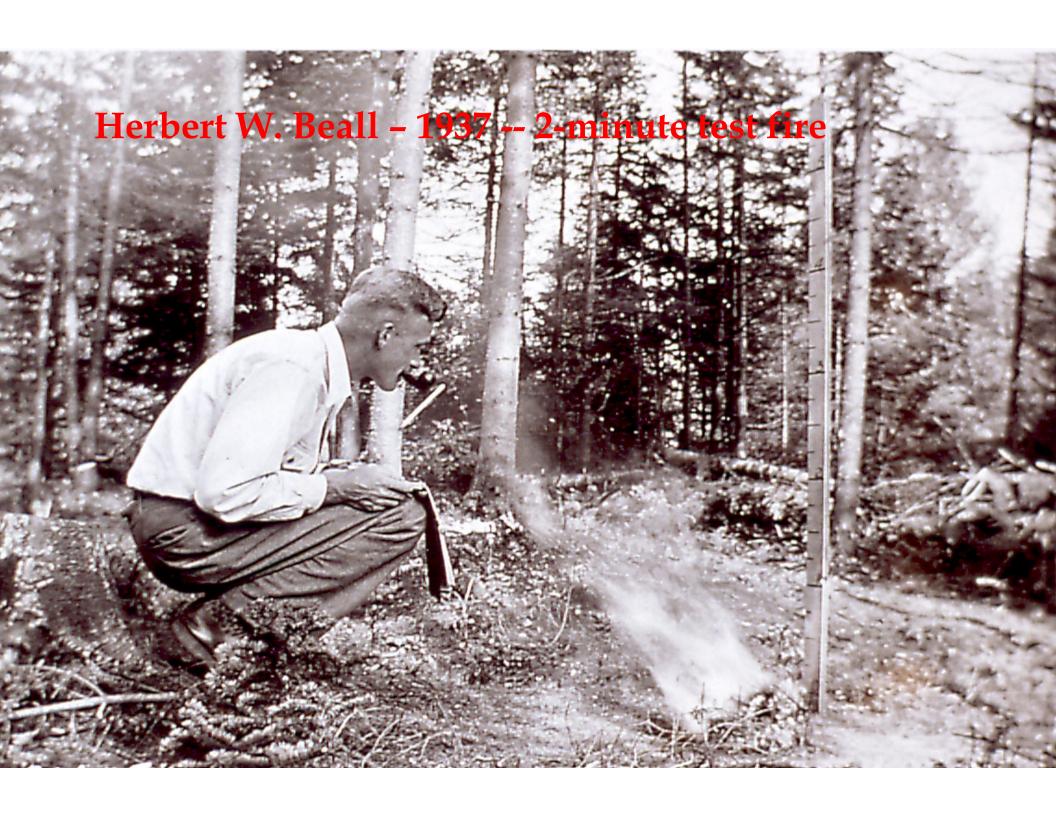
Jim Wright

CFS 1922

&

1924 paper on Relative Humidity and Forest Fires

Start of CFS fire research



Canada Transfer of Resources Act 1930

Alberta Forest Service October 1, 1930

Forests now on
Alberta
Provincial
Crown Lands

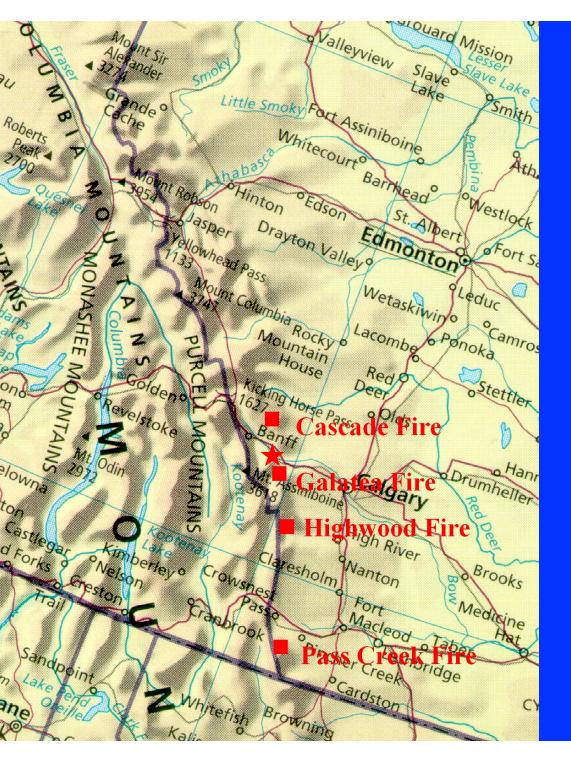


Depression Years – Hard Times



Drought and Dust Storms



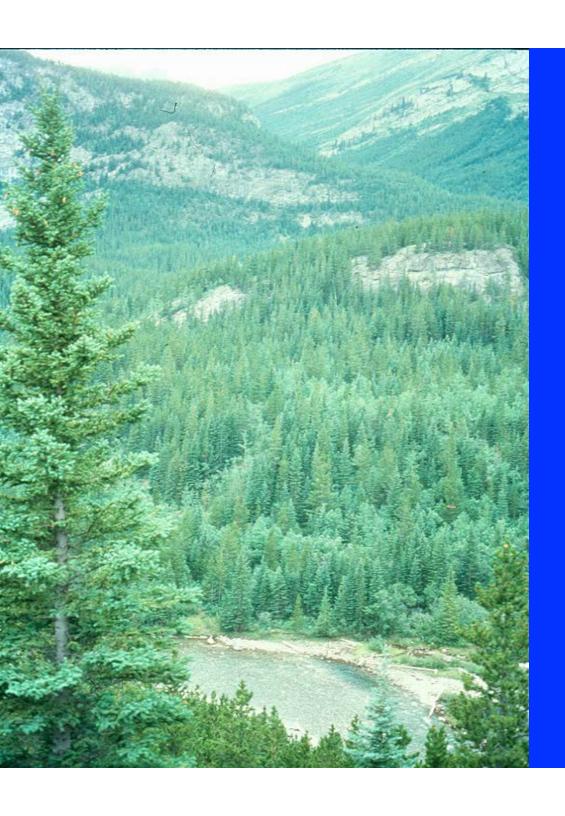


Fires of 1936

Policy Changing

- Cascade Banff
- Galatea
- Highwood
- Pass Creek





Galatea Creek

and

Kananaskis River









In the meantime, after 1930, CFS focussed on forest research: Fire behaviour Pumps & hoses



National Research Council (CIFFC Roots)

- 1935 -- Associate Committee on Forest Research. 1936 -- Sub committee on Forest Fire Protection To collaborate with NRC in-house programs:
- - Pump and hose testing and development
- - Fire behaviour

Brought the forest fire community together -





Kananaskis Prisoner-of-War Camp 1939-1945





Herb Beall

1928 summer 1932 UofT grad

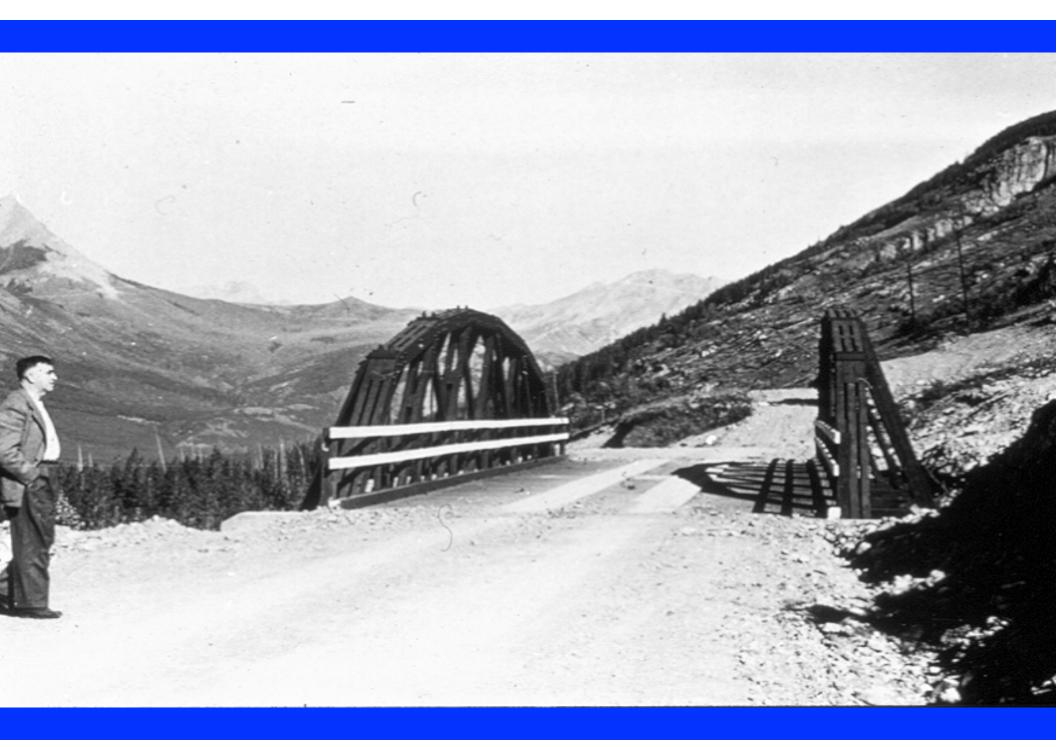
1945 Chief Forest Protection Division CFS

1947 Chair, NRC Forest Fire Sub-Committee

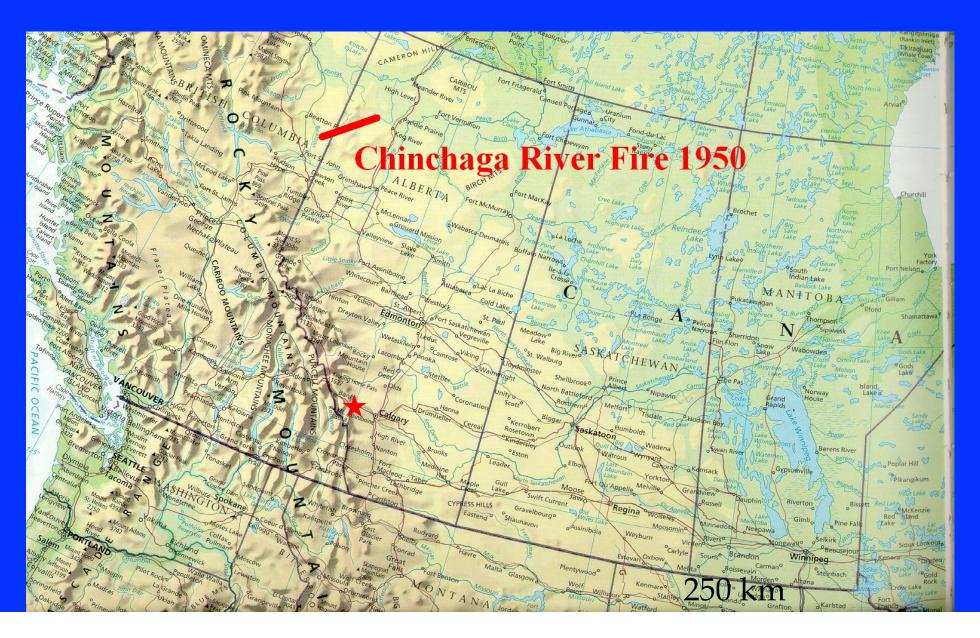
1948 ERFCB Board

1950 – first Forest Fire Danger Tables

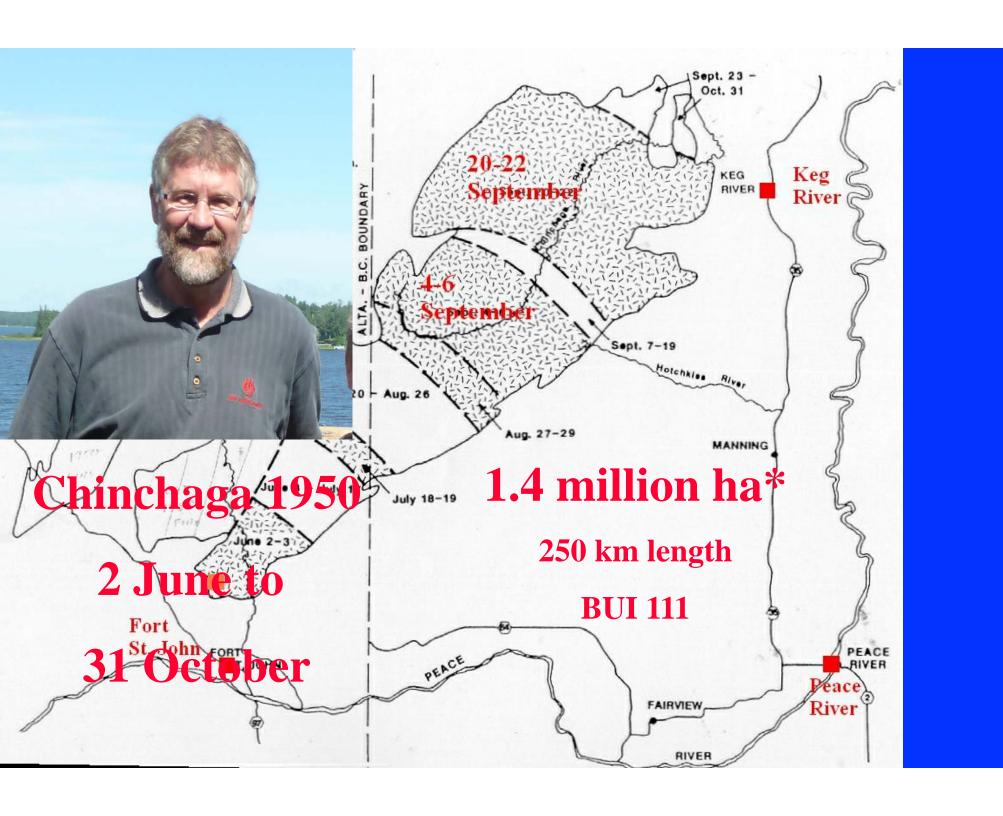
1948 1962 EASTERN ROCKIES FOREST CONSERVATION BOARD CALGARY

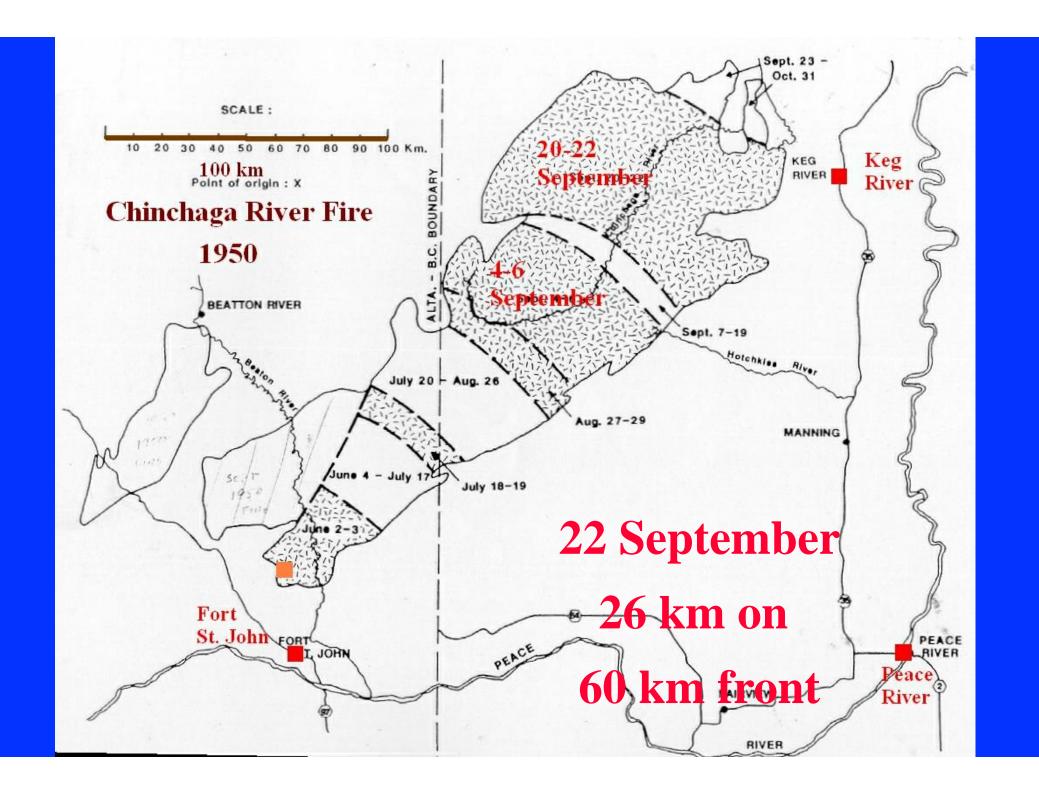


Chinchaga River Fire 1950







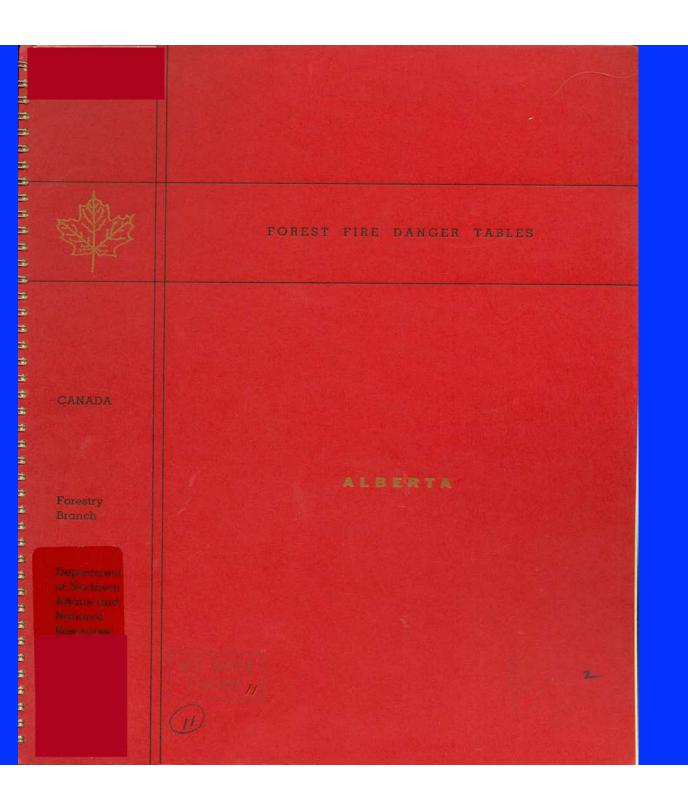




First Forestry Training School - Kananaskis -- 1951







Forest Fire Danger Tables

1959



Weather stations at lookouts and ranger stations



Canadian Forest Fire Linkages

5 NRC Associate mmittee on Forest Research

6 NRC Sub-Committee on est Fire Protection

2 CCFFC Canadian mmittee on Forest fire ntrol

3 CCFFM Canadian mmittee on Forest Fire nagement – to 1996

"Togetherness"







Stan Hughes

1970 - Mutual Aid paper for CCFFC

Colombia Fire Team
1973
Bill Wuth
Carson McDonald
Stan Hughes

Canadian Forest Fire Linkages

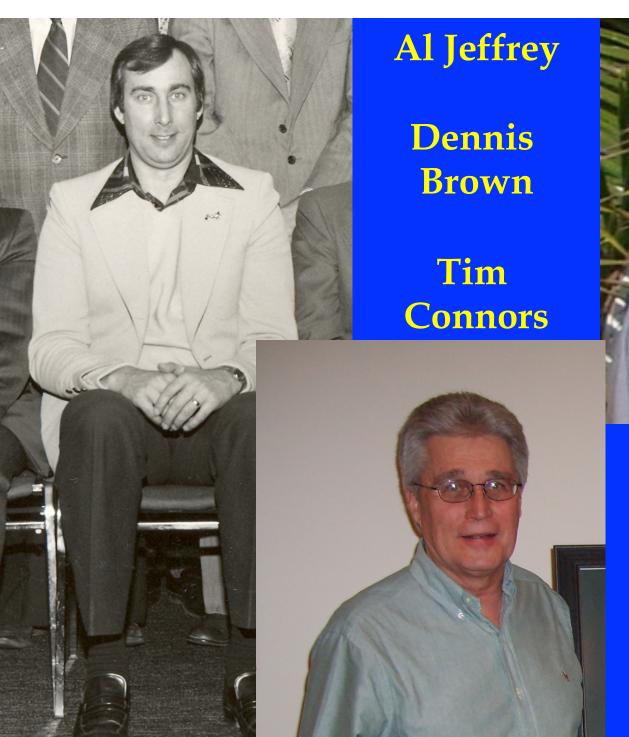
- 1935 NRC Associate
 Committee on Forest Research
- 1936 NRC Sub-Committee on Forest Fire protection
- 1952 CCFFC Canadian Committee on Forest fire Control
- 1983 CCFFM Canadian Committee on Forest Fire Management – to 1996

- 1970 Mutual Aid proposals
- 1982 CIFFC Canadian Interagency Forest Fire Centre
- 1997 CIFFC Fire Science and Technology Working Group



CANADIAN INTERAGENCY FOREST FIRE CENTRE INC. CENTRE INTERSERVICES DES FEUX DE FORÊT DU CANADA INC.

by
Canadian Council of
Forest Ministers

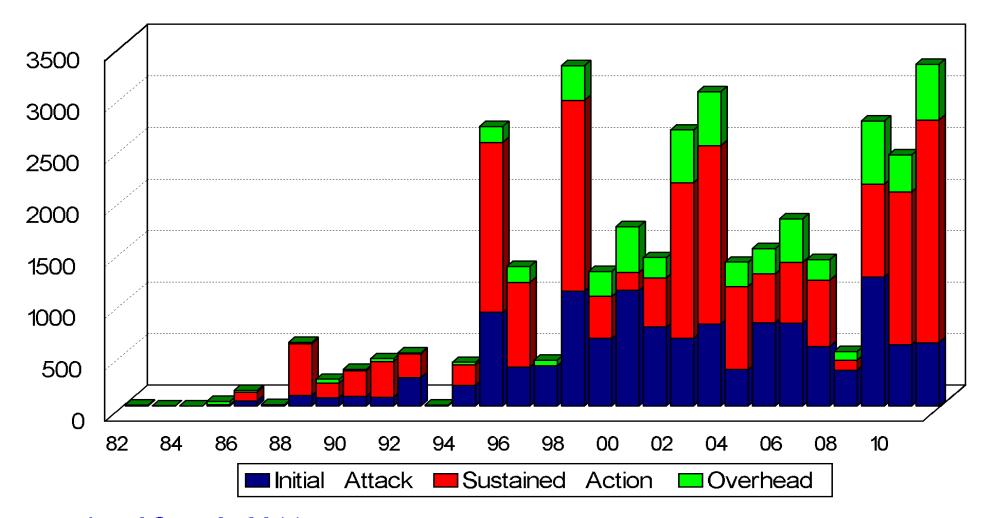






Personnel Mobilized

1982-2011

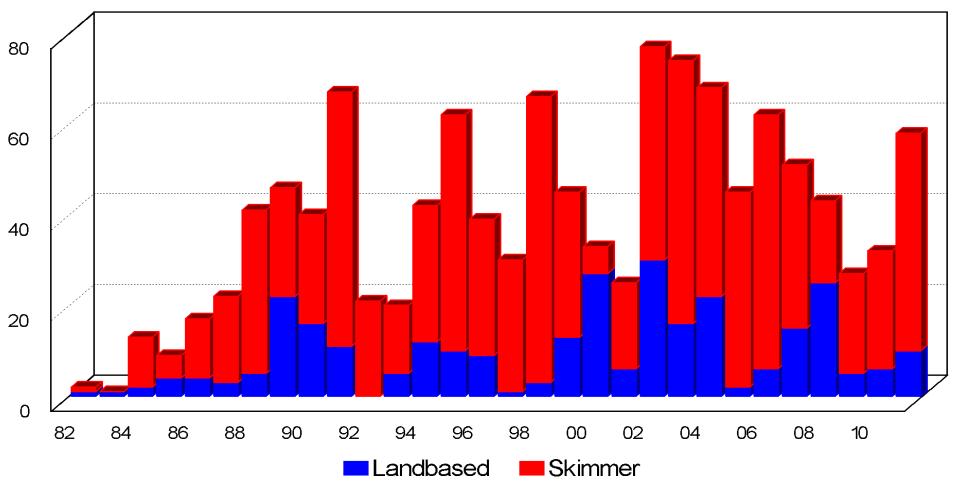


As of Sept 9, 2011



Airtankers

1982 - 2011







Wildland Fire Working Group

Canadian Wildland Fire Strategy

Fire Smart

- Includes municipalities
- Insurance industry
- Social acceptance









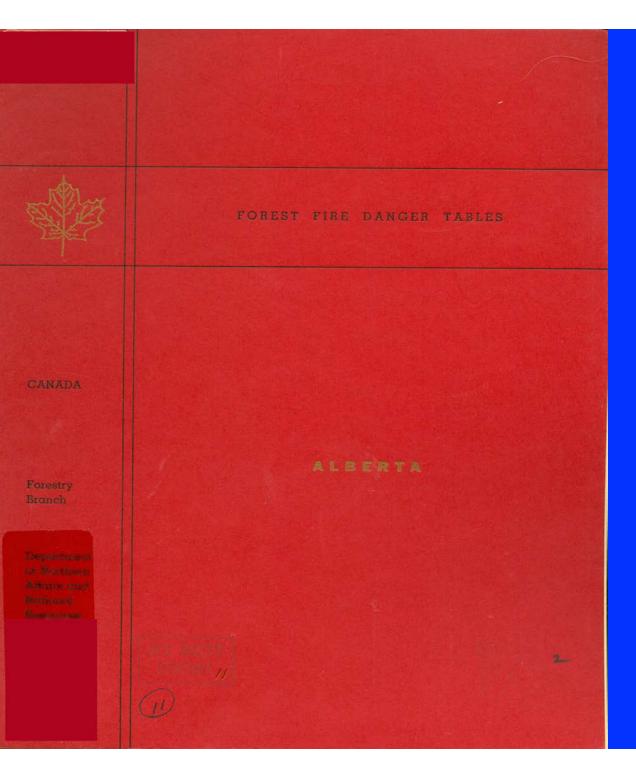
The Portable Power Pump











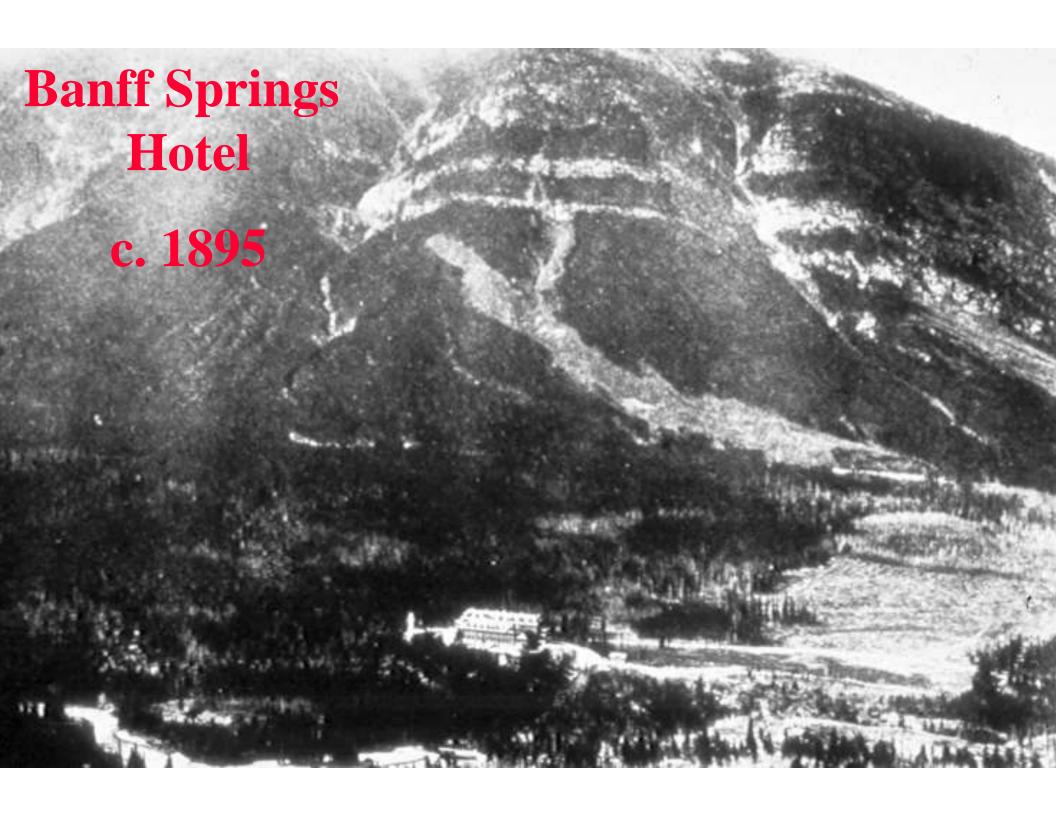
FBP System



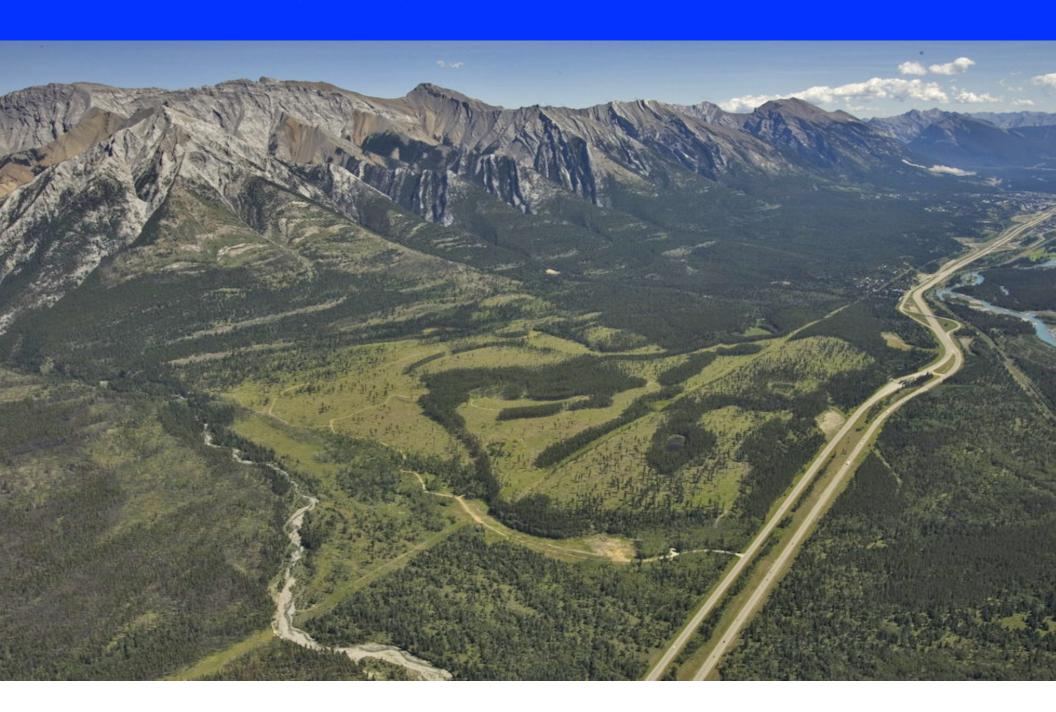
Prometheus

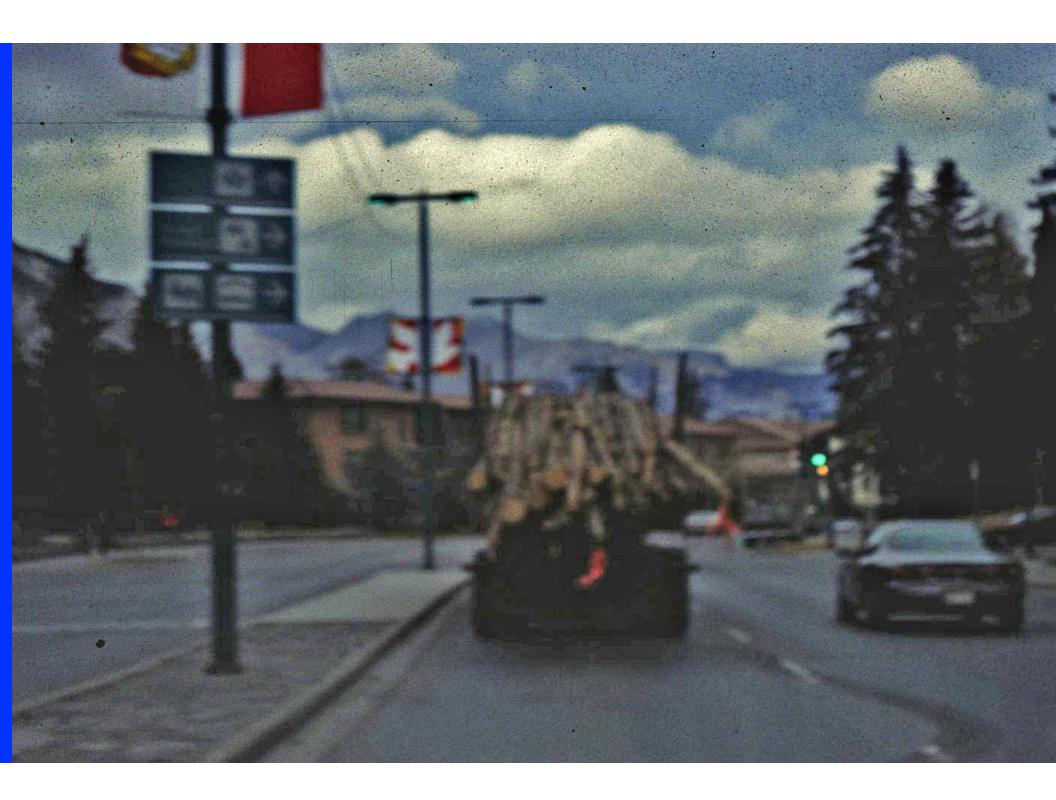






Carrot Creek Fuelbreak -- Banff





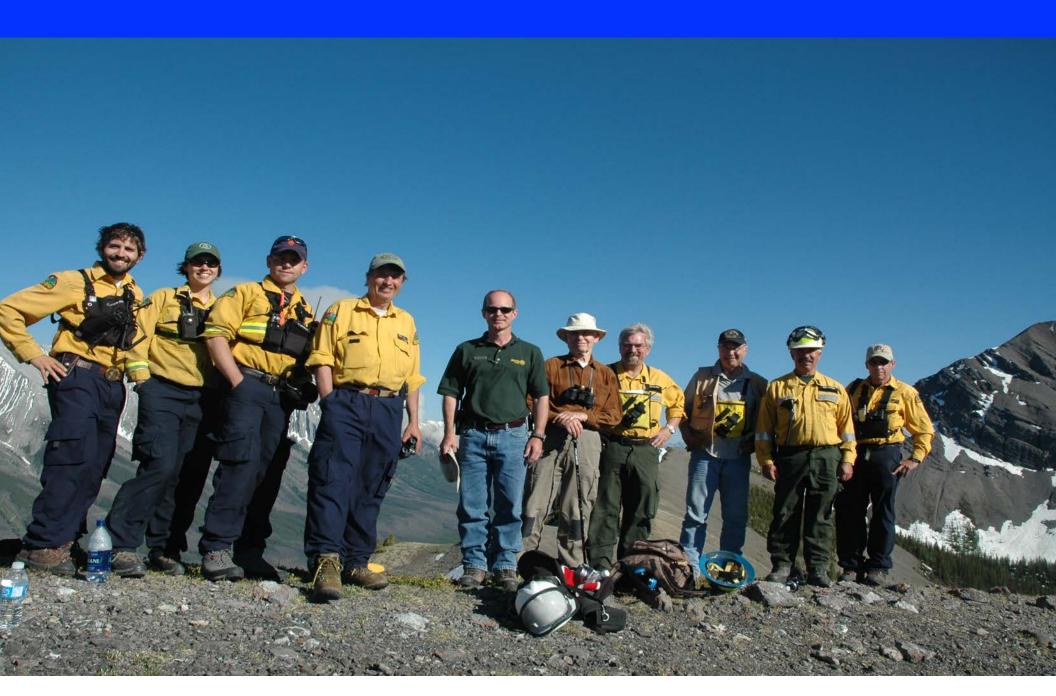








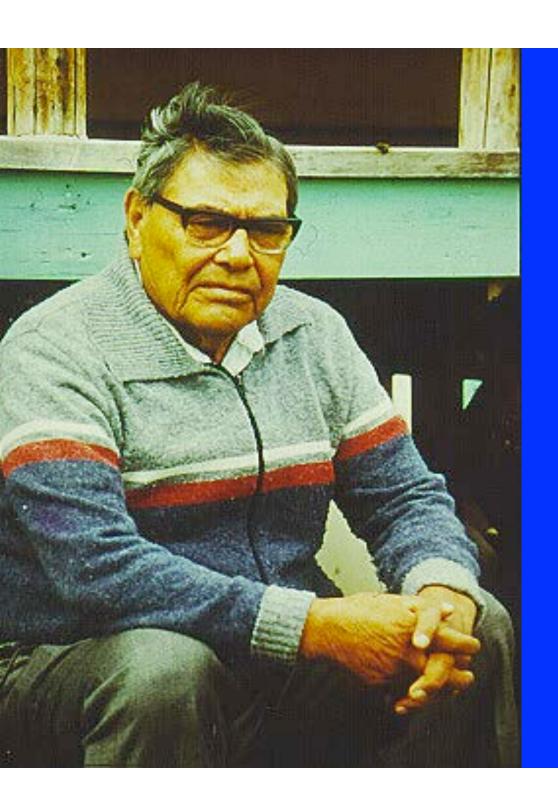
Mt. Nestor Fire Team -- 2008

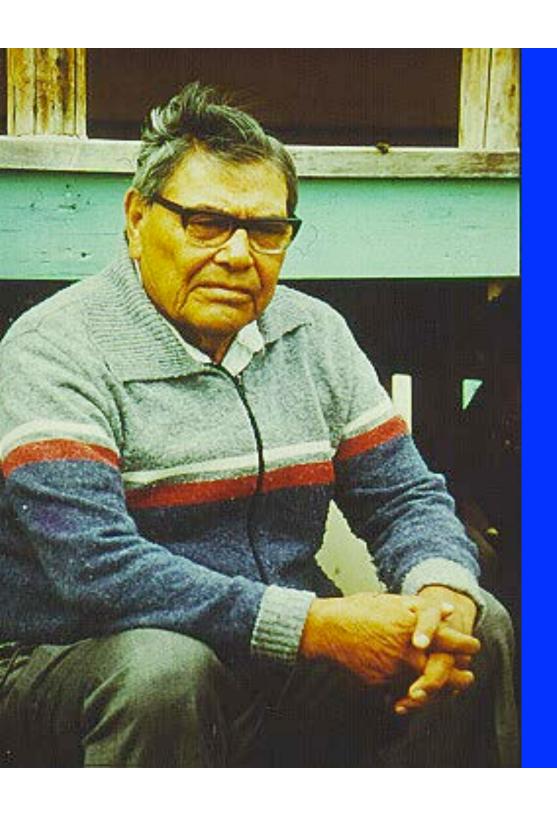


Mt. Nestor Fire Team -- 2008









"Not bad!"







"The 'we're all in this together'

is a better philosophy than

'you're on your own.' "

William J. Clinton – 5 September 2012







Natural Resources

Ressources naturelles Canada



Ressources naturelles et Faune

Québec







Parks Canada Parcs Canada



Environment and Sustainable Aberta Environment and Sustain Resource Development



Saskatchewan Ministry of Environment



footbills research institute research growing into practice.









MINISTRY OF NATURAL RESOURCES





Stick together!

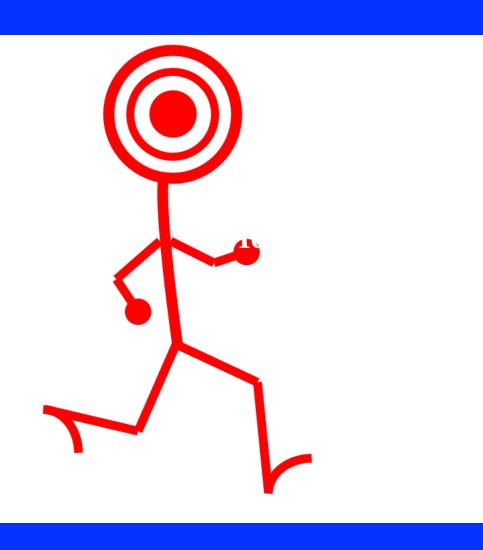


Collaborate widely!



Aren't we there yet?

Moving Targets



- Research needs
- Urbanization
- Climate change
- More values at risk
- Fuel continuity
- Sustainability
- Budget limits
- Multiple agencies

"The problem will never be solved.

It will just continue to change"

" [We need to] create a new narrative"

Stephen Pyne -- 2011



"Canada's talent of dogged but effective problem solving is heroic, dramatic [and] sometimes even interesting."

Conrad Black

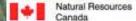
June 2012





The answers lie within us

Government of Alberta



Ressources naturelles Canada











