



# FIRE & VEGETATION MANAGEMENT NEWSLETTER

BANFF NATIONAL PARK



Burning a section of the main unit- Red Deer River Prescribed Fire  
photo: Dan Rafla



Guard Burning Red Deer River Valley- Aug 29, 2011

## What's Inside:

### Prescribed Fires

- Red Deer River Valley wrap up

### FireSmart Work

- Nov.-Dec. project summary
- Moose Meadows Fire Guard: an in-depth look

### Invasive Plants Management

- Summer Highlights

## Information:

Fire Communications Officer:  
403-762-1447  
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## What's Hot?

The Banff Fire and Vegetation Management team has wrapped up prescribed burning operations for 2011 and is getting ready for a busy late fall and winter working on FireSmart initiatives. In this edition of the Fire & Vegetation Management Newsletter, we summarize highlights from the summer season and provide an overview of our priority projects for the winter.

In this newsletter, you will find:

- A summary of the Red Deer River Valley Prescribed Fire
- An update on FireSmart projects, including information about pile burning that will take place this fall and winter
- Highlights from the non-native vegetation management program this summer

**Banff  
National Park**

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# Red Deer River Valley Prescribed Fire

## Summary of 2011 Operations:

Between August 29th and October 2nd, Parks Canada crews successfully burned 1200 hectares in the Red Deer River Valley.

Parks Canada has conducted a number of prescribed fires the Red Deer River Valley in the past so the burn unit consisted of a wide range of vegetation types: open grassland, closed spruce and pine forest and previously burned forest. This variety of fuel types provided Parks Canada crews with the opportunity to observe diverse fire behaviour and to manage the fire in smaller sub- units.



In previously burned areas within the unit, fire consumed downed timber and unwanted re-generation of lodgepole pine. Burning this downed timber and pine regeneration is important for recycling nutrients, restoring grassland and making habitat more accessible for wildlife such as big horn sheep and grizzly bears.



Wind direction and speed varied considerably during the burning operation, but smoke produced from burning operations vented well and had minimal impact on communities.

Banff's fire crews are pleased with the success of this prescribed fire and are thankful for the assistance provided by helicopter pilots and support from Banff's resource conservation staff, local business owners and residents. We are also grateful for the assistance from the Glacier NP fire crew and unit leaders from Prince Albert and Glacier NP.

Crews have now removed all equipment from the Red Deer River Valley and the area closure has been lifted.

Areas of the unit that did not burn this fall will be rescheduled for a future date.



## Overview:

The Red Deer River Valley contains the largest area of flat, lower subalpine forest in the park, outside of the Bow Valley. Located west of the Ya Ha Tinda Ranch and 51 km north of Lake Minnewanka, the goals for reintroducing fire to this valley included:

- improving wildlife habitat
- restoring historic vegetation patterns
- reducing the amount of susceptible mountain pine beetle habitat
- reducing the threat of future wildfires from spreading outside the park.



*Left: Pilot, Todd Cooper, inspects results of aerial ignition (photo: Dan Rafla). Below: Banff Fire Crew members prepare to use the Aerial Ignition Device (AID).*



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# FireSmart Projects

## Why FireSmart?

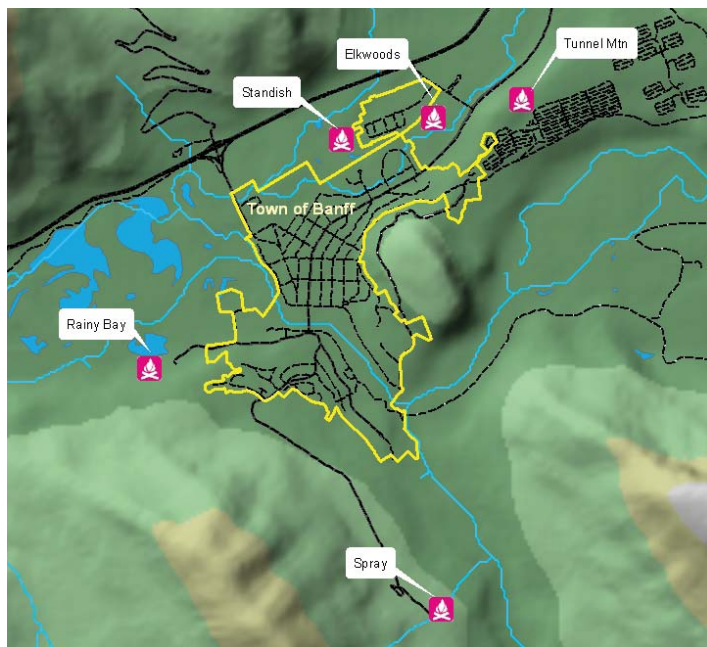
After decades of fire suppression, the forests around townsites in and around our national parks, campgrounds and other developments are dense and tangled with woody debris. We're now used to seeing this buildup in our local forests, but under current conditions, these forests are unhealthy and can pose a threat to our communities.

Efforts are underway to reduce the risk of wildfire to communities and other developments within the mountain national parks. Parks Canada is an active partner of the "FireSmart" program that focuses on how individuals and communities can work together to reduce the risk of loss from wildfires in communities across Canada.

As part of our on-going commitment to protecting our communities, several forest thinning projects have been completed over the past few years.

Wet conditions in the spring prevented crews from burning many of the piles resulting from recent work. This fall and winter, crews will focus efforts on burning the remaining piles. Piles will be burned as conditions allow.

## Pile Burning Projects (Nov-Dec)



*Pile burning projects near the Town of Banff*

### **Moose Meadows:**

Several areas have been thinned in the Moose Meadows area over the past couple of years. A fire guard was created in the Moose Meadows area (60ha) and the forest between the river and the Trans-Canada Highway was thinned in 2009/10. This is our largest pile burning project for 2011/12.

Additional information about the Moose Meadows project is included on the next page.



*Crew member burning piles resulting from thinning work*

### **Spray River (between Spray River and lower gondola terminal)**

Piles resulting from thinning work below the lower gondola terminal will be burned.

### **Tunnel Mountain Campground - Village 1 & 2**

Piles of wood and debris resulting from the thinning work that took place near the water tower above the campground (fall 2010) will be burned.

### **Elkwoods**

A small section of forest between Banff Ave. and the Industrial Compound was thinned last winter. Piles will be burned while snow is on the ground.

### **Rainy Bay**

Located adjacent to the Bow River, along the trail to Sundance Canyon, this area has 20-30 piles remaining from previous thinning work that need to be burned.

### **Behind Standish Towing**

A small area of forest behind Standish Towing in the Industrial compound has a few piles remaining from previous thinning work.

**Tunnel Mtn Campground Wind Throw Clean Up** - In December, contract crews will be working in the Tunnel Mtn Campground to clean up trees that were blown over in wind storms this summer. Expect to see machines moving through the area.

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# FROM MEADOW TO FOREST & BACK AGAIN: THE MOOSE MEADOWS FIRE GUARD PROJECT

Over the winter of 2010/11, Parks Canada hired contract crews to create a fire guard in the Moose Meadows area. Trees were felled and some of the timber was removed. Remaining timber has been piled and will be burned starting in late fall 2011. The fire guard is 60 hectares and runs adjacent to the Canadian Pacific Railway line for approximately 1.5 km.

## What is the Purpose of this Project?

The Moose Meadows fire guard project is part of a valley wide fuel break that will serve to protect down valley communities (e.g. Banff and Canmore) from a wildfire.

It has been designed to connect with existing shrub and grassland to form a 200 ha block of land that has limited trees to carry an intense wildfire. Fire breaks such as this have been created in strategic areas throughout the park.

The firebreak at Moose Meadows is in a place where a large forest fire might be deflected onto the steep slopes along the Bow Valley while halting the spread between the Bow Valley Parkway and TransCanada Highway and reducing the threat of a wildfire moving eastward towards communities such as Banff and Canmore.

This project was also undertaken to create more open habitat in the Bow Valley that is representative of historic vegetation patterns.



*Aerial view of Moose Meadows fire guard  
photo: Alex Taylor*



*Contract Crews working on fireguard Dec 2010*



*View of fireguard looking westward, July 2011*

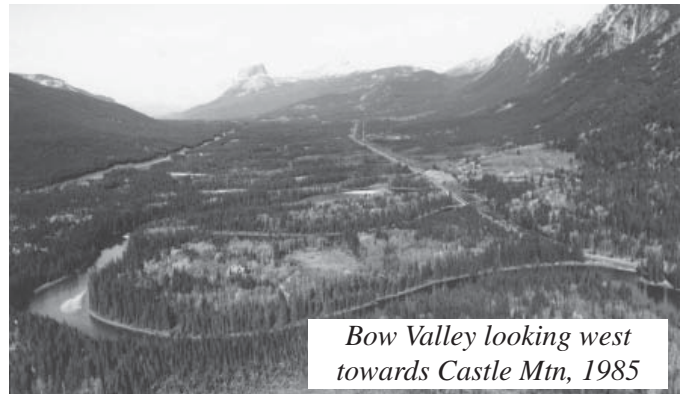
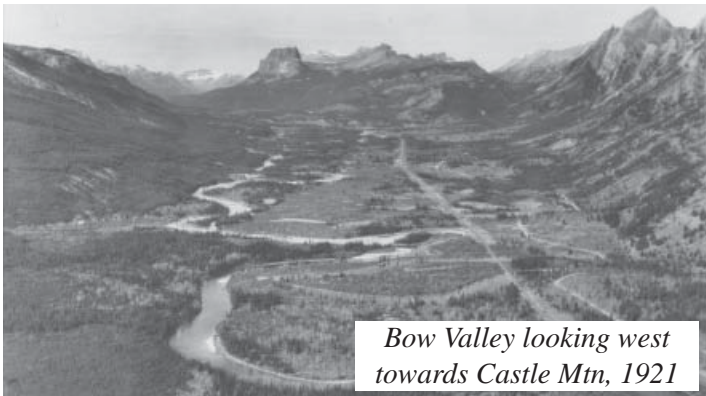
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## How will this benefit wildlife?

Historically, fire moved through the lower Bow Valley every 5- 50 years maintaining open meadows and Aspen forests that provided excellent habitat for bison, elk and bears. Many birds and smaller mammals also relied on these open areas for habitat. Fire suppression efforts in the early-mid 1900s resulted in many of these open grasslands and Aspen forests to be overgrown by pine and spruce. Closed pine and spruce forests are now the dominant type of habitat and there is a dramatic reduction in habitat diversity. When completed, this project will restore some of that diversity while also protecting our communities from wildfire.

These photos illustrate how much the Bow Valley has changed since the early 1920's



## What will happen in this area next?

Cutting, removing trees and piling remaining wood was just the first step towards creating the firebreak and restoring this area to a more meadow-like state. This fall and winter, crews will begin burning the brush and debris piles to strengthen the effectiveness of the fire guard. At a future date, crews will conduct a broadcast burn (a wide spread ground fire set to burn remaining debris resulting from the thinning work). Broadcast burning will release much needed nutrients into the soil and encourage new growth of grasses and flowers – the seeds of which have been lying dormant in the soil since the establishment of the spruce and pine forest during the fire suppression era.

## Are there any other places Parks Canada has done similar work?

Yes. Previous meadow restoration projects that Parks Canada has completed over the years have produced very positive results. Here is a photo sequence showing the progression of the Carrot Creek fire guard from forest to grassland/meadow.

*Thinning forest to create Carrot Cr. fire guard winter 2002*



*Broadcast burning fire guard May 2007*



*Elk Grazing in fire guard, June 2007*



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# Invasive Plants

## Helping Hands

The World Conservation Union recognizes non-native invasive vegetation species as the second greatest threat to biodiversity after habitat destruction. Invasive vegetation species out-compete and eliminate native plants, reduce biodiversity of an area and are potentially harmful to wildlife.

This summer's wet weather made for great growing conditions for invasive plants. Parks Canada employees and volunteers were kept busy managing populations of non-native plants. In July and August, we had two hard-working students (Leah Pengelly & Annick Sevigny) helping Percy Woods and Geoffery Prophet with mapping locations of weeds, pulling and cutting weeds. We also had a committed group of Parks Canada volunteers helping to pull weeds. Over 550 volunteers helped pull weeds from sensitive riparian areas in key locations throughout the park. In total, over 500 bags of weeds were removed!



*Calgary Catholic Immigration Society teen weed pull  
Photo: Tina Barzo*



*Contract crews spray weeds along the Legacy Trail  
Photo: Percy Woods*

Parks Canada also contracted crews to spray herbicide along the section of the legacy trail between 3rd Vermillion Lake and the 1A highway. The goal of using herbicide in this area is to kill Stinkweed, Perennial Sow Thistle and Canada Thistle, thereby limiting their spread to other areas in the park.

### What Can You Do to Help Fight Weeds?

- Learn to identify invasive plants
- Report campground or back-country sightings (with GPS location if possible) to Percy Woods (percy.woods@pc.gc.ca or 403-762-1422)
- Keep to trails and

pathways when hiking

- Remove burrs and seeds from you and your pets after hiking and biking and dispose of them in a sealed bag in a garbage receptacle.
- Wash your bicycles after trail rides outside of the national park to avoid spreading seeds in the park.
- Join the Parks Canada volunteer team for a weed pull (contact Tina Barzo for more information about the "Helping Hands" program): Tina.Barzo@pc.gc.ca



*Spotted Knapweed*

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