

Prescribed Burning in BC Parks and Protected Areas



A look at prescribed
burning projects in
2007 - 2008



Prescribed Fire in BC Parks and Protected Areas



Prescribed burning in White Lake Grasslands Protected Area



Spring vegetation growth after a winter burn

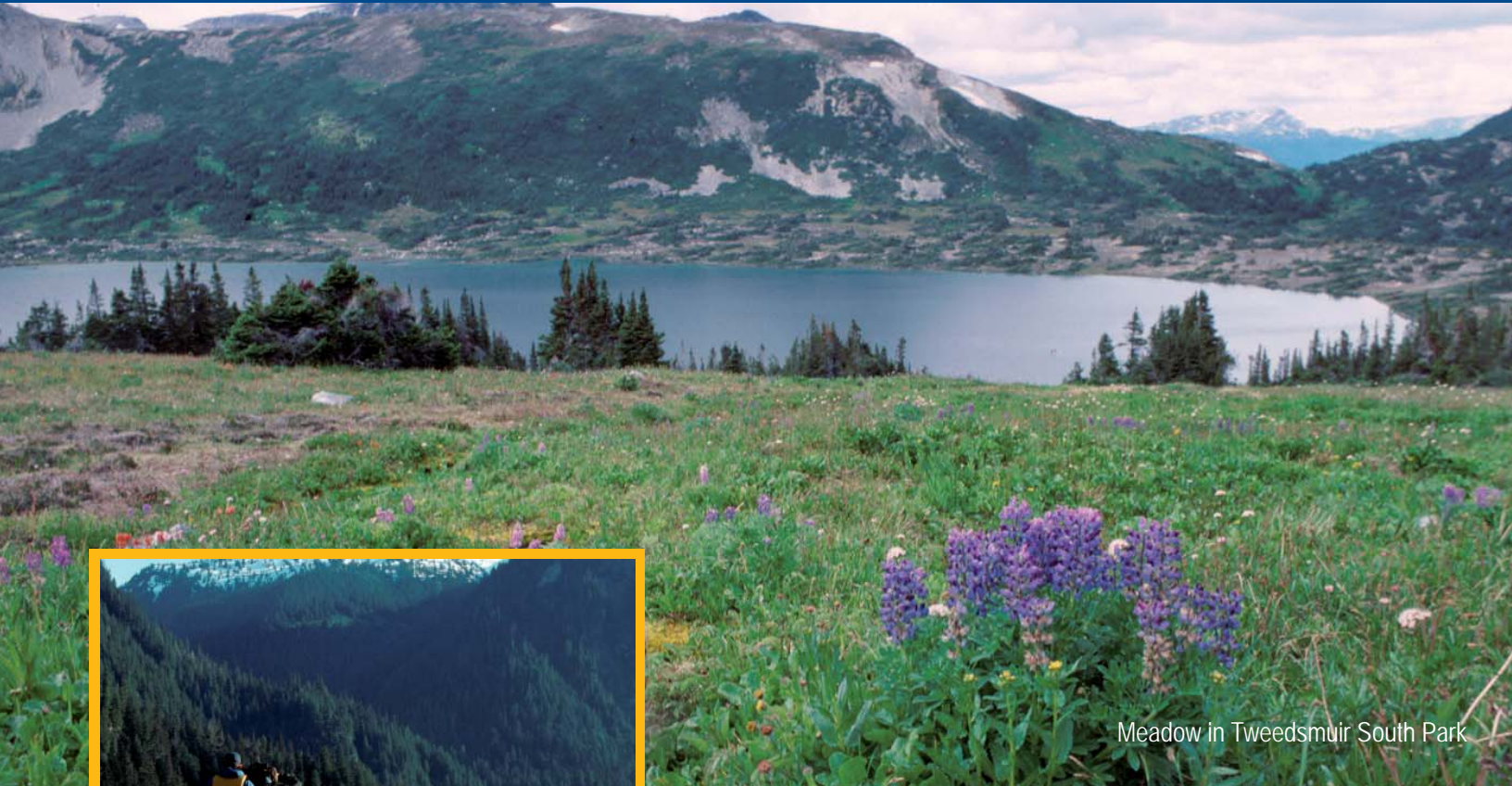


Prescribed fire in Uncha Mountains Red Hills Protected Area

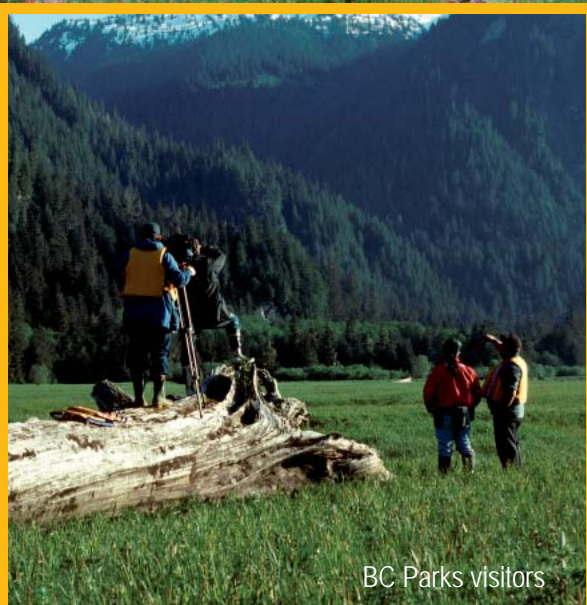
Prescribed burning is an important ecosystem restoration tool for protected areas. It can be used to reduce hazardous fuels, restore fire maintained ecosystems and maintain wildlife habitats. In the last two years alone, BC Parks has burned over 5,000 hectares of park land under prescription in over 30 different protected areas throughout the province. Burn areas range from less than one hectare to over 2,000 hectares in size.

Prescribed burns are planned to take place quickly during times of good venting conditions with minimal smoke impacts to communities. They are planned to ensure ecosystems remain healthy and productive. They work to reduce wildfire threats to communities and maintain air quality.

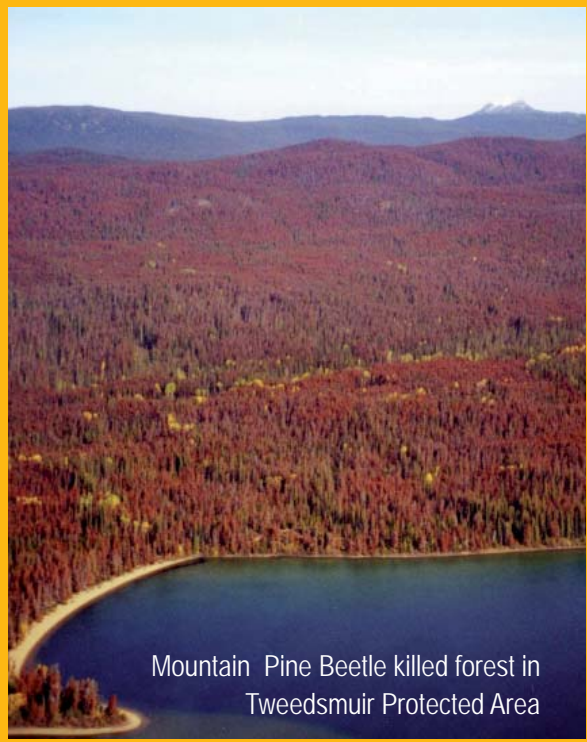
Since 2003, the BC Parks ecosystem management program has completed over 100 projects worth over \$9.6 million.



Meadow in Tweedsmuir South Park



BC Parks visitors



Mountain Pine Beetle killed forest in
Tweedsmuir Protected Area

Prescribed burning in protected areas is part of a larger ecosystem restoration program of forest management activities to address:

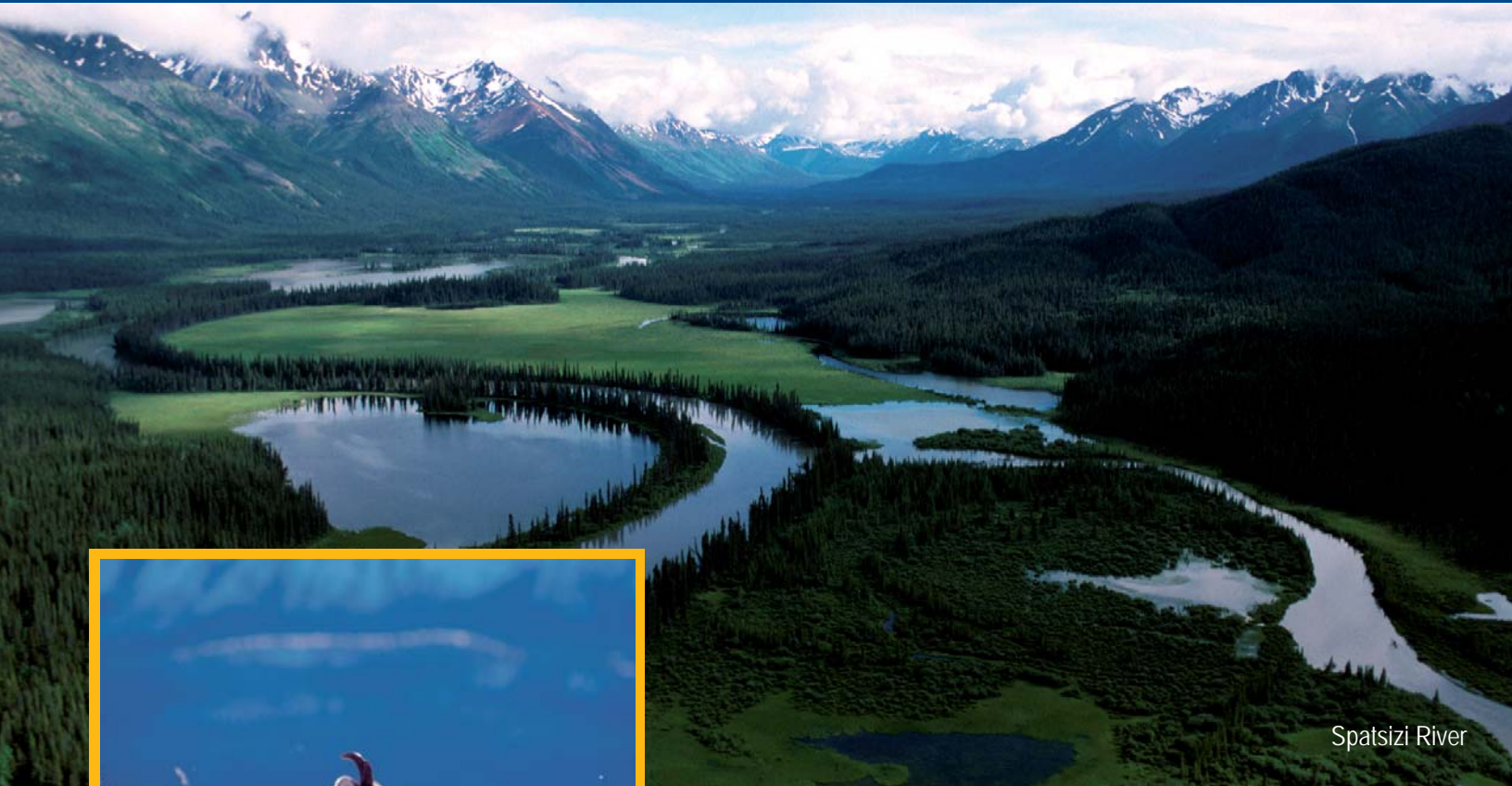
Human Health and Safety – ensure park facilities are safe and protect adjacent communities from wildfire through the removal of hazard trees, the reduction of fuel accumulations and the establishment of fuel breaks

Ecological Restoration – restore and maintain grasslands, fire-maintained ecosystems and other wildlife habitats through the removal of forest in-growth and the reintroduction of fire

Forest Health Management – minimize impacts on adjacent forests from forest disturbances such as insect infestations

The following pages provide a snapshot of some key projects from 2007 - 2008.

Spatsizi Plateau Wilderness Provincial Park



Spatsizi River



Stone's Sheep



Woodland Caribou

Spatsizi Plateau Wilderness Provincial Park is one of Canada's largest and most significant protected areas. Spatsizi's 696,160 hectares provide important habitat for large populations of wildlife including Mountain Goats, Stone's Sheep, Grizzly and Black bears, and one of the most important habitats for Woodland Caribou in British Columbia. Due to successional vegetation changes, large portions of this protected area are no longer viable habitat for these species.

Prescribed burning was done in this area to restore habitat for the unique resident Stone's Sheep population.

Project Details

Burn Date: May 2008

Area Burned: 2,000 hectares



Prescribed fire in Spatsizi Plateau Wilderness Park



Young trees in post burn landscape



Regeneration forage
for Stone's Sheep

Outcomes

- Provided resident Stone's Sheep population with winter and spring habitat by increasing grass production
- Improved escape terrain and visibility for sheep

Project Funding

Funding sources: Ministry of Environment, Wild Sheep Society and the Foundation of North American Wild Sheep

Cost: \$ 35,770

Partners

Tahltan Nation, Stikine Country Advisory Committee, Collingwood Bros., Foundation of North American Wild Sheep, Wild Sheep Society and Ministry of Forests and Range

White Lake Grasslands Protected Area



Alkali lake in White Lake Grasslands Protected Area



Prescribed burn



Lighting the prescribed fire

White Lake Grasslands Protected Area is very important for the conservation of the hot and dry grassland, open pine forest, alkali ponds and rock outcroppings of the Southern Okanagan Basin Ecoregion. Prescribed burning was done in this area to:

- increase ecosystem resiliency
- restore the natural fire disturbance cycle
- reduce ground fuels
- improve foraging and nesting habitat for red-listed White-headed Woodpecker
- reduce wildfire risk to adjacent lands

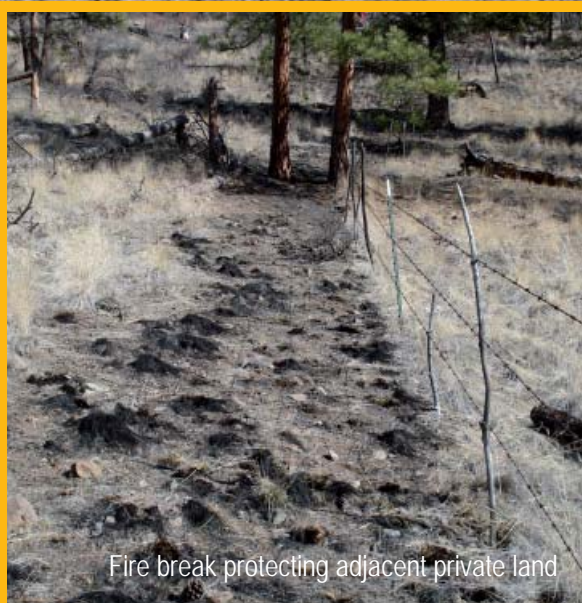
Project Details

Burn Date: two burns, March and April 2008

Area Burned: 22 hectares



Drip torching to start the fire



Fire break protecting adjacent private land



Balsam root growth is enhanced by fire

Outcomes

Safety

- Reduced fuel interface

Ecosystem Restoration

- Restored fire-maintained ecosystems
- Increased knowledge of invasive plant response to fire and of treatment effectiveness monitoring
- Increased knowledge of the effects of fire in antelope brush ecosystem

Support

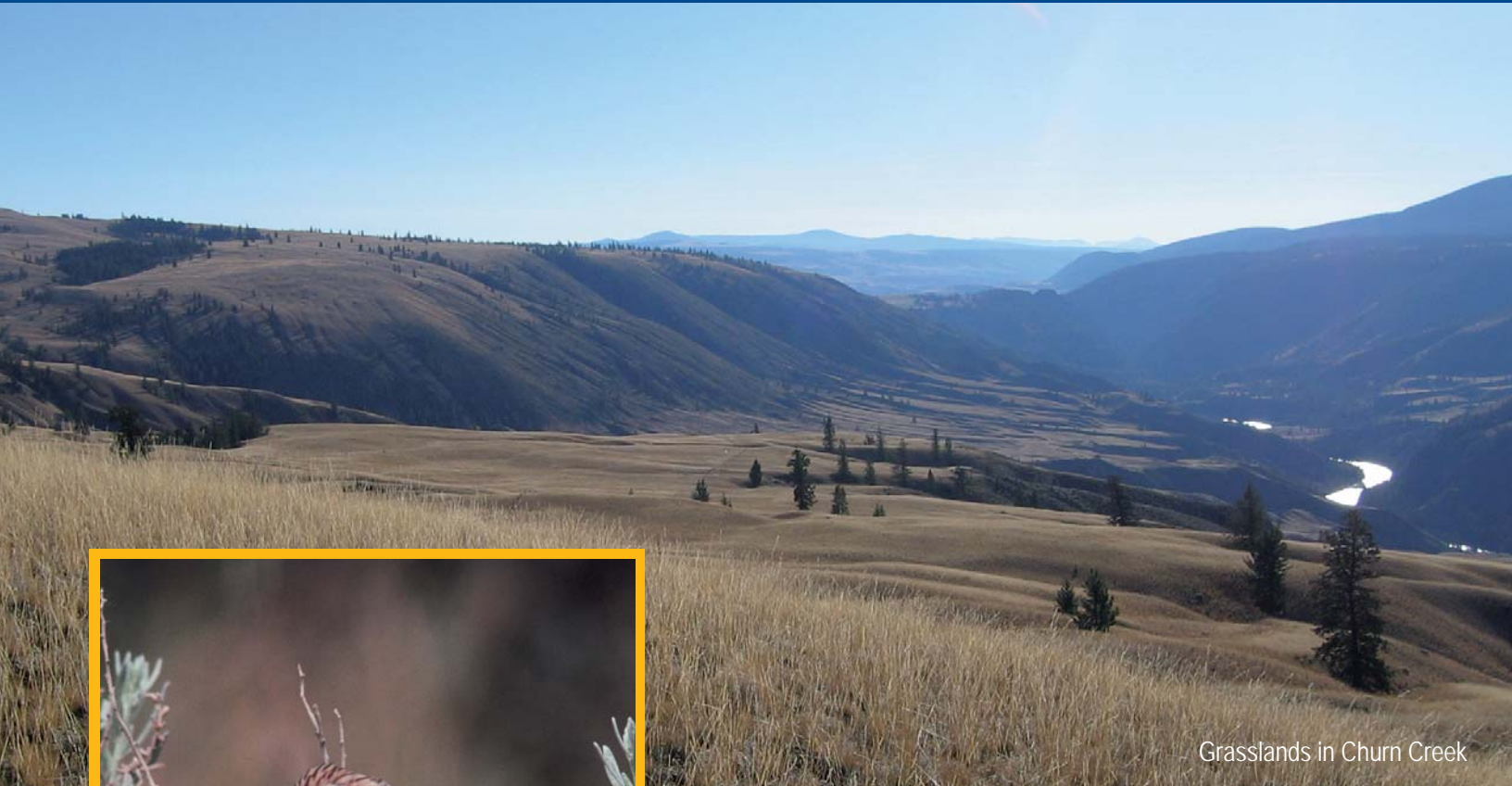
- Built relationship with First Nations Knowledge Keepers
- Increased understanding and appreciation for fire reintroduction into the landscape

Project Funding

Funding sources: Ministry of Environment, Federal Mountain Pine Beetle Funding

Cost: \$9,500

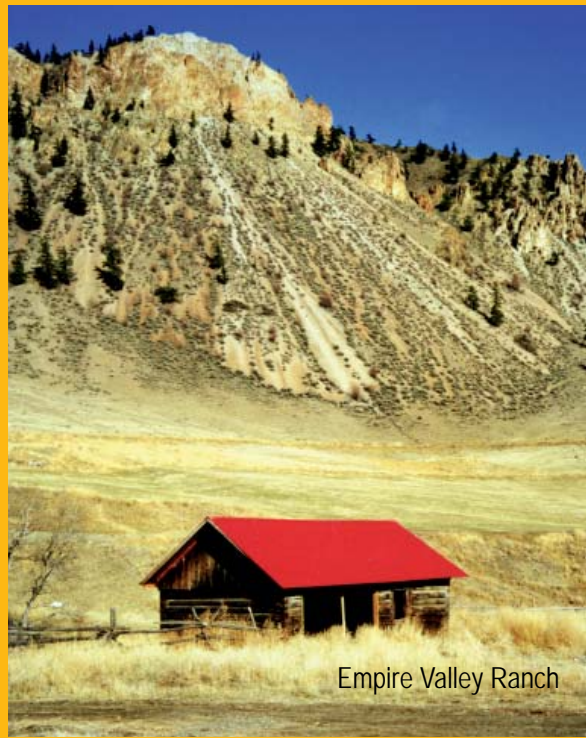
Churn Creek Protected Area - Dry Farm Burn Area



Grasslands in Churn Creek



Brewer's Sparrow
Photo: M. McPhee



Empire Valley Ranch

Churn Creek Protected Area is one of five large protected areas across B.C. that was established to conserve an example of nationally significant grassland ecosystems. This increasingly rare ecosystem contains many red and blue listed species such as the Brewer's Sparrow and Gopher Snake. As part of an ongoing ecosystem management project, prescribed burning was done in this area to:

- restore historical open forest stand structure and native grassland ecosystems
- reduce fuel loading
- remove in-growth and conifer encroachment into grassland
- maintain and enhance red and blue listed species at-risk habitat



Lighting the prescribed fire



Area restored to pre-burn stand structure using tree removal and fire



Lighting the grasslands to enhance growth



Mule Deer

Project Details

Burn Date: April 2007

Area Burned: 43 hectares

Dry Farm is one of four areas identified in Churn Creek Protected Area for burning in a multi-year ecosystem management project.

Outcomes

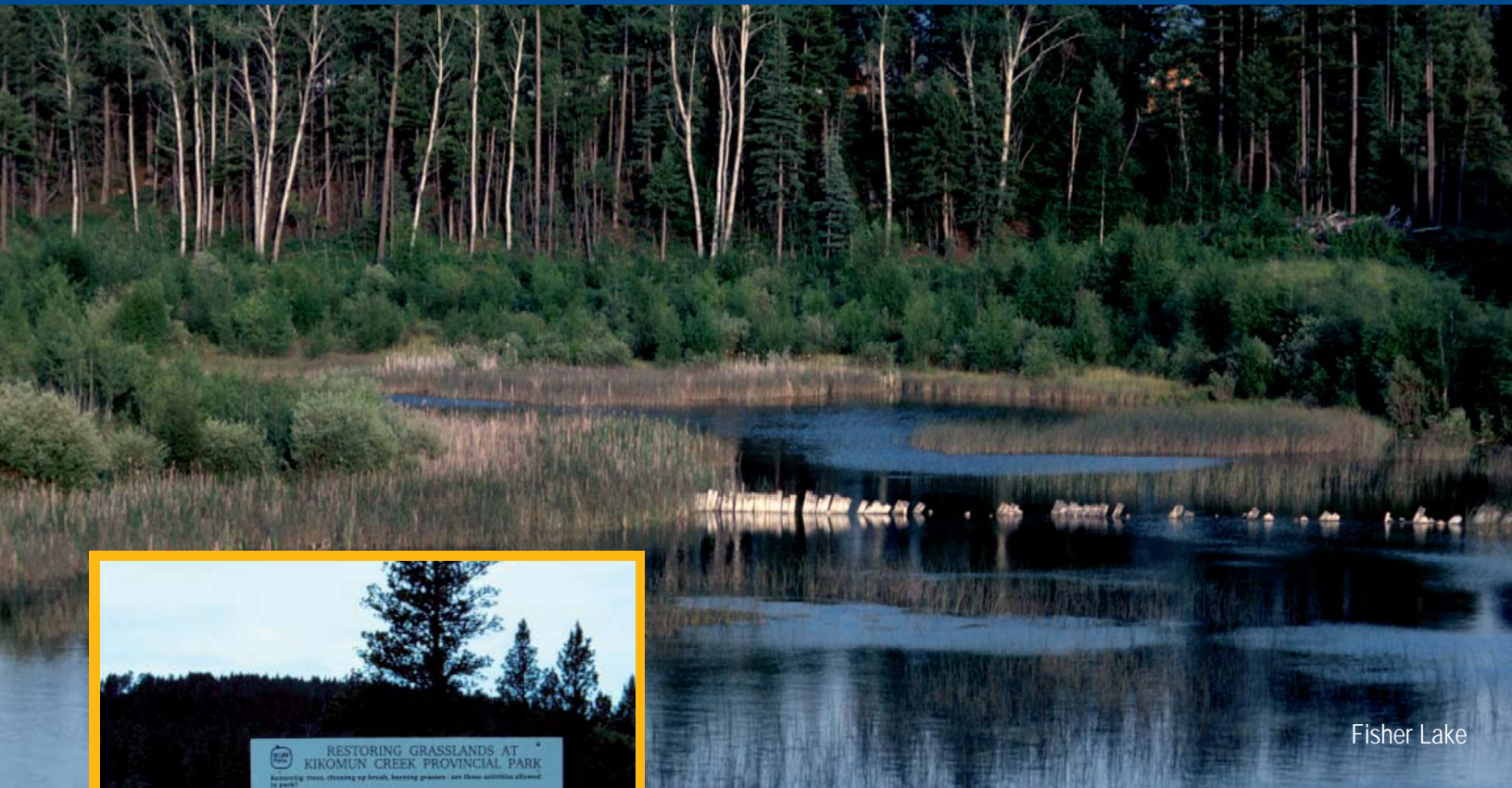
- Enhanced grass forage response
- Established vegetation plots to monitor and gather knowledge of understory plant community's response to fire
- Increased quantity and quality of forage for Mule Deer
- Learned lessons for future planned burns

Project Funding

Funding source: Habitat Conservation Trust Fund

Cost: \$7,500 +

Kikomun Creek Provincial Park



Fisher Lake



Interpretive sign



Prescribed fire

Kikomun Creek Provincial Park preserves an example of dry Interior Douglas-Fir and Ponderosa Pine forests as well as rare native grasslands that provide habitat to many red and blue listed species. Over the last several decades, fire suppression has contributed to forest in-growth and encroachment on grasslands and has restricted the use and altered the quality of the habitat for grazing ungulates such as elk and deer. Ecosystem restoration treatments began in Kikomun Creek Park in 1999 with overstory and understory thinning. Since then, other ecosystem restoration treatments have also included tree removal and prescribed fire.

The main objectives for using fire in the ecosystem management program in this protected area include:

- species-at-risk habitat restoration
- fuel reduction
- re-introduction of fire into a previously fire disturbed habitat into grassland



Area restored using tree removal and fire

Project Details

Burn Date: April 2008 was the most recent burn

Area Burned: 98 hectares in 2008, 275 hectares total

Outcomes

- Restored species-at-risk habitat
- Restored endangered grassland
- Improved winter range for ungulates such as deer and elk
- Partnered successfully with other resource agencies

Project Funding

Funding sources: BC Stumpage Fund (now the BC Parks Enhancement Fund), Habitat Conservation Trust Fund

Cost: \$50,000 in 2008



Old trees are protected by wrapping with foil prior to burning



Photo monitoring pre and post fire is important for evaluating outcomes

Kootenay-Crested Provincial Park
Wildlife Tree# 397-05/28/08
TM 62666 / 5454392
© Mike Gail BC Pw

More Prescribed Fire Projects in BC Parks



Snowy Protected Area Okanagan Region

Since the 1980s, the grasslands in Snowy Protected Area have been protected from fire. This has caused conifer encroachment and fuel build-up which has reduced the value of forage for sheep and the habitat values for other important grassland ecosystem species. Prescribed fire was done in Snowy Protected Area to:

- reduce conifer encroachment
- improve foraging habitat for California Bighorn Sheep

Project Details

Burn Date: May 2008

Area Burned: 70 hectares

Outcomes

- Increased grass growth
- Increased wildlife use





Prescribed fire



Monitoring vegetation post burn

Rubyrock Lake Provincial Park Omineca Region

Rubyrock Lake Provincial Park protects diverse habitats including important ungulate winter range, waterfowl migration stopover and nesting grounds, and supports a wide range of habitat species. The main objective for burning in Rubyrock Lake Provincial Park was to re-introduce fire in a previously fire-maintained ecosystem. This area was frequently burned by First Nations groups in the past making it a unique ecosystem.

Project Details

Burn Date: June 2008

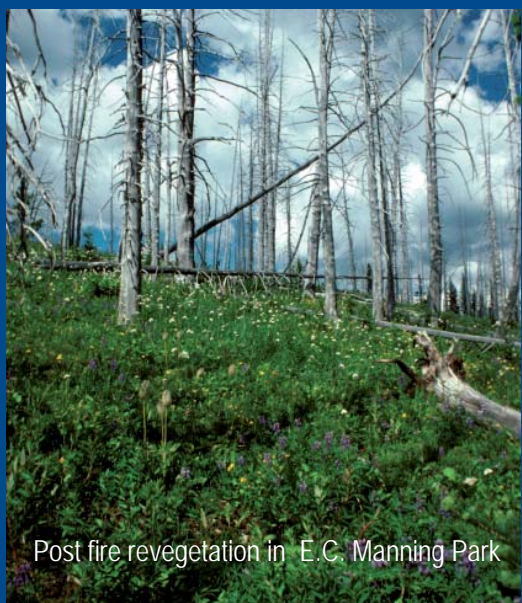
Area Burned: 2,000 hectares

Outcomes

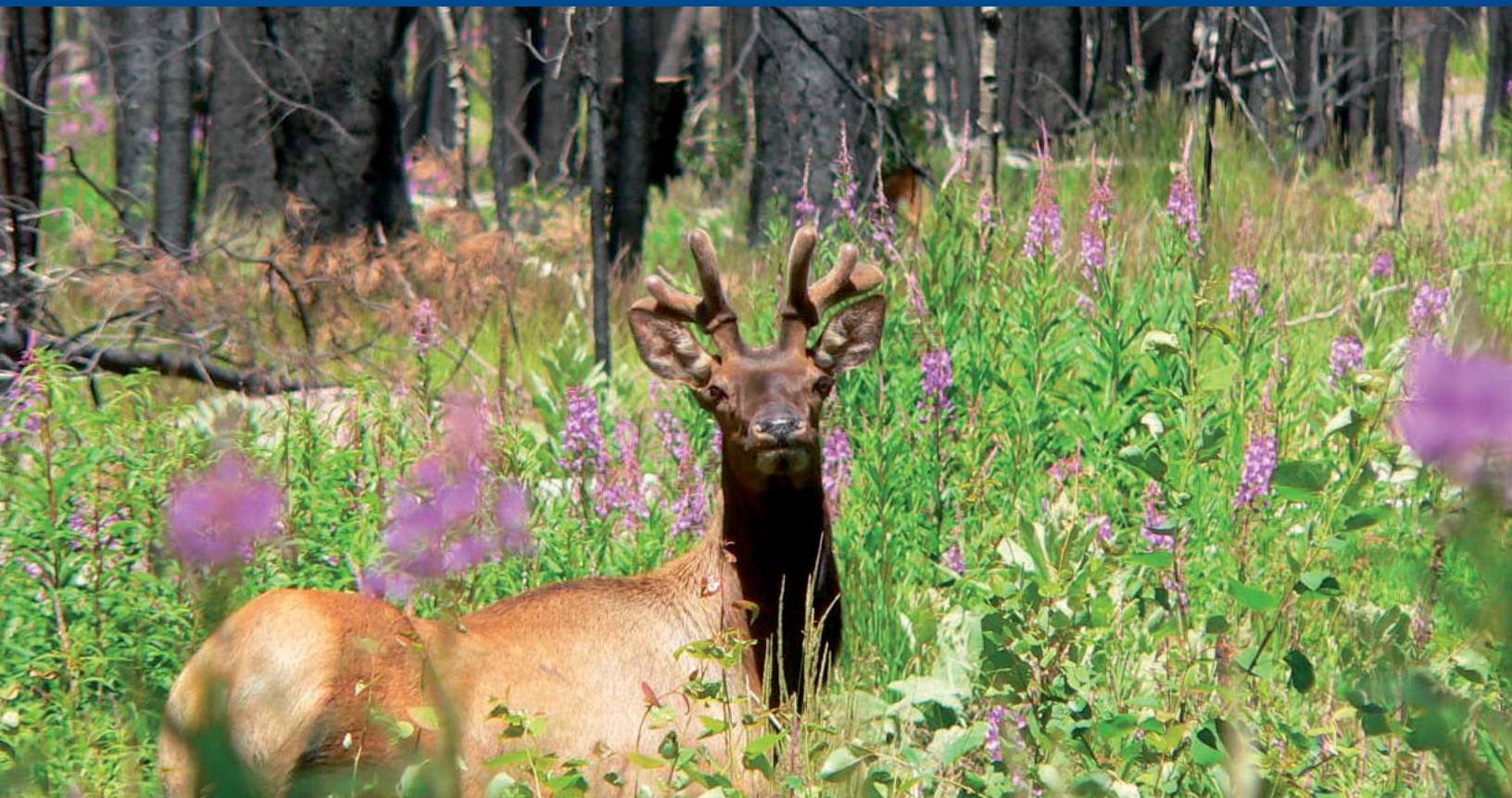
- Rapid and abundant regrowth
- Re-introduction of fire into a traditionally burned area
- Strong working relationship with the community and Yehooche First Nation.

These projects are group efforts. Thank you to all our partners without whom these projects would not be possible.

Ministry of Forests and Range, Protection Branch;
Ministry of Environment, especially the Ecosystems Branch; all the First Nations groups and community groups that support these projects.



Post fire revegetation in E.C. Manning Park



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