



Kootenay
National Park

Management Plan
Implementation Report 2015

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Superintendent's Message

Once again I am pleased to present to Canadians this annual report highlighting some recent achievements of Parks Canada in implementing the Kootenay National Park Management Plan. Now in year-five of this management plan, Parks Canada continues to make progress on meeting the goals and objectives set out for Kootenay National Park. Highlights include continuing efforts to reduce wildlife mortality on Highway 93S; making tangible improvements to visitor facilities; engaging new visitors inside the park; reaching out to Canadians where they live and work; ecosystem restoration in Sinclair Canyon; and species-at-risk recovery efforts.

The highlights described in this report reflect local initiatives to implement Parks Canada's national objectives to conserve and restore Canada's national parks, to connect Canadians with their national treasures, and to bring Parks Canada places to Canadians where they live. As you reflect on these achievements you can be assured that Parks Canada remains committed to the very important responsibility of protecting the outstanding natural and cultural heritage of all Canadians.

Melanie Kwong

Field Unit Superintendent

Lake Louise, Yoho and Kootenay



Park Management Implementation Reporting

This annual report highlights progress and accomplishments for the 2015 calendar year. It provides an opportunity for Canadians to review and provide feedback on the progress and priorities established for the implementation of the Kootenay National Park Management Plan. The park management plan is the guide to how the national objectives of Parks Canada are delivered through on the ground initiatives in Kootenay National Park. Highlights are presented for each of the five key strategies outlined in the park management plan.

Annual reports from previous years can be found on-line at:

<http://www.pc.gc.ca/eng/pn-np/bc/kootenay/plan/gestion-mgmt/plandirecteur-mgmtplan.aspx>

A Showcase of National Park Stewardship

Parks Canada is a world leader in natural and cultural heritage conservation and restoration. This leadership is demonstrated through innovative scientific research and active ecosystem restoration projects conducted within Parks Canada's protected areas. Significant restoration and research projects continued in Kootenay National Park during 2015.



Photo © Parks Canada

Highway 93S Wildlife Crossing Project

In August 2014 the Government of Canada announced that \$9.6 million was allocated to the second phase of the Highway 93S Wildlife Crossing Project. This project is intended to increase safety for motorists and reduce highway-related wildlife mortality, while ensuring that wildlife can also safely cross the highway corridor. In 2015 this funding has supported the construction of over 10km of additional highway fencing and six new wildlife crossing structures in the Kootenay Crossing area. These crossing structures are important for maintaining wildlife habitat connectivity in the Kootenay Valley. The first phase of this project, completed in 2013, included 4.7km of highway fencing and three wildlife underpasses.

Two continuous years of monitoring of the three underpasses installed in 2013 has begun to document their success. The underpasses have been used regularly by white-tailed deer, occasionally by wolves, and sporadically by moose, mule deer and black bear. At least 1600 medium and large animals are known to have crossed through the structures so far. Wildlife seem to be adjusting very well to the fencing and underpasses, with no incursions into the fenced highway being reported in 2014/2015. Ongoing monitoring will now broaden to include the six new crossing structures.

Wildlife Crossing Structures Exhibit

To augment the new exhibits at the Radium Hot Pools, interpretive staff developed a life-size board game, in which visitors are the game pieces trying to safely survive a year in Kootenay as either a deer or a wolf.

Sinclair Canyon Restoration Project

Winter work continues on the 45 hectare Sinclair Creek Restoration unit. The main objective of this project is the restoration of Rocky Mountain Bighorn sheep transitional habitat, which will be achieved by returning the area to open Douglas-fir forest and grassland.

Additional objectives include the restoration of native flora and fauna associated with open forest and grassland ecosystems, and the reduction of the current forest fuel loads to lower the risk of wildfire losses and increase fire protection for surrounding facilities, including the community of Radium Hot Springs, BC.

Over the winter of 2014/15 an additional 12 hectares was thinned and pile burned using hand-falling crews. Additional thinning work is planned to continue over the winter of 2015/16. The first prescribed fire for the unit is scheduled for the early spring of 2016, if conditions are favourable. A fire history research project is also underway for the restoration unit, in partnership with the University of Victoria, to discover how frequently fires burned this area historically, and how these previous fires are linked to tree age and forest composition.



Visitor Experience

Connecting Canadians to their national parks and national historic sites is a corporate priority for Parks Canada. Providing infrastructure and services that facilitate meaningful engagement with nature is critical to establishing these lasting connections. Visitation numbers and highlights of recent efforts to achieve this objective are outlined below.

Visitation

Visitation increased significantly in fiscal year 2014-15¹, rising 8.2% from the previous year. The trend has continued, with visitation between April and December 2015 rising by 7.5% over the same period the previous year.

¹ Parks Canada's fiscal year runs from April 1 to March 31.

Fiscal Year	Visitation	% change from Previous Year
2014-15	464,182	8.2
2013-14	428,967	-1.3
2012-13	434,781	1.8
2011-12	427,128	-0.5
2010-11	429,365	0.7

Table 1: Visitation Statistics – Kootenay National Park





Photo © Parks Canada

Federal Infrastructure Investment

In July 2015, federal funding of more than \$44 million was announced for deferred infrastructure maintenance in Kootenay National Park. Projects funded during this first phase of work include paving and rock slope stabilization along Highway 93S, and rehabilitation of the Radium Hot Springs facility and grounds. In 2016 work will commence on sidewalks and lighting work from the west park entrance to the hot pools.

Rockwall Trail Network - Bridge Reconstruction

The flooding experienced in northern Kootenay in 2012 and 2013 damaged or destroyed numerous bridges in the Rockwall area resulting in the closure of the Numa and Tumbling Creek trails. Parks Canada trail crews have been busy working to rebuild these remote structures. Work to repair the Tumbling-Ochre suspension bridge located at km 4.1 of the trail, and a log bridge at km 6.6 was initiated in 2014. These bridges were completed in spring 2015, and the Tumbling Creek trail was re-opened to park visitors. Unfortunately, the Numa trail had to be closed again when the bridge at Numa Falls failed. New bridge plans are being developed, and it is anticipated that this bridge will be replaced in 2016.



The Kootenay Explora App

The Kootenay Explora driving tour app was developed in 2014 to provide a means to connect the park with drive-through visitors. The audio tour features behind-the-scenes stories told by park staff, and provides travellers with enticements to stop and enjoy the park. Topics covered include the 2003 wildfires, the Kootenay Wildlife Crossing project, wildlife research information, and highway history. A “soft launch” of the app occurred in 2015 resulting in over 800 downloads. A formal launch is planned for May 2016.

In 2015 an augmented reality activity was added to the Explora App. Visitors are invited to take a tour back in time at the Radium Hot Pools, through overlaying photos from the past with the present views and adding themselves into the pictures if they choose.

Stanley Glacier Burgess Shale Hike

In 2015 Parks Canada expanded upon the new Burgess Shale hike to the Stanley Glacier area. This was the site of palaeontological research in 2008, which ultimately led to the discovery of the new Marble Canyon fossil site in 2012. In their second year these hikes were a tremendous success, with 85% of the limited number of spaces being booked in advance. A total of 44 hikes were provided, with a total of 458 participants, double the number from last year.

Facility Improvements

New way-finding signage was designed, manufactured and installed along Highway 93S through Kootenay National Park. Seventeen signs were replaced at the following locations: Floe Lake, Numa Falls, Paint Pots and Stanley Glacier. New campground orientation signage was installed at Marble and McLeod Campgrounds.



Photo © Parks Canada

Volunteering

Volunteering is an important way for Canadians and international visitors to connect with Canada's national parks. Kootenay National Park volunteers contributed hundreds of hours throughout the year including: assisting guides on the Stanley Glacier Burgess Shale hike, as campground hosts and in litter pickups, invasive plant control, ecological monitoring and trail maintenance. In addition, volunteers from the Friends of Kootenay National Park contributed their time and resources in 2015 to broaden awareness and understanding of the natural and cultural heritage of the park.

The Red Chair Program

The national Red Chair Program came to Kootenay in 2014 with the placement of a pair of Adirondack chairs at Marble Canyon and Sinclair Canyon above the hot pools. This unique visitor experience was enhanced in 2015 with the installation of interpretive panels positioned near the chairs. Interpretive messages at Marble Canyon feature the role of lightning in ecosystem renewal, and at Sinclair Canyon the restoration of bighorn sheep habitat is profiled. Visitors are encouraged to share the chair through social media.

New Visitor Guides

Parks Canada has developed a new visitor orientation guide called Getting Around Kootenay National Park. This 12-page guide is distributed at the park gates and visitor centres throughout the mountain parks. The guide includes a large park map, as well as a map of the Village of Radium Hot Springs. The new guide also features a “Top-Ten” list of activities to do in the park, provides camping, hiking and safety information, and includes suggested itineraries for full and half day adventures.



Photo © Parks Canada



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Learn to Camp

For several years, neighbouring parks have been providing a Learn-To-Camp program for visitors unfamiliar with traditional camping. The program was initially based on a guided overnight experience, and although participants enjoyed the program, considerable staff time was dedicated to reaching 50-60 people. In the spring and summer of 2015, Parks Canada developed and launched a re-designed Learn-To-Camp program using a mock campsite set up at different locations, including the Radium Visitor Centre in Kootenay National Park. Planning for the program began in May and delivery was launched in mid-July. Five interactive programs were offered on a drop-in basis at the campsite: How to Set Up/Take Down a Tent; Sniff Out The Problem (How to camp Bear Safe); What to Pack for Camping; Where Can We Camp in Banff, Yoho, and Kootenay National Parks?; and Camp Right & Have a Good Night. Programs ran from July 17th 2015 through August 30th 2015 and a total of 1349 visitors took part in the three parks.



Photo © T.Keith

Celebrating History, Culture and the World Heritage Site



Photo © Parks Canada

Floe Lake Patrol Cabin Restoration

The Mountain Parks Heritage Workshop carpenters completed a restoration project on the historic Floe Lake Patrol Cabin in September 2015.

This building is a federally Recognised Heritage Building and valued cultural resource situated at the park's most popular backcountry campsite. The restoration work was completed in accordance with heritage conservation techniques, and included a new wood shingle roof, a new floor, a new door, and fresh paint inside and out.

Bringing the Mountains to People Where They Live

Bringing Parks Canada stories to Canadians where they live and work is an important element of Parks Canada's effort to connect Canadians to their national parks and national historic sites. Parks Canada pursues this objective through various avenues, such as participating in outreach education activities in urban centres, and providing engaging content on internet and social media sites.

Get Into The Wild

The "Get into the Wild" outreach program highlighted mountain park stories at the Calgary Zoo from mid-June to Labour Day. Student interpreters engaged young families (44,000 total contacts) in learning activities and prop talks that focused on species at risk found both in the zoo and in our western and northern national parks (e.g. caribou, grizzly bears, black tailed prairie dog, whooping crane and bison). A new activities booklet also highlighted a variety of recreational activities available in the national parks.

Wings Over The Rockies

Burgess Shale fossils were integral to the "Fossils and Feathers" theme for the 2015 Wings Over the Rockies event in Invermere. Palaeontologist Jean-Bernard Caron from the Royal Ontario Museum was the keynote speaker and highlighted the importance of the Burgess Shale in Yoho and Kootenay national parks. Caron was also involved in several other fossil-related programs and events, including school presentations offered with the support of Parks Canada staff to over 700 Columbia Valley school children. In addition, 25 people took part in Parks Canada tours of the Sinclair Canyon restoration area and Highway 93S wildlife crossings.

Urban Outreach

2015 marks the third year of the Parks Canada urban outreach program in the Vancouver area. In addition to scheduled programming at the Vancouver Aquarium and Science World, the outreach program targets several special events throughout the Lower Mainland. Kootenay National Park stories of fire management and wildlife monitoring were profiled at Science World with 16,119 contacts and, for the first time, stories of the Burgess Shale were profiled at the Vancouver Aquarium with a total of 65,567 contacts. Outreach activities at special events throughout the Vancouver area featured general park information and resulted in approximately 17,000 additional contacts.

In Toronto, Kootenay National Park's wildlife crossing project and Burgess Shale fossils were highlighted at the Royal Ontario Museum during March Break. For seven days, Parks Canada staff engaged young families with interactive programs and made approximately 6,000 contacts. Other Parks Canada take-away activities, including spray-on tattoos, green screen postcards, fossil rubbings, build-a-wildlife-crossing postcard, social media posts and news media coverage ensured these Kootenay National Park stories and visitor information reached additional audiences in Toronto and beyond.

Stories related to Kootenay National Park's wildlife crossings were incorporated into school programs offered by Earth Rangers, a Parks Canada national partner, and reached approximately 100,000 urban students in the 2014/15 school year. The program is expected to reach 200,000 in the 2015/16 school year.



Local School Trips

School field trips highlighting wildlife research and monitoring in the Redstreak restoration area were offered to Columbia Valley elementary schools in Spring 2015, and reached 250 children, teachers and parent-volunteers.



Photo © Parks Canada

Ensuring Healthy Park Ecosystems

Conserving and restoring natural ecosystems is critical to ensuring Parks Canada meets its obligation to maintain the ecological integrity of Canada's national parks. Maintaining healthy, intact ecosystems also ensures that Canadians have opportunities to experience and learn about Canada's native biodiversity and ecological processes. Some highlights of ecosystem management initiatives in Kootenay National Park are outlined below.

Water Quality Monitoring

The Canadian Aquatic Biomonitoring Network (CABIN) is an aquatic biomonitoring program for assessing the health of freshwater ecosystems in Canada (www.ec.gc.ca/rcba-cabin/). The CABIN monitoring protocol relies on the abundance and diversity of aquatic bugs to assess water quality. These bugs are known to be sensitive to environmental conditions. Eight randomly-selected sites have been sampled in Kootenay National Park, with another seven sites scheduled for sampling next year. The CABIN results will be reported in the next State of the Park Report.

Species at Risk – Whitebark Pine Recovery

Whitebark pine is a characteristic tree species of high alpine habitats in the western cordillera. In 2012, this species was designated as endangered under Canada's *Species at Risk Act*. The principal threats to its survival are: white pine blister rust – a fungus introduced from Europe; mountain pine beetle; and climate change. As part of the recovery effort for this species, Parks Canada vegetation specialists collected seed from nine whitebark pine trees that show some potential to be resistant to blister rust. These trees were found in the Mitchell Ridge, Luxor Pass and Stanley Glacier areas. In mid-summer, these trees have their cones protected by cages to prevent the seeds from being eaten by Clark's nutcrackers. The cones are collected in the fall and the seeds are extracted and sent to nurseries to test for resistance to white pine blister rust. Disease resistant trees, if identified, will be used in future restoration efforts.



Photos © Parks Canada

In addition to seed collection, park staff returned to the Numa Creek drainage that was burned in a managed wildfire in 2013, to plant 55 whitebark pine seedlings. Whitebark pine seedlings have been shown to have higher survival rates in a post-fire forest, as the fire decreases competition and increases the amount of sunlight reaching the forest floor. The seedlings planted at Numa were derived from trees that have a high potential of being resistant to blister rust, although this won't be confirmed for another two or three years.

Managing Human-Bear Conflict

In 2015 Parks Canada implemented a focused strategy in the Olive Lake area to address the annual spring concentration of both black bears and grizzly bears feeding on early spring vegetation along the roadside.

A spring roadside garbage pickup was carried out and selective dandelion control in specific locations was conducted in an attempt to reduce bear attractants and diminish the number of bear crossings on the Kootenay Parkway. The 11-kilometer long “No Stopping Zone” Restricted Access between the Kootenay Viewpoint and McKay Creek was implemented from May 16th to June 8th, 2015. Closures and warnings were also put in place at the two truck brake checks at Sinclair Summit.

The Kindersley—Sinclair Trail Group Access Restricted Activity Order was implemented from June 28th to October 15th, 2015. This measure requires hikers to travel in a group of four or more people to reduce the potential for bear-human conflicts when grizzly bears are frequenting the meadows in the pass. There were no reported encounters with bears on the trail while this restriction was in effect.





Looking Forward

Some exciting projects and activities to look for in 2016 include:

- Construction of additional highway fencing and wildlife crossing structures on Highway 93S during the summer of 2016.
- Prescribed burns are planned for Redstreak Mountain and the Sinclair Canyon Restoration area if the appropriate conditions occur.
- Upgrades to the sidewalks and lighting between the Village of Radium Hot Springs and the hot pools facility.
- Replacement of the Numa Falls pedestrian bridge.

For more information, please contact us at:

Kootenay National Park of Canada

P.O. Box 220, Radium Hot Springs, B.C., Canada, V0A 1M0

<http://www.pc.gc.ca/eng/pn-np/bc/kootenay/index.aspx>

Kootenay National Park Visitor Centre (open from mid-May until mid-October)

Phone: 250-347-9505

Email: kootenay.info@pc.gc.ca