



FREE
REPORT

Grizzly Bears

A majestic creature faces extinction in some BC and Alberta populations



Grizzly bears left: photo Wayne Lynch. Photo top: Michael Wheatly. Grizzly bears bottom: John Marriot.

Grizzlies need protection **on both sides of the border**

Grizzly bears hold a certain place in our hearts – a revered yet feared beast of up to 375 kg which can stand 6 feet tall and conjures up images of rugged and unspoiled wilderness. A subspecies of brown bear, grizzlies historically ranged from Alaska down to Mexico and as far east as Manitoba. Unfortunately, human fear of the grizzly and encroachment of their habitat has left the grizzly virtually non-existent in Canada's southern provinces outside of British Columbia (BC) and Alberta. The few remaining populations of grizzly that straddle the Canada-US border in BC and Alberta are in trouble, and need our actions to help them recover.

The plight of grizzlies in southern BC and southern Alberta was not grave until the time of the gold rush. From 1850 to 1860 thousands of grizzlies were slaughtered and the population never recovered. Any hope of recovery without human assistance was dashed in the past 50 years by habitat destruction caused primarily by road building, logging, oil and gas extraction, and development in the back-country.

Perhaps more than any other animal, grizzlies need abundant wilderness to survive. Although tolerant of a certain degree of development, grizzlies are intolerant of any kind of sustained mechanized human activity, especially roads and trails used by motorized vehicles¹ and higher elevation old-growth logging².

In the past 20 years, intensive use of back-country roads and trails by motorized vehicles, wilderness off-roading, and fire suppression has further imperilled grizzlies. Senseless trophy hunting also has negatively impacted many grizzly populations, although some BC populations and all Alberta grizzlies are now legally protected from hunting. Illegal hunting is an unknown factor, but the best scientific estimates³ suggest that up to 25% of human-caused grizzly kills are from illegal hunting (see graph on the right). Logging is still a problem for grizzlies but a manageable one given the bear's tolerance for some logging, society's increasing distaste for old-growth logging and the increasing expense of logging in remote areas. Thus the biggest current threat to grizzlies is from increasing motorized human access, and associated developments like ski resorts in the back-country and highways that impede grizzly movement.

Accurate grizzly population estimates do not exist. However, most scientists agree that about 12,000-17,000 grizzlies exist in BC⁴ and about 500-700

Types of mortality of grizzly bears in Alberta, 1990-2007

Licensed hunting*	39%
Illegal hunting	25%
Self-defense	17%
Aboriginal	6%
Other	5%
Problem Wildfire	4%
Vehicle/Train	3%
Natural	1%

*Licensed hunting suspended in 2006.

Source: Alberta Grizzly Recovery Plan 2008-2013 (2008)

grizzlies exist in Alberta⁵. Less than 500 bears remain in the five Canadian populations featured in this report.

Grizzly populations still exist in every rugged north-south mountain range that crosses the US border. These five populations in the southern sections of the Canadian Rocky, Purcell, Selkirk, Granby and Cascade mountains are only fragments of what they once were. All these populations, except the Southern Rockies, number less than 100 bears and some, like the North Cascades population near Hope, BC, number in the teens. These populations need immediate help if they are going to survive.

Map and more info about bears inside!



Photos Michael Wheatley

Grizzlies in Southeastern BC A Castle and a Crown for Alberta

A Last Stand

South-eastern British Columbia represents the last stand for 'trans-boundary' grizzly populations whose range encompasses both sides of the Canada/US border. Somewhat larger (greater than 100 animals) grizzly populations to the east in the Rocky Mountains dwarf more vulnerable populations (less than 100 animals) in the Purcell and Selkirk Mountains to the west. These three great mountain ranges, the Purcells, Selkirks and Rockies, represent the last regions of 'trans-boundary connectivity' for grizzly bears along the 49th parallel. Of these, only the Rockies shelters populations robust enough (228 bears exist in the Canadian Rockies south of highway 3) to ensure long-term sustainability in the face of climate change and other human impacts. All these grizzly populations are divided by Highways 3 and 3A (see map), which represents a movement barrier to grizzlies. Without proper habitat management within grizzly movement corridors and wildlife crossing structures to provide a bridge for grizzlies on either side of the highways, the viability of these populations will continue to suffer and could lead to population decreases or extirpations.

The famed Flathead Valley in the extreme south-eastern corner of British Columbia is home to the highest density of inland/interior grizzly bears in North America. Vast huckleberry fields, rich meadows, open forest, and an extensive river valley forest system along the Flathead River produce enough food to allow this population to remain healthy, and habitat protection measures have ensured that this population remains connected to populations south of the border. Unprotected in BC at this time, with the exception of the tiny Akimena-Kishenena Provincial Park (in which hunting is permitted), the Flathead faces a series

of threats from proposed coal mining, coal-bed methane extraction, intensive forestry activities, and increasing motorized recreation activities. Wildsight, CPAWS and a host of other organizations have been calling for the creation of a national park in British Columbia's portion of the Flathead for over a decade.

The Southern Purcell, or Yaak, population of grizzly is much less robust. Extensive clearcutting and human activity has resulted in a declining population in this region. According to recent census work, as few as 24 grizzlies remain south of Highway 3⁶, and 87 remain north of Highway 3⁷. The fact that this grizzly population is still physically and genetically connected to the population north of Highway 3 gives scientists hope. In the extreme south however, part of the Purcell grizzly population has been completely isolated in the Cabinet Mountains south of Troy, Montana, where only about 15 grizzlies remain⁸. Over 70 partner groups are working together in this landscape as part of the Yellowstone to Yukon Conservation Initiative's Cabinet-Purcell Mountain Corridor Conservation Project to maintain a movement corridor for this threatened group of grizzly. The proposed 6500-bed Jumbo Glacier Resort in the heart of the Purcells has been identified as one of the greatest threats to north-south connectivity for grizzlies.

The Canadian south Selkirk grizzly population is estimated to contain about 60 bears south of Nelson, but DNA studies indicate that there is little to no connection

between these bears and the larger populations to the north of Nelson⁹. The recent purchase of the 550 square kilometer "Darkwoods" property by The Nature Conservancy will help these grizzlies, but is inadequate to sustain the population. Human-caused mortality is still the number one cause of grizzly declines in this region. Human access created by coal mining, coal bed methane extraction, forestry, backcountry vehicle use and permanent settlement creates more conflict between grizzlies and humans, and leads directly to higher mortality.

While grizzly hunt quotas have been curtailed or stopped in some areas, hunting of grizzlies is still permitted in many of these fringe populations. Decreasing grizzly mortality is the key to the long-term survival of grizzlies in this part of the world. Protecting habitat, managing human access, and curtailing direct human mortality is the key to protecting these populations and ensuring their persistence into the future.

Article by Wildsight wildsight.ca



Photo Garth Lenz.

In many ways, Alberta has done more for grizzlies than BC. The Alberta government recently completed, and promised to fully implement, a grizzly recovery plan for 2008-2013¹¹. Although few actions have been taken to date, there is reason for cautious optimism that Alberta will fulfil its promises to the public and uphold its legal obligations under the Federal Species At Risk Act. The Alberta government should be commended for effectively banning the trophy hunting of grizzlies in 2006, something BC is not brave enough to do.

Historically, Alberta was home to at least 10,000 grizzlies but that number has now dropped to between 500 and 700¹². Only 170 bears exist between Highways 3 and 16¹³. Clearly much more habitat must be protected, in particular along the Rockies' rugged eastern

slopes. Other measures needed include more public outreach to residents that live, work or play in grizzly country, and limitations on motorized vehicle access to the back-country¹⁴.

Immediately north and south of Highway 3, the grizzly population in Canada is increasingly fragmented (only 51 bears remain), and suffers from neglect and abuse due to Alberta's 'multiple use' approach to regional planning, in which many simultaneous and sometimes contradictory land-uses are permitted.

To ensure grizzly survival, all non-essential roads and all back-country vehicle trails in core grizzly habitat in this region must be permanently closed. Wilderness off-roading bans must be implemented and strictly enforced. Logging activity in core grizzly habitat should focus on creating food for grizzlies, protecting old-growth forests, and should

be followed by the immediate decommissioning of logging roads. Active oil and gas access roads are particularly damaging to grizzlies. Since 89% of Alberta grizzly fatalities occurred within 200 metres of roads and motorized vehicle trails¹⁵, the importance of closing vehicle roads and trails in core grizzly habitat cannot be over-emphasized.

Ranchers and farmers are increasingly becoming accepting of grizzlies on the eastern slopes because of community outreach efforts, but the Alberta government needs to do much more to facilitate this relationship (see back page).

The single most important action the Alberta government could take on behalf of grizzlies in southern Alberta is to protect the entire Castle Wilderness Area (now proposed as the Andy Russell I'tai sah köp Park), north of Waterton Park.

Article by Castle-Crown Wilderness Coalition ccwc.ab.ca

North Cascades Grizzly Less than 20 left

No species evokes the memory of pioneers better than the grizzly. Yet it was those very pioneers, in particular the gold rush era settlers in the 1850s, who reduced the North Cascade grizzly population from about 500 to only a few dozen bears in a single decade.¹⁶ Recent threats from logging, highway and road construction has reduced this population to less than 20 bears.¹⁷ It is the only population for which the BC government has written a 'recovery plan'¹⁸.

However, to date, none of the important actions recommended by the BC government's own recovery team have been implemented. A major ski resort proposal in critical core grizzly habitat near the

Coquihalla Summit (near Highway 5) could be their final death knell.

A viable solution would include relocating female bears from healthier populations in northern BC; closing all non-essential roads within 500 metres of core habitat; banning old-growth logging throughout this bear population's range; limiting other logging to that which is specifically designed to create or maintain berry patches; and building under-passes and over-passes across Highways 1, 3 and 5. Complete protection of all habitat is warranted in the north-western part of this bear population range (Spuzzum Creek) where it intersects with the somewhat larger and healthier population using the Stein Provincial Park area.

Bear Facts

- Grizzlies have an average of only 2 cubs every four years and don't give birth until about age 8.
- Grizzlies' low reproductive rate combined with imprecise and/or low population estimates is the principle scientific rationale for banning hunting.
- Grizzlies are mostly vegetarian. They eat principally nuts, berries, leaves and roots.
- A grizzly's home-range is huge! 250-500 km² for females and 500-1000 km² for males.

Source: Alberta Grizzly Recovery Plan 2008-2013 (2008)

Kettle-Granby Grizzly Most endangered in BC

The Granby Wilderness Society has been advocating for the endangered Kettle-Granby grizzly since 1995. This unique population of dry-land grizzly lives in a transition zone between the dry Okanagan and the wet Kootenays.

In 1994 two parks were established northeast of the town of Grand Forks. Granby and Gladstone Provincial Parks were created in large part to protect core grizzly habitat. Since then, research has found that large carnivores such as grizzly, wolf and wolverine require extensive range for survival. Parks like the Granby and Gladstone offer some protection, but are too small to provide secure and suitable habitat for such far-ranging species.

In 1997, a scientific study by the BC government suggested that habitat around to the two parks was still adequate to sustain a small population of grizzly bears. Today the landscape has witnessed drastic change. Many of the roadless and intact forests outside the parks no longer exist. The Kettle-Granby grizzly is suffering from the loss of critical habitat. A DNA study in 2000 suggested that as few as 34 grizzly roam the ridges and valley bottoms of the Kettle-Granby ecosystem¹⁰.

Unfortunately, BC government policy dictates that the protection of wildlife can not adversely impact logging, mining and range use. The Kettle-Granby grizzly population faces extinction unless we manage and protect its habitat.

A management plan for a sustainable population of the Kettle-Granby grizzly will require a grizzly bear recovery area, consisting of a connected patchwork of core habitat leading to the northeast of Granby Provincial Park and to the



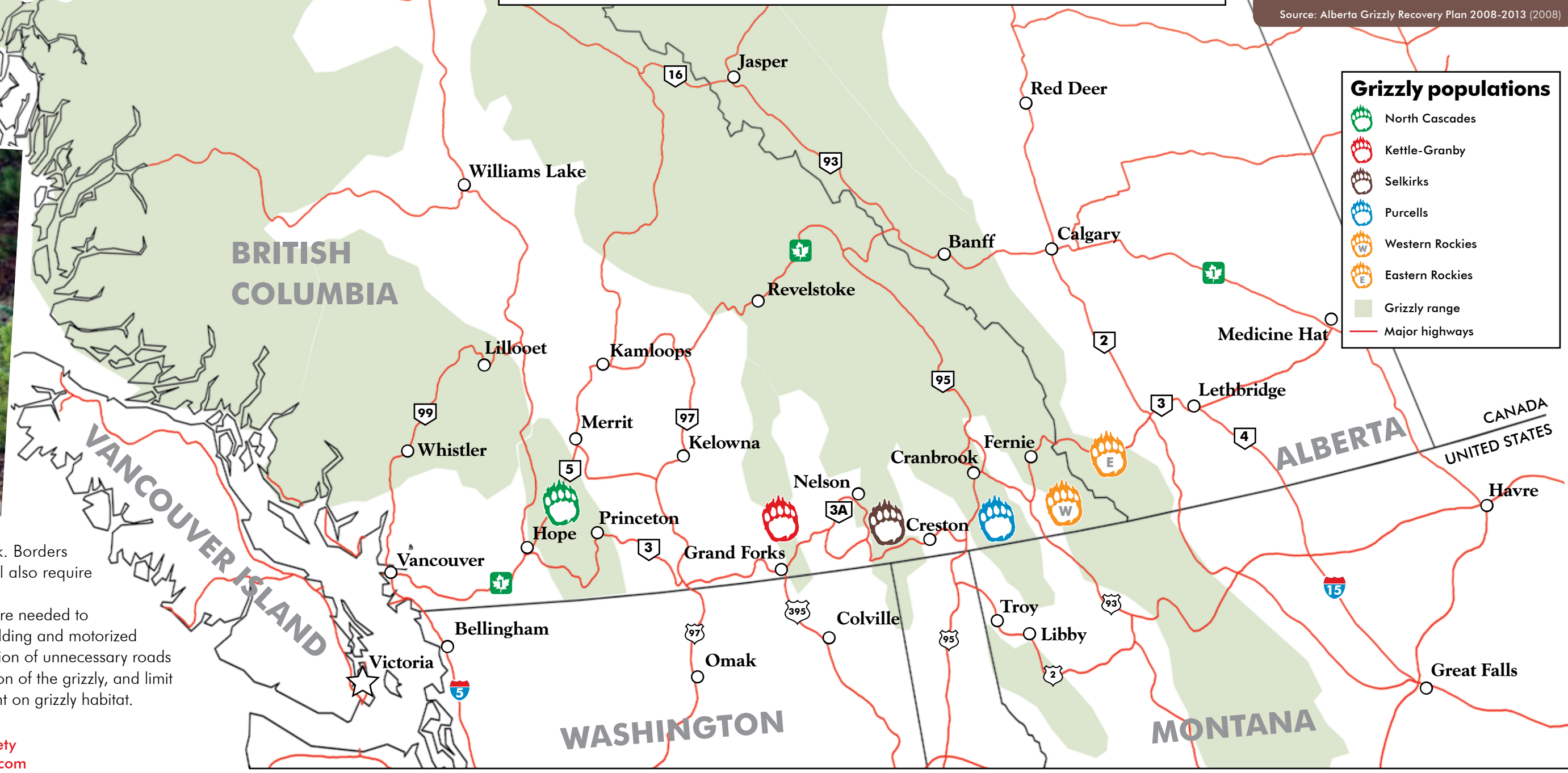
Grizzly Bear. Photo John Marriot

south of Gladstone Provincial Park. Borders around Granby Provincial Park will also require significant expansion.

Stronger legislation and policy are needed to protect bear habitat, limit road-building and motorized vehicle access, guide the deactivation of unnecessary roads that are detrimental to the protection of the grizzly, and limit the negative impact of development on grizzly habitat.

Article by Granby Wilderness Society granbywildernesssociety.blogspot.com

Grizzly Bear Populations in the Western Canada-US Border Region



Grizzly populations

- North Cascades
- Kettle-Granby
- Selkirks
- Purcells
- Western Rockies
- Eastern Rockies
- Grizzly range
- Major highways

A US Grizzly Success Story¹⁹

When Lewis and Clark explored the west

in the 1800's, they estimated 50,000 grizzlies roamed the wilderness of the continental US. By the 1970s their numbers dropped to below 500 and they were officially declared "threatened" with extinction. In 1982, the first recovery plan for any bear in the world was drafted for the US grizzly population. Soon after, the Yellowstone population was identified as a priority for recovery.

Although grizzlies are still critically imperilled in their few remaining US populations south of the 49th parallel, the story of the recovery of the Yellowstone Park area grizzly is another story altogether.

Beginning in 1982 with a declining population of 160 grizzlies, many US government agencies in partnership with ranchers, farmers and local

communities set out on an ambitious task to recover the Yellowstone grizzly. Some 26 years later, the Yellowstone population, having increased to 560 bears, was de-listed (though prematurely in the opinion of most scientists). Regardless, if followed in Canada, this model could result in the survival of our cherished grizzlies.

The US saved the Yellowstone grizzly by taking the following actions:

- ★ limit human-caused mortality by closing certain roads and enforcing a hunting ban;
- ★ protect core habitat;
- ★ building public support through well-funded and complex partnerships, and
- ★ research and monitoring.



Photo Jeremy Sean Williams

Of Grizzlies and Sheep *The Range Rider Heroes of Montana*²⁰



Much of the success of grizzly bear recovery programs depends on the relationship between bears and people, particularly those that live in grizzly country: ranchers, farmers and rural residents. Recovery of grizzlies is impossible if grizzlies and people can't co-exist, and human-caused mortalities aren't diminished.

One particularly innovative success story is from a group of range riders, educators and scientists called "Keystone Conservation", who design and implement solutions to help people and predators get along. They patrol range lands on horseback to deter conflicts between predators and livestock before they occur. Since 2003, grizzly conflicts in the famed Blackfoot Valley of Montana have decreased 93%.

Keystone also teaches children and adults about wildlife, and recognizes that the citizens who live near wildlife are its *de facto* guardians. "Predator Friendly" certification recognizes wildlife stewards on farm and ranch lands throughout the central Rockies.

Why Did the Grizzly Cross the Road?

Highways 1, 3, and 5 are a big threat to the long-term survival of grizzlies, particularly females who often refuse to cross highways, even if that results in their death from starvation or competition with other grizzlies. Grizzlies need to cross highways to survive because their home-range is so large: 250-500 km² for female grizzlies and 500-1000 km² for male grizzlies.²¹

Luckily, grizzlies and many other species of wildlife cross roads in specific areas along movement corridors that literally serve as animal highways. In human society, when

two highways merge, overpasses and underpasses are built to avoid collisions. If grizzlies and other wildlife are to survive, the same must be done for them. Overpasses and underpasses for wildlife have been built in many parks around the world, including Jasper and Banff, and work well if properly constructed.²² This model needs to be replicated throughout grizzly bear country. Scientists know where these structures need to be built and how to protect grizzly movement corridors—now politicians need to respect scientific opinion and implement and fund these important projects.

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Take ACTION to help the Grizzlies

Write the **BC Premier**, and let him know how you feel about the need for developing and implementing Recovery Plans for each grizzly population in southern BC, and the importance of banning grizzly hunting throughout BC.

Write to the **Alberta Premier**, and let him know how you feel about following through on his commitment to implement the Alberta Grizzly Bear Recovery Plan. Also let him know your opinion on creating the Andy Russell Park.

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