Bow Valley Human-Wildlife Coexistence Status Report 2019

This status report highlights the work and activities that have been completed, by the various agencies operating in the Bow Valley in relation to the Bow Valley Human Wildlife Coexistence Roundtable Recommendations. The activities represented within this summary extend to March 2019. In many cases, these conflict reduction strategies have been ongoing prior to the Roundtable report. Each activity has been organized, by agency, into the six categories from the Bow Valley Human Wildlife Coexistence report:

- Transboundary Management
- Wildlife in Developed Areas
- Habitat Security
- Food conditioning and Habituation
- People Compliance
- Wildlife Management

Wildlife Sightings

Wildlife sightings, especially bears, wolves and cougars, can be important for public safety and wildlife management. When in Banff National Park, please report all sightings to Banff Dispatch at 403-762-1470. For all other sightings outside of Banff National Park, please report all sightings to 403-591-7755.

Please note that while this information may be beneficial to the management of wildlife, not all reports will result in an immediate response.

Trans-boundary Management

Interagency:

- Strategy meeting on March 19, 2019, Town of Banff, Town of Canmore, Parks Canada, and Alberta Environment and Parks, to discuss future initiatives and reporting. (Recommendation 1)
- Bow Valley WildSmart with assistance from Alberta Environment and Parks, Fish and Wildlife Enforcement Branch and the Town of Canmore, continue to communicate consistent and clear wildlife safety messaging and information about the need to keep wildlife outside of developed areas in order to reduce negative human-wildlife encounters.
 - This is done through Bow Valley WildSmart education and outreach programs including our new website, weekly bear reports, media engagement, social media posts, Nature for Newcomers, community events, school and youth groups, adult groups, businesses, staff training, volunteer wildlife ambassadors, Speaker Series, and educational materials, brochures, stickers. (Recommendation 1)
- Alberta Environment and Parks participated in Parks Canada annual spring Wildlife Training and discussed wildlife management priorities and projects.

- Parks Canada and Alberta Environment and Parks notified each other about transboundary movements of GPS radio-collared wolves, black bears and grizzly bears.
- Parks Canada and Alberta Environment and Parks worked together to manage bearhuman incidents that occurred along the boundaries near Minnewanka and the Spray Valleys.
- Parks Canada and Alberta Environment and Parks met to discuss approaches for assessing the effects of human activity on grizzly bears using remote cameras.
- Hosted 7th annual "Bear Day" event focusing on bears ecology and bear safety.

Wildlife in Developed Areas

Interagency:

 The Town of Canmore and Environment and Parks with help from Bow Valley WildSmart removed Shepherdia from within Canmore, 28 acres in 2018. The majority of this work was done under a 3rd party contract, through funds provided by the Town of Canmore. (Recommendation 8)

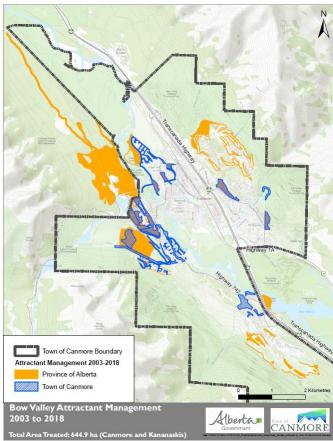


Figure 1. Attractant Removal - Canmore area 2003 to 2018

 In 2018, the Town of Canmore and Alberta Environment and Parks agreed to finance and install an eight-foot fence around Centennial Park in an effort to exclude wildlife, particularly elk, from this urban greenspace. Work will commence in 2019. (Recommendation 8) Alberta Environment and Parks with help from Bow Valley WildSmart and local schools are engaged in an Urban Elk Monitoring Program by reporting elk in town through the NatureLynx app. (Recommendation 7)

Town of Banff:

- As part of the Capital Budget process, Council provided direction to pursue an enhanced fencing program at the Banff Recreation Grounds. An update will be provided to Council on progress in the fourth quarter of 2019. (Recommendation 8)
- In 2019, the Town of Banff put into action-enhanced compliance measures for construction waste bins, which can inadvertently become wildlife attractants if used improperly for food disposal. Measures included mandatory lids for bins on public property and required supervision for bins on private property. (Recommendation 6)
- In 2018, the Town of Banff conducted an audit of existing commercial waste enclosures and used the process to assist in educating commercial operators about the need to operate these facilities with wildlife in mind. (Recommendation 8)
- Council has provided direction to administration to return with options for additional regulation and potential prohibition of fruiting trees within the Town of Banff. A report containing options is planned for 2019. (Recommendation 8)

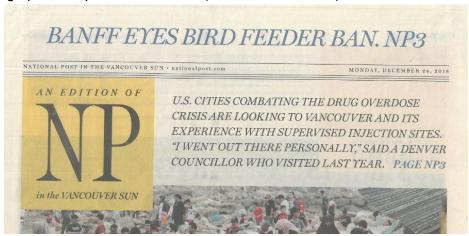


Figure 2. Town of Banff Proposed Bird Feeder Ban

Town of Canmore:

• Approximately sixty crabapple trees were removed from the Town of Canmore in 2016, and 2017, through a subsidized removal and replacement program. The Town of Canmore did not repeat the fruit tree incentive program in 2018, in part to control costs, but also because significant efforts were made over the past three years to raise awareness around the issue. The focus shifted to encouraging homeowners to take personal responsibility for their own trees and manage them so they do not attract dangerous wildlife. Starting in August 2019, the Town of Canmore pushed messages regarding attractant management through social media accounts, the Town of Canmore website, and on two mobile traffic signs (Figure 6 & 7). (Recommendation 8)

Alberta Environment and Parks:

- Collaborating with University of British Columbia Okanagan, Adam Ford and Emily Sunter to complete a study on "Factors affecting spatial and temporal variation in human-carnivore interactions" around Canmore. Expected completion 2020. (Recommendation 8)
- Collaborative removal of twenty-eight acres of shepherdia in Canmore (Recommendation 8)

Parks Canada

• Removed female shepherdia bushes from 5.72ha in the Middle Springs area and 5.22ha in the human use nodes Lake Minnewanka area (Figure 3 & 4). (Recommendation 8)

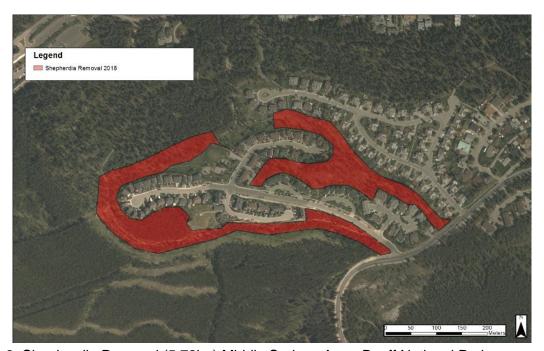


Figure 3. Shepherdia Removal (5.72ha) Middle Springs Area, Banff National Park



Figure 4. Shepherdia Removal (5.22ha) Minnewanka Area, Banff National Park

- Removed twenty-eight fruit bearing trees with an emphasis on crab apples from within the Town of Banff Boundary from 2015, and 2016. Parks Canada and the Town of Banff provided and planted non-fruit bearing native replacement trees. (Recommendation 8)
- Frequent public reminders about the need to remove and secure wildlife attractants in town through media interviews and social media. These occurred as large carnivores used the periphery of the townsite. (Recommendation 9)
- Staff implemented a short, intense aversive conditioning program on a male black bear. The bear, which had been focused on foods in town, responded by travelling around rather than through the Banff townsite. (Recommendation 9)
- A coyote denned within the town limits and displayed aggressive behavior towards people and dogs. The incident consumed considerable staff resources to reduce risks to the public and to encourage the coyote to move her pups out of town. Staff worked with home owners to try and prevent future denning in the area. (Recommendation 9)
- Increased wolf and cougar predation around the Town of Banff helped control the elk population. This, combined with the removal of aggressive bull elk in winter 2017-2018, meant that no habituated elk were removed in 2018-2019. Staff regularly hazed elk out of the townsite, especially during spring calving and during the fall rut. (Recommendation 9)
- Implemented five formal warning advisories and sixteen closures many of which were due to proximity of cougars, wolves, coyotes, and black bears to high human use areas. Staff also implemented three restricted activity orders to improve human-wildlife coexistence. (Recommendation 9)

Bow Valley Wildsmart:

 Participants of our education and outreach programs are requested and reminded to report sightings of bears, cougars, wolves and aggressive wildlife to Kananaskis Emergency Services. Brochures and stickers with the reporting phone numbers are handed out to participants and members of the public at presentations and events. (Recommendation 5)

Yellowstone 2 Yukon (Y2Y):

 Provided grant support for the 'Living With Wildlife' website, a digital accompaniment to filmmaker Leanne Alison's "Living With Wildlife" film, that provides additional content and resources related to co-existing with wildlife & promoting wildsmart communities. (Recommendation 5)

Habitat Security

Interagency:

- Town of Canmore and Alberta Environment and Parks distributed four-hundred postcards to homes in the Peaks of Grassi subdivision educating residents on the importance of the South Canmore wildlife corridor. Additional signage was installed in the corridor to identify the corridor boundaries and official trails. (Recommendation 11)
- Alberta Environment and Parks in collaboration with the Town of Canmore installed trail closure signs in the Peaks of Grassi area. The Town of Canmore and Alberta Environment and Parks paid for the signage. (Recommendation 11)

Town of Banff:

• In 2019, the Town of Banff will be undertaking a Wildlife Corridor assessment with the goal of providing evidence-based guidance on the impact of town activities on wildlife in the town boundaries and adjacent wildlife corridors. (Recommendation 11-12)

Town of Canmore:

- In 2019, the Town of Canmore will undertake a review of the Lower Silvertip Wildlife Corridor. The study, done by an independent consultant will:
 - Determine the value of the Lower Silvertip Wildlife Corridor as an area for wildlife movement within the regional system of wildlife movement corridors or other valued ecosystem components.
 - b. Establish the intent of the Lower Silvertip Wildlife Corridor based on that value.
 - c. Depending on the outcome, a management plan and an implementation plan may be developed based on the identified intent. (Recommendation 11-13)

Parks Canada:

- Analyzed and published a manuscript titled Temporal road closures improve habitat quality for wildlife that assessed the effectiveness of the Bow Valley Parkway spring, night time travel restriction. Temporal closures are a management tool that can improve habitat security. (Recommendation 12 & 13)
- Initiated a preliminary review of wildlife movement, wildlife conflict, and human recreation within and adjacent to wildlife corridors. The goal is to identify potential mitigations that

- would simultaneously improve connectivity, reduce wildlife conflicts, and improve recreational opportunities for people. (Recommendation 13)
- Continued a collaboration with Dr. Adam Ford from the University of British Columbia -Okanagan to assess what factors influence the effectiveness of wildlife corridors. The project is analyzing twenty plus years of corridor tracking and predation data. (Recommendation 13)
- Conducted preliminary analysis of spatial factors affecting corridor permeability.
 (Recommendation 11)
- Implemented seasonal area closures and restricted activity orders to improve public safety and improve wildlife habitat security. Examples include the Hillsdale and Fairholme Bench wolf denning closures, the Upper Spray Valley closures, the Bow Valley Parkway seasonal travel restriction. (Recommendation 12)

Food Conditioning and Habituation

Interagency:

 Environment and Parks, with the Town of Canmore, surveyed Canmore for the abundance and distribution of fruit trees, crab-apple, cherry and mountain ash, in the community. There were 2582 fruit trees recorded and georeferenced. (Recommendation 14 and 18)

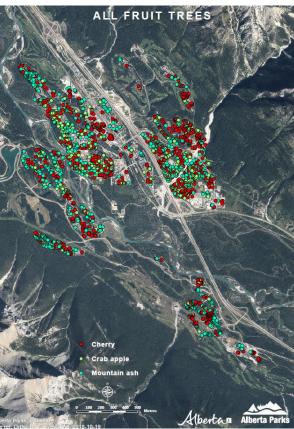


Figure 5 Fruit tree survey - Canmore 2018

 Bow Valley Wildsmart in collaboration with Alberta Environment and Parks, continues to communicate wildlife safety and attractant management messaging through education and outreach programs, the new website, weekly bear reports, media engagement and social media posts. (Recommendation 1)



Figure 6. Fruit tree removal Sign – Town of Canmore



Figure 7. Buffaloberry Removal Sign – Town of Canmore

Parks Canada:

 Parks Canada implemented the annual spring litter pick to reduce wildlife attractants. (Recommendation 18)

People Compliance

Biosphere Institute pf the Bow Valley:

 In 2018, Environment and Parks with assistance from Bow Valley Wildsmart and Volunteer Wildlife Ambassadors administered a Bear Spray surveys at various trails and trailheads in the Bow Valley and Kananaskis Country in order to start collecting data about people compliance of carrying bear spray. This data will continue to be collected so that comparisons, trends and future mitigation can be determined (Figure 8, 9, 10). (Recommendation 20)

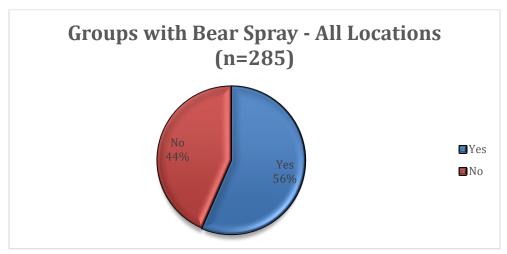


Figure 8. Groups with at least one person carrying bear spray.

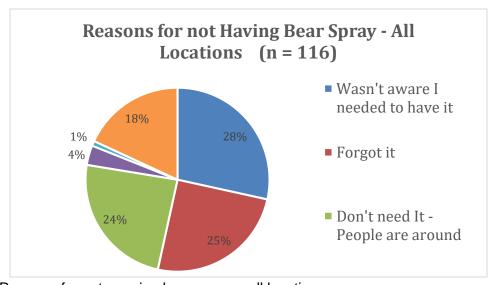


Figure 9. Reasons for not carrying bear spray – all location.

 In collaboration with Alberta Environment and Parks, Bow Valley Wildsmart continues to communicate wildlife safety messaging through our education and outreach programs, our new website, weekly bear reports, media engagement and social media posts. (Recommendation 20)

Town of Banff:

 Administration are exploring additional off-leash dog parks within the Town of Banff in order to provide resident pet-owners with options for recreating outside of wildlife

- corridors. In addition, focused monitoring efforts in 2018, of known off-leash dog areas did not reveal a substantive number of violations. (Recommendation 21)
- Council has approved funding for a strategic communications plan around human wildlife coexistence. Administration is planning to move ahead with this in collaboration with regional partners in Q2 / Q3 of 2019. In the interim, joint Parks Canada / Town of Banff signage and advertising is being rolled out in anticipation of the summer season, and continue to respond to media inquiries on relevant issues (Figure 2). (Recommendation 20)

Town of Canmore:

- During 2018, Town of Canmore Bylaw Services issued:
 - Seventy-nine citations and forty-four warnings related to off leash dogs
 - Four citations and four warnings related to wildlife attractants. Of the citations, three were related to improper storage of attractants and one was related to fruit trees. Of the warnings, two were related to improper storage of attractants and two were related to fruit trees. (Recommendation 21)

Alberta Environment and Parks:

In 2018, Alberta Environment and Parks allocated two seasonal park rangers to patrol
protected areas in the Bow Valley around Canmore. Enforcement actions in the area
increased by about 300%. This was not a permanent staff allocation and would require
more staff in the future. (Recommendation 21)

Parks Canada:

• Implemented year two of the wildlife messaging campaign. Primary messages: Human food kills wildlife" and "Give wildlife space" (Figure 10). Wildlife messaging included in the "Getting Around Banff" guide which is given to visitors stopping at the Banff East Gate (distribution = 584 350 vehicles). (Recommendation 20)



Figure 10. Banff national Park Wildlife messaging campaign posters

• New "clean campsite" signage was installed (Figure 11) on all picnic tables in the campgrounds. In addition, regular campground prevention rounds conducted daily (24/7) to ensure no wildlife attractant were left out. (Recommendation 20)



Figure 11. Clean campsite signage.

- Enhanced wildlife messaging was given through website content on Banff National Park's website focusing on how to behave responsibly around wildlife, through interpretive programs, the Wildlife Guardian team patrolling roadways preventing wildlife jams, and through social media posts. (Recommendation 20)
- A trail survey was conducted by the University of Manitoba during May asking users if they had bear spray (if yes - do they know how to use it? If not, why?) and checking for dogs on leash (and explaining why it is important to have dogs on leash). (Recommendation 20)

Yellowstone 2 Yukon (Y2Y)

 Y2Y provided feedback to Tourism Canmore Kananaskis on the development of their draft tourism strategy, with suggestions on developing communications to visitors to include content on the importance of wildlife in the Bow Valley and how to minimize wildlife-human conflict. (Recommendation 23)

Wildlife Management

Interagency:

- Bow Valley Wildsmart coordinated messaging with Y2Y about highway mortalities and the Bow Valley Gap overpass through social media. Also directed readers to Y2Y's website in order to write a letter to decision makers. (Recommendation 24-25)
- Alberta Environment and Parks continues to consult with Alberta Transportation on the design and implementation of highway mitigation and crossing structures on the Trans-Canada Highway. The Government of Alberta has allocated \$25 million over five years in the budget to identify animal-vehicle collision-prone areas across Alberta to assess the best ways to redirect wildlife and to design and install mitigation measures such as fencing and underpasses or overpasses. Alberta Transportation has already retained an engineering consultant to determine the best location of a wildlife crossing and to design a wildlife overpass and fencing on the Trans-Canada between Lac des Arcs and the Kanannaskis River bridge. (Recommendation 24)

Management Removals

Interagency:

No Grizzly Bear were removed in 2018, from the Bow Valley and Black Bear removals within the Bow Valley continues to be variable (Figure 12). Five black bears and one wolf were killed on the Trans Canada highway in 2018. Two black bears were translocated; one for accessing garbage, fruit trees and entering a garage and another for public safety concerns in the Dead Man's Flats. A young of year black bear cub was found dead in Bow Valley Provincial Park, the cause of death unknown.

 Alberta Environment and Parks and JSG continue to monitor wildlife management removals from the Bow Valley. (Recommendation 24)

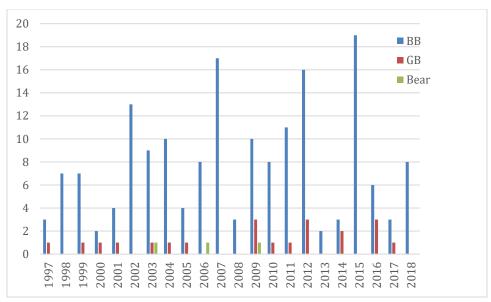


Figure 12. Bow Valley Annual Bear Removals* (n= 197)
*includes road/ rail mortality, translocations and management destruction

 Alberta Environment and Parks continues to consult with Alberta Transportation on the design and implementation of highway mitigation and crossing structures on the Trans-Canada Highway. (Recommendations 27-28)

Parks Canada:

- Parks Canada in collaboration with the University of Alberta analyzed factors affecting
 where large mammals were killed on the railway. The analyses will help identify focal
 areas for mitigations. They will submit a manuscript for publication in 2019.
 (Recommendations 27 & 28)
- Staff cleared deadfall from thirty-two kilometers of wildlife travel routes and railway egress routes to reduce wildlife mortality on the railway, reduce wildlife conflict near the Town of Banff, and improve connectivity within wildlife corridors. (Recommendations 27 & 28)
- Parks Canada installed new and improved fencing along the TransCanada Highway to reduce wildlife incursions. (Recommendations 27-28)