WildSafeBC Annual Report 2018 Nelson and Area

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Executive Summary

The Nelson WildSafeBC (WSBC) program covers the Regional District of Central Kootenay (RDCK) management zones E and F including the City of Nelson and all of the smaller unincorporated communities from Balfour to Bonnington (Figure 1).

WildSafeBC's goal is to reduce human-wildlife conflicts in order to increase public safety and keep wildlife wild. The Nelson WSBC program provides education and promotes best practices by working closely with the Conservation Officer Service (COS), the City of Nelson, BC Parks, the West Kootenay Eco-society, local schools, small businesses and other independent organizations.

In 2018, black bear (*Ursus americanus*) complaints were in line with the yearly averages however calls regarding cougars (*Puma concolor*) were well above average. The WSBC Community Coordinator (WCC) also became aware of roof rats (*Ratus ratus*) showing up in various locations around the city. There had been no known records of rats prior to 2018. Another notable development was the first sighting of a grizzly bear (*Ursus arctos*) feeding on kokanee salmon in Kokanee Creek spawning channel in over 20 years. The grizzly spent three weeks using the spawning channel. All these developments meant 2018 was a busy year for the Nelson WSBC program, in new and interesting ways.

In 2018, the WCC provided 41 presentations, 90 hours of door-to-door campaigns, 20 hours of garbage tagging, distribution of WSBC brochures and held eight booths at various markets. Bear spray demonstrations and training sessions were provided for three organizations and the teachers and administrators of two schools. With the support of local media, the WCC had a potential marketing reach of over 60,000 people.

The City of Nelson continues to demonstrate its commitment to the Provincial Bear Smart Community criteria by increasing the number of municipal bear resistant refuse containers and offering "at cost" bear resistant garbage carts for residents.



Figure 1. WildSafeBC Nelson area of coverage including the City of Nelson and RDCK Areas E and F.

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Highlights from the 2018 Season

Black Bear Activity

From April to September, provincial calls regarding black bears were lower than average in 2018. In Nelson, a burst of activity occurred in May which slackened off through the summer, followed by an increase in September (Figure 2). There were 80 calls in 2018 compared to the annual average of 117.6 from 2013-2017 (Figure 3).

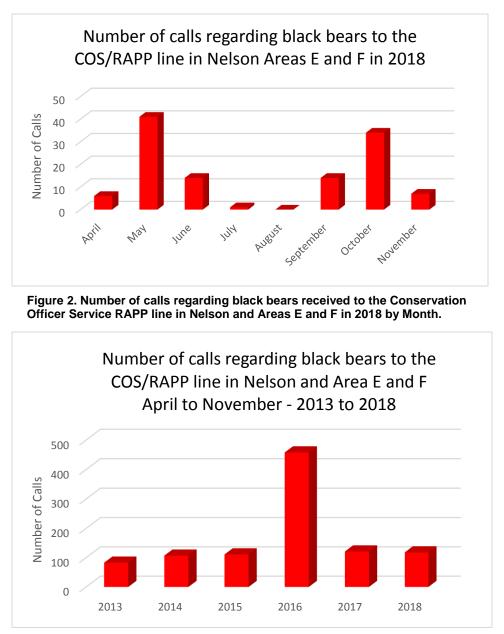


Figure 3. Number of calls regarding black bears received to the Conservation Officer Service RAPP line in Nelson and Areas E and F from 2013 to 2018.

Calls that are received by the Conservation Officer Service 24/7 RAPP line (1-877-952-7277) are uploaded on a daily to basis to WildSafeBC's Wildlife Alert Reporting Program (W.A.R.P.). The data is available on the WildSafeBC website and allows users to view wildlife reports as icons on a map (Figure 2) or the data can be downloaded to provide annual statistics. Bears in conflict as a result of garbage are indicated by the red bear on the map.

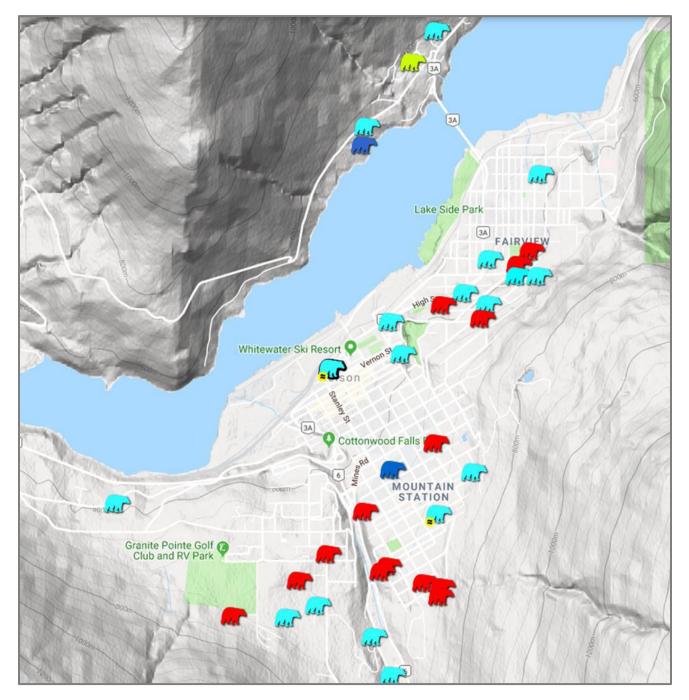


Figure 2. Bear reports in Nelson and the surrounding area for 2018 as viewed on the WARP program.

Cougar Activity

The Nelson area received 29 calls regarding cougar activity compared to the annual average of 11.6 calls between 2013 and 2017 (Figure 5). The highest activity occurred between Nelson city limits and Six Mile Lakes Road along the North Shore. The WCC fielded many calls regarding pets and livestock lost to cougar predation. In response to this increased cougar activity, the WCC initiated an intensive campaign which included 55 hours of door-to-door campaigning, a newspaper article that was also shared online through social media and radio announcements. Cougar sightings subsided shortly after as well as reports of pet and livestock losses.

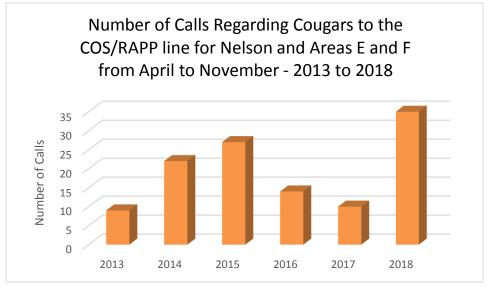


Figure 3. Calls to the Conservation Officer Service RAPP line regarding cougars from 2013-2018 in Nelson and areas E and F.

Presentations

The Nelson WSBC program provided 41 presentations to various schools and organizations over the 2018 season (Figure 4). The presentations focused on managing attractants for bears and cougars, both in the home and while camping and how to avoid dangerous encounters with bears and other predators while traveling in the wilderness.

- SPCA summer camp (3)
- Forest Path Program (5)
- St. Joseph's Elementary School (2)
- South Nelson Elementary School (5)
- Blewett Elementary School (6)
- Ecole des Sentiers-Alpins (6)
- Nelson Community Christian School (2)
- Kootenay Kids Day Care (1)

- L.V. Rogers High School Aboriginal Studies Program (1)
- Boy Scouts (Cubs) Canada (1)
- WorksafeBC (1)
- Camp Koolaree (1)
- Nelson Library Program (1)
- Waldorf School (1)
- Kokanee Creek Visitor Centre (5)



Figure 4. Nelson WildSafeBC Coordinator providing wildlife education and safety information at various schools.

Kokanee Creek Provincial Park

Kokanee Creek Provincial Park and its campground receive significant visits and are an important local resource. There is also has a high level of human and black bear activity throughout the summer months. The campground operators, Ann and Rick Pidgeon, took over the maintenance of the park in 2014 and are committed to reducing conflict with bears. All visitors are educated on managing bear attractants and provided with a WSBC black bear brochure. Garbage management is excellent and is an example of best practices. Regular patrols are made by operation staff and volunteers with either warnings or "cooler confiscations"

if unsupervised food or garbage is found at camp sites. Black bear conflict and the number of black bears destroyed in the park has decreased considerably. At the time of this report, no black bears were destroyed in 2018. The park is now a model of how bears and people can safely coexist.

The WSBC program works closely with BC Parks operations and the West Kootenay Ecosociety that operate the visitor center. The WCC provides brochures and performs bear and cougar safety presentations once a week at the visitor center.

This year a grizzly bear was discovered in the fish spawning channel (Figure 5) and fed for three weeks on kokanee salmon. No conflicts with park visitors were reported. This was the first grizzly observed in the spawning channel in 20 years. Black bears avoided the spawning channel while the grizzly bear was present.



Figure 5. Grizzly bear in Kokanee Creek spawning channel (photo: Joanne Siderius)

Door-to-Door

Door to door campaigns are an important part of the WSBC program. It increases the coordinator's knowledge of the community, and allows the community the opportunity to get to know the coordinator and the program. Door to door campaigns are often initiated by the Conservation Officer Service as result of an immediate source of conflict or an attractant management issue. The most common need for outreach is around unsecured garbage or fruit trees. However, as result of the high cougar activity in 2018, 90 hours was dedicated to door-to-door campaigns that were focused on cougar awareness and education along the North Shore (Figure 6).

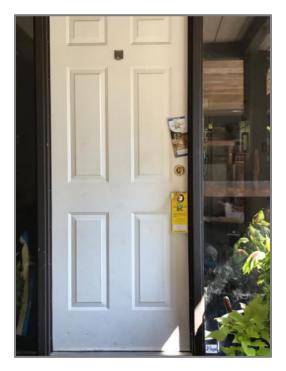


Figure 6. WSBC door hanger and cougar brochure left during a door-to-door campaign.

Garbage Tagging

Of the 73 calls made to the COS regarding black bears that listed an attractant, 66% identified garbage in the Nelson area (Figure 9). Bears that receive a food reward can become food-conditioned and lose their natural wariness of humans. These bears are more likely to remain close to these food sources and may damage property or become a public safety risk.

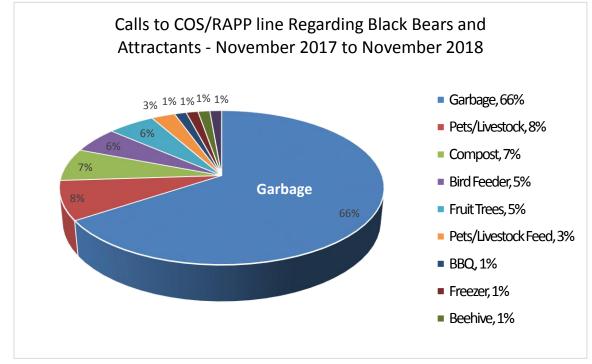


Figure 7. Calls to the Conservation Officer Service where an attractant was reported and related to a black bear conflict or sighting from November 2017 to November 2018 in the Nelson area.

A key aspect of WSBC's program is to promote best garbage management practices and have a positive impact on changing human behaviours. Garbage that is set out on the street at night is a high attractant for black bears as they are less wary of accessing an unsecured food source when human activity is low.

Garbage tagging is an effective tool designed to educate and promote responsible garbage management. It involves traveling an area of the city, in the evening, in which garbage is to be collected the following day. Any garbage that is put out on the curb the night before is tagged with an informational sticker (Figure 8). The WCC attempts to talk to the resident the following day and provides them with garbage management best practices to keep wildlife wild and the community safe. In 2018, 20 hrs were spent in this activity.



Figure 8. The WCC placing educational stickers on garbage bins placed out the night before garbage collection.

Brochure Distribution

The WSBC brochures were widely distributed throughout the Nelson area and were re-stocked throughout the season (**Error! Reference source not found.**). A full complement of brochures was placed in the following locations:

- Ministry of Environment office in downtown Nelson
- Kootenay Lake Forestry Centre
- City of Nelson Visitor Centre
- Kokanee Creek Provincial Park visitor centre
- Regional District of Central Kootenay
 office

Black bear brochures were distributed to all outdoor and bicycling stores in downtown Nelson and all motor sport dealers, hotels, convenience stores, restaurants and marinas along Highway 3A on the North Shore. The coordinator also facilitated the sale of 1000 black bear brochures to Kokanee Creek Provincial Park campground for distribution to all campers during check in.



Figure 9. WSBC brochures at the Kootenay Lake Forestry Centre.

Media

The WCC continued to foster a good relationship with local media. Over the 2018 season, the WCC had a column in the local newspaper, the Nelson Star, with seven published articles (Error! Reference source not found.). Several radio announcements and interviews were broadcast on EZ rock 106.9, Juice FM 103.5 and Kootenay COOP Radio 93.5. The estimated potential reach of these combined media is over 60,000 people. Some stories were also shared online through social media and likely reached a larger audience both within and beyond the Nelson area.



unmanged compost or truit and another neighbour may provide water by way of a pond or fountain. Animals will seek out the necessi-ties of life in areas where they exist, but wort bother with an area that provides them with nothing. Try to work with your neigh-bours to create neighborhoods that are free from wildlife attractant the have felt is that the cre Try to work with your neigh-bours to create neighborhoods that are free from wildlife attractants. Create action groups or commit-tees to discuss and review potential areas of risk. Some neighbourou It is nd in the ings for ntly provide oons, bear nks. ra

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WildSafeBC gratefully acknow edges the support of the progras by the Ministry of Environmen the Columbia Basin Trust, the Ci of Nelson, and Areas E and F of the Regional District of the Centr Kootanew. Regional Kootenay

Figure 10. Article in the Nelson Star newspaper written by WSBC Coordinator.

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Public Displays

The WCC had booths in eight craft and farmers' markets during the summer (Figure 11) including popular events such as:

- Harrop market
- Cottonwood market
- Canada Day Fair at Lakeside Park
- Balfour Daze
- Red Fish Festival

These booths provide an opportunity to engage with many citizens and promote the bear resistant garbage carts offered by the City of Nelson at cost. Many issues were discussed and questions answered around attractant management, reducing wildlife conflicts and more recent issues such as rats.



Figure 11. WSBC booth at various events in 2018.

Bear Spray Training

One of the many goals of the WSBC Nelson program is to increase the use of bear spray by outdoor enthusiasts and people who work in bear country. Bear spray is an effective deterrent to prevent bears from inflicting injury in the event of an attack. A review of 83 bear encounters in Alaska, where bear spray was deployed, found that 98% were uninjured by close-range encounters ((Smith, Herrero, Debruyn, & Wilder, 2009). While wind can interfere with the accuracy of the spray, it reached the bear in all cases.



Figure 12. Bear spray training at L V Rogers High School.

Bear spray should be part of a person's safety equipment when travelling in bear country and can also be an effective

deterrent for other dangerous wildlife such as cougars, coyotes and wolves.

In 2018 the WildSafeBC Nelson program offered bear spray training and demonstrations for a number of organizations. Valhalla Pure Outfitters (VPO), a large outdoor retailer in Nelson, has made bear spray training an annual event for all its staff. The ongoing training to VPO staff will also benefit their customers and increase the number of knowledgeable users. Other organizations that received bear spray training included: Forest Path Program (parents and teachers), WorkSafeBC, L V Rogers High School students (Figure 12), and the Waldorf School (Figure 13) (teachers and school administrators).



Figure 13. Bear spray training at the Waldorf School.

City of Nelson

The city of Nelson has made significant commitments to becoming a "bear smart" community. Nelson has increased its support of the WSBC program and continues to offer "at cost" Toter bear resistant garbage carts for residents. The WCC supported the City in its efforts by promoting the bear resistant garbage carts at markets. In 2017 and 2018, the City also purchased a dozen Haul-All "Hid-a-Bag", bear-resistant refuse containers that were placed in parks and public spaces that replaced the older open units (Figure 14).

In 2017, the City transitioned away from trapping skunks in favour of an education approach for attractant management and skunk population control. Calls regarding nuisance species such as skunks, raccoons and rats, are directed to the WCC who provides information on how to reduce conflict in a non-lethal manner.

In 2018 it was recognized that rats had established themselves in the city. Once the WCC learned of these sightings, immediate action was taken. This included a door-to-door campaign in the impacted area, a newspaper article and information broadcast on two radio stations. The public was encouraged to report sightings to establish a database showing locations within the City and to determine levels of colonization.



Figure 14. Haul-All Hid-A-Bag bear resistant containers installed by the City of Nelson. A total of 12 have been installed since 2017.

Objectives for 2019

The Nelson WSBC program will continue to support the City of Nelson's efforts in becoming a "Bear Smart" community status. There are 6 criteria for becoming a "Bear Smart" Community

and this includes "developing and maintaining a bear-proof municipal solid waste management system. Ongoing efforts to replace open garbage receptacles with Haul-All "Hid-A-Bag" units are important steps in this process as well as offering Interagency Grizzly Bear Committee certified bear-resistant garbage carts to the public at cost.

Fruit trees continue to be a significant bear-attractant and source of conflict, both on private and public lands throughout the City of Nelson. The WCC will continue to collaborate with the City of Nelson by completing a mapping project of fruit trees on public lands. The WCC will use this map to work with City to find ways to replace or manage these trees. An education campaign will be launched in the spring of 2019 to highlight the human-wildlife conflict issues around unmanaged fruit trees. The public will be provided with fruit tree management options and best practices.

The program will also continue to collaborate with the Conservation Officer Service (COS) and promote the use of the RAPP line (1-877-952-7277) to report dangerous wildlife in an urban setting. The WCC also supports the COS by providing urgent education and safety information to residents affected by heightened wildlife activity. The WCC will continue to provide public education through media, educational seminars, the school Junior Ranger Program and special events. The WCC is committed to supporting the city of Nelson, the Regional Districts, local businesses, schools, and non-profit groups in reducing human-wildlife conflicts.

Acknowledgments

The Nelson WSBC program would like to acknowledge the generous support it receives from its sponsors, the Columbia Basin Trust, the Regional District of Central Kootenay and the British Columbia Conservation Foundation and the City of Nelson.

The Nelson WSBC program also values the important support provided by Conservation Officers Nathan Smienk and Jason Hawkes as well as the following schools for their commitment to the WSBC education program: Kootenay Lake School District 8, École des Sentiers-alpins and the Waldorf School. A special thanks to Anne and Rick Pidgeon operators of Kokanee Creek Provincial Park campground as well as Joanne Siderius and the crew at the Kokanee Creek Visitor Centre for their commitment and hard work in keeping wildlife wild and campers educated and safe. Finally, thank you to the Nelson Star Newspaper, 103.5 Juice FM Radio and the Nelson Co-op radio for promoting our WildSafeBC messaging to the community at large and helping us deliver our safety information to a wider audience.



British Columbia Conservation Foundation

Works Cited

Smith, T. S., Herrero, S., Debruyn, T. D., & Wilder, J. M. (2009). Efficacy of Bear Deterrent Spray in Alaska. *The Journal of Wildlife Management*, *7*2(3), 640-645.