RESORT MUNICIPALITY OF WHISTLER

Human-Bear Conflict Management Plan

WHISTLER

2nd Edition, October 2016

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1. BACKGROUND

The Resort Municipality of Whistler (RMOW) has been engaged in proactive initiatives to reduce and prevent human-bear conflicts since 1995. The Whistler Black Bear Task Team was formed in 1997, and produced the *Black Bear Management Plan* in 1998. In 2004, bear biologist Wayne McCrory wrote a *Bear Hazard Assessment* for Whistler. In 2005, McCrory produced a follow-up *Bear-People Conflict Prevention Plan*. The information provided in the reports, and supported by strong community interest, prompted Council to pass a motion in 2006 to prepare the groundwork for making an application to the province to become a Bear Smart Community.

The commitment accelerated the planning and implementation of bear smart initiatives, and a number of the recommendations and implementation priorities in the earlier reports were acted upon. The 2009 Human-Bear Conflict Management Plan (the Bear Plan) was written using the earlier reports as background material with direct input from members of Whistler's Bear Working Group. The completion of the Bear Plan and its adoption by Council in June 2010 was the final step to completing the groundwork for applying to the provincial government for Bear Smart Community status.

In October 2011, the RMOW received Bear Smart Community status from the Ministry of Environment. Since then, the RMOW and its partners have continued to address issues identified in the 2009 Bear Plan in an effort to further reduce human-bear conflict in Whistler.

In October 2015, the Whistler Bear Working Group was made a committee of Council called the Whistler Bear Advisory Committee (WBAC). This further secures a place for prioritizing bear management in the RMOW.

The WBAC reviewed the 2009 Bear Plan in 2016, and prepared an updated list of actions. Those actions will guide the RMOW and its partners in bear management for the next five years.

1.1. Bear Smart Community Program

The Bear Smart Community program was designed by the Ministry of Environment in partnership with the British Columbia Conservation Foundation and the Union of British Columbia Municipalities. It is a voluntary, preventative conservation measure that encourages communities, businesses and individuals to work together.

The goal is to address the root causes of human-bear conflicts, thereby reducing the risks to human safety and private property, as well as the number of bears that have to be destroyed each year.

The program is based on a series of criteria that communities must achieve in order to be recognized as being "Bear Smart". There are six required components a community must complete—or be committed to and engaged in implementing—in order for it to be designated a Bear Smart Community.

Table 1. Status of required components for designation as a Bear Smart Community

Component	Completed for Whistler
Prepare a Bear Hazard Assessment (BHA) using the criteria outlined.	√ (McCrory 2004)
Prepare a human-bear conflict management plan to address the hazards and conflicts identified in the BHA.	$\sqrt{\ }$ (adopted by Council June 15, 2010)
Implement a continuing public education program directed at all sectors of the community.	√ (Get Bear Smart Society, COS, RMOW)

Implement "Bear Smart" bylaws that prohibit the provision of food to bears as a result of intent, neglect, or irresponsible management of attractants.	√ (Garbage Disposal and Wild- life Attractants Bylaw No. 1861 passed March 2009)		
Develop and maintain a bear-proof municipal solid waste management system.	$\sqrt{\ }$, continuing progress		
Revise planning and decision-making documents and policies to be consistent with the bear-human conflict management plan.	√		

The continuation of the WBAC is fundamental to Whistler's success in achieving Bear Smart Community status. The WBAC is a partnership that includes federal and provincial agencies, municipal government, businesses, community groups and individual citizens acting as a dedicated team whose goal is to provide the community with leadership and direction as a Bear Smart Community.

1.2. Bear Response Plan

Once Bear Smart Community Program status is awarded, more options become available for managing human-bear conflicts in that community. The Conservation Officer Service (COS) policy, *Preventing and Responding to Conflicts with Large Carnivores*, provides direction for developing a response plan for human-bear conflicts that is specifically tailored to that community.

The response plan allows the COS and its partners the option of using non-lethal techniques, such as bear aversion, when bears come into the community and exhibit undesirable behaviours. Non-lethal control of bears, including short-distance (<10 km) relocation, aversive conditioning, and on-site release, are used in communities where a plan outlining responses to human-bear conflicts has been prepared and approved by the COS Regional Director. Non-lethal management techniques may be used when it is determined that a bear's behaviour does not pose a moderate to high risk to public safety or cause significant damage to public or private property.

The COS and RMOW review and revise the bear response plan to meet evolving management issues.

1.3. General Bear Safety Considerations

In general, the 2004 McCrory Bear Hazard Assessment stated that a low level of bear hazard exists throughout the RMOW because human developments overlap with generally low-quality black bear habitats. The risk is increased in these areas, however, by the availability of non-natural food attractants such as garbage, bird-feeders and landscaped berry bushes. A somewhat higher hazard also exists where more concentrated black bear foods occur seasonally, such as at the golf courses in the spring, the Valley Trail, local schools, and many of the children's play set areas.



Since 2004, there have been eight black bearcaused injurious encounters that have resulted in non-life-threatening injuries. Now that grizzly bears are now known to use the area, it is prudent to provide the public with more information regarding their presence and how to minimize the chance of an encounter. With respect to black bears, of the three potentially life threatening categories, a predaceous attack would be the most likely to be fatal. In the other two categories - food/garbage-associated attacks and a chance encounter with a defensive mother black bear - injuries tend to be minor (McCrory, 2004).

The Whistler mountain bike park trail system and proposed expansion presents a higher-risk situation where there is the potential for a defensive mother black bear launching an injurious attack on a biker. Several bear-biker collisions have already occurred.

Events in Whistler that include trail running races or trail biking races, must consider the added risks of pursuing these activities in bear country. While rules dictate that people need to stay on course and cannot stop for bears during a race, the problem is that bears may react defensively toward people who are continually running/biking toward them. Normally, people would back away and give bears their space and the interaction would remain safe. Running/biking toward bears is seen as an offensive action in the animal world and may result in the animal taking some kind of action - usually a bluff, but it could get more serious particularly after several people do the same thing one after the other.

2. WHISTLER'S UPDATED BEAR PLAN

Whistler's 2009 Bear Plan paved the way for the community to apply for and receive Bear Smart Community status. In 2016, the Whistler Bear Advisory Committee reviewed the 2009 plan and other related documents to determine what actions had been completed and to develop a list of guiding actions for the next five years.

2.1. What's Been Accomplished Since 2009

The 2009 Bear Plan outlines an action plan for Whistler. The following table includes the action plan and actions taken.

Table 2. Status of 2009 Bear Plan actions

Recommended Action	Action Taken			
Develop a Community Vision That Supports Bear Smart Principles	The community agrees that we must minimize the number of bears killed as a result of human-caused problems. The challenge is for all residents (short and long term) to understand bear behavior and to take action to change our behavior to reduce potential conflicts.			
Implement & Enforce Bear-Proof Waste Management Throughout Whistler	The RMOW continues to provide bear-proof containers at its depots, parks and village locations. The Callaghan transfer station is surrounded by an electric fence, and the Nesters and Function sites are now fully fenced. A weakness continues for residents without cars who can struggle to get their waste to the central depots and may dispose of waste illegally by dumping, or stockpile it which may attract bears to residences and sheds.			

Reduce availability of other attractants (landscaping plants, fruit trees, birdfeeders, etc.)	The RMOW passed a policy in January 2013 that Sorbus aucuparia (Mountain Ash, single stem tree); Sorbus sitchensis (Mountain Ash, shrub, multi-stem); Vaccinium (blueberries & huckleberries); and clover will no longer be approved in landscape plans requiring municipal approval. The RMOW and other businesses also continued to remove attractants in the village (e.g., established mountain ash that attract bears). The message is constantly shared with the broader community.
Maintain and Support the Public Education Program	The RMOW took on a bigger role in public education starting in 2014 with the establishment of the Bear Smart Program Assistant position. The Get Bear Smart Society and Conservation Officer Service also provide public education.
Maintain and Support the Whistler Bear Working Group	The Whistler Bear Working Group was made a Committee of Council in October 2015, and is now called the Whistler Bear Advisory Committee (WBAC). This further embeds bear management into municipal processes.
Modify bylaws and implement zero- tolerance compliance enforcement	The Garbage Disposal & Wildlife Attractants Bylaw, No. 1861 is being updated and will include improvements for bear management recommended by WBAC. The COS Bear Response Officer position has been replaced by adding another full time officer who resides in Whistler and focuses on bear management.
Modify green space development and management planning	Bear management is considered during development proposal reviews, mainly related to planting plans.
Maintain the intent of the Official Community Plan, including the PAN designations, and other development plans and permits	Bear management policies were included in the 2013 OCP. Presumably when it is re-instated, those policies will still exist. In the meantime, staff are aware of bear management issues particularly related to solid waste infrastructure and landscaping.
Additional recommendations: Encourage School District #48 to engage in Bear Smart practices Improve bear information on RMOW website	The BSPA continues to reach out to the local schools with some success. Michael Allen is in the elementary schools annually. The RMOW has significantly improved its website and the bear information it contains. See https://www.whistler.ca/services/environmental-stewardship/bears-and-wildlife/bears

2.2. Input Documents

The following documents were reviewed and relevant recommendations brought forward into the Human Bear Conflict Management Plan update.

- The Preliminary Bear Hazard Assessment of RMOW, August 2004, Prepared by McCrory Wildlife Services, Ltd.
- Human-Bear Conflict Management Plan for RMOW, October 2009, Prepared by Maggie Paquet
- Minutes of Whistler Bear Advisory Committee (formerly the Whistler Bear Working Group)

- Minutes and notes from WBAC subcommittees: Car-free Residents with "Discards", COS Bear Response Plan
- WBAC Submissions/Correspondence to RMOW staff with respect to Garbage Disposal and Wildlife Attractants, Bylaw No. 1861 update, and Special Events Guidelines
- Get Bear Smart (GBS) and Resort Municipality of Whistler (RMOW) Bear Think
 Tank/Brainstorming Facilitated Session Minimizing Human/Bear Conflict in Whistler: Bear
 Think Tank Strategies and Initiative, 2015. To view report:
 https://www.dropbox.com/s/e3pxz1sza6btgwe/GBS Brainstorming SummaryRecomendati
 ons.pdf?dl=0
- Human-Bear Conflict in North America: A review of causes and management approach by Sarah Elmeligi, MNRES, 2015. To view report: https://www.dropbox.com/s/e3pxz1sza6btgwe/GBS Brainstorming SummaryRecomendations.pdf?dl=0
- Short Summary of Bear Smart Community Survey Results by Sylvia Dolson, Get Bear Smart Society, February 2016 To view report:
 https://www.dropbox.com/s/76ttd5oyrbekhxa/Summary%20of%20Get%20Bear%20Smart%20Community%20Survey%20Results.docx?dl=0

2.3. The Issues

The root cause of conflict activity is the attraction to sources of human food or waste that are easily accessible by bears. In Whistler, the main sources are:

- Residents: improperly stored or stock piled garbage and recycling (mostly empties) are the
 dominant attractant, as well as bird feeders, poorly managed composters, barbecues, pet
 food stored outside, and fruit bushes/trees
- Commercial areas: unsecured garbage, recycling, and restaurant grease
- Visitors: intentional feeding, particularly to lure a bear closer for a photograph; or just getting too close for a selfie (and potentially, surrounding a bear)

Many bears in Whistler are habituated to some extent. Although some do remain wary, some exhibit site-specific habituation, such as on the ski hill or on golf courses because a bear's feeding strategy is to tolerate human presence in locations or at times where/when there are less abundant natural food sources. Some bears take advantage of anthropogenic food sources (garbage, recycling, compost, BBQ grease, etc.) as well as landscaped plants (including grass on golf courses during the spring/fall) more than others. Some use these sources to supplement their wild diet seasonally or only during severe natural food shortages.

The main causes of bear mortality in Whistler in the last 5 years are conflict kills, collisions with motor vehicles, and infanticide. In the past, almost all mortality resulted from conflict kills. MVA's have increased since the highway improvements. Infanticide was almost unheard of in this area 15 years ago – it is not known why it has increased recently. The bear population in 2016 is approximately 50-60 black bears, about half of the previous estimated total.

An average of 8 – 9 black bears are killed every year as a result of conflict in Whistler. This amounts to a mortality rate of about 15% - twice the Ministry Of Environment's rate of sustainable human-caused mortality which is 8%. This total does not include other causes such as road mortality, infanticide, or hunting. An abnormally high number of orphaned cubs were also reported in 2015 – some died and three were over-wintered at a care facility and released back into their home range in May of 2016.

Generally, rates of interaction between humans and black bears, including sightings and conflict activity are dependent on the amount of natural food available to bears within their habitat. When natural foods are scarce, bears may enter residential and commercial areas in search of any food they can find.

Fall is often the highest conflict period of the year. This seasonal variation is caused by bear biological factors, like hyperphagia when during the fall, a bear's physiological responses to search for food are naturally heightened in order to gain sufficient weight to survive hibernation. Animals that have an insufficient fat layer tend to den later. Fall is also when most natural foods of any caloric value have been depleted further influencing the level of conflict.

Lastly, a community or region's bear management policy has a direct effect on the number of bears killed as a result of human-caused conflict. In BC, the Conservation Officer Service (COS) policy, Preventing and Responding to Conflict with Large Carnivores (MOE, April 2016), dictates officer response. Officers make decisions based on the policy and its Bear Conflict Response Matrix (see Appendix A). Each officer, however, has discretion on how and when the management actions are applied. The RMOW, COS and Get Bear Smart (GBS) Society are currently developing a Bear Response Plan to clearly articulate how the policy and matrix will be applied in Whistler given its Bear Smart Community status.

Visitors, non-permanent and new residents in bear country are more likely to report bear sightings. There is a strong aversion by local residents to report conflicts to the COS, even when a bear has entered their residence and caused damage, for fear that the bear will be killed. The WBAC attempts to counter this sentiment in the media with messages that emphasize the need to take responsibility for ensuring attractants are not accessible and calling the COS early so that non-lethal management techniques can be employed earlier in a bear's habituation cycle.

In addition to its attention to black bear management, in August 2014, the RMOW passed a resolution in support of the recovery of the threatened Grizzly Bear populations in southwest BC. Since then, the community Councils of Squamish, Pemberton, Lillooet, and the Board of the Squamish Lillooet Regional District, have all passed similar resolutions. This unanimous support for recovery throughout the entire Sea-to-Sky corridor indicates the strong value both residents and visitors associate with maintaining the iconic grizzly bear in our wilderness backyard. More information about grizzly bears in the area can be found at: http://www.coasttocascades.org/.

The presence of grizzlies as well as black bears in the area elevates the level of concern, particularly along trails that travel through known grizzly bear habitat. Signage to inform trail users of the possible presence of grizzly bears and black bears is essential to avoid liability suits. Trail/campsite closure (temporary or permanent) should also be considered as necessary.

For definitions of terms used see: (http://www.bearsmart.com/wp-content/uploads/terms-concepts-h-b-conflict-mgmt-Hopkins-2010.pdf)

3. RECOMMENDED ACTIONS

The updated edition of the Bear Plan identifies ongoing issues for our community and recommendations for improvement. The Whistler Bear Advisory Committee will review this document and its recommendations every 3 – 5 years to assess progress and address new issues that may arise.

The following recommendations for the community have been reviewed by the Whistler Bear Advisory Committee (WBAC) and recommended as priorities:

3.1. Infrastructure

- 3.1.1. Plan future trail and recreation sites with both black and grizzly bears in mind, and place appropriate informational signs.
- 3.1.2. Continue to integrate bear-proof waste management infrastructure that allows for adequate space for solid waste disposal and diversion, and efficient solid waste servicing requirements into the municipal permitting process.

3.2. Planning & Policy

- 3.2.1. Continue to meet the requirements for provincial Bear Smart Community status as designated by the province's Ministry of Environment.
- 3.2.2. Continue to support the Whistler Bear Advisory Committee (WBAC).
- 3.2.3. Consider RMOW funding for third party bear managers or alternate methods (volunteers) to supplement COS response
- 3.2.4. Continue with the Bear Exclusion Zone, or "No-Go Zone," designation and management approach, as defined in the 2009 Human-Bear Conflict Management Plan, Section 3.2.5. The main and upper Village are areas where bear presence receives immediate response to move the bear out. See map in Appendix B.
- 3.2.5. Continue to consult with the WBAC on the Garbage Disposal and Wildlife Attractants Bylaw No. 1861 update (WBAC recommendations included in Appendix C) and consider increasing the associated fines.
- 3.2.6. As Bylaw Services resources allow, enforce the Garbage Disposal & Wildlife Attractants Bylaw, No. 1861, proactively and as a high priority.
- 3.2.7. Review the RMOW Special Events Guidelines annually against the performance of events to determine if further bear smart recommendations should be incorporated.
- 3.2.8. Ensure that municipal planning considers how green space locations, bear movement corridors, solid waste management sites, landscape planting plans, Firesmart planning, and public use of outdoor space can be designed to minimize human bear conflicts.
- 3.2.9. Ensure the Official Community Plan (OCP) and all relevant community documents continue to include Bear Smart principles.
- 3.2.10. Support conflict data collection and analysis that allows stakeholders to better identify conflict patterns in order to better target solutions, potentially through GIS mapping.
- 3.2.11. Audit municipal parks for potential safety issues related to children's play areas and bears.
- 3.2.12. Encourage the rehabilitation of Whistler's orphaned cubs and their release back to the wild.
- 3.2.13. Investigate opportunities for improving access to the central waste and recycling depots for residents without cars.

3.3. Public Education

- 3.3.1. Continue to fund the Bear Smart Program Assistant (BSPA) and related public education and communications programs, and consider extending the hours assigned to the position.
- 3.3.2. Keep www.whistler.ca updated to reflect current information; continue to post relevant bear smart advisories and tips on RMOW social media channels. Ensure website content is accurate and in alignment with best bear management practices.
- 3.3.3. Investigate erecting signs at visitor entry points to Whistler identifying that they are in bear country.

3.4. Partnerships

- 3.4.1. Continue to provide funding to the Conservation Officer Service to provide enhanced services related to Whistler's status as a Bear Smart community.
- 3.4.2. Encourage local schools and daycare facilities to collaborate with the WBAC and incorporate Bear Smart practices on school properties.
- 3.4.3. Encourage the COS and RCMP to regularly review and improve where needed their non-lethal bear management training programs.
- 3.4.4. Continue to support the COS in applying non-lethal management techniques.
- 3.4.5. Support initiatives to reduce bear habituation and safety issues related to wildlife viewing along the Callaghan Rd.
- 3.4.6. Monitor and encourage proactive bear management at local private campgrounds, including replacement of food-hanging system with metal storage lockers.
- 3.4.7. Encourage Whistler Blackcomb to continue to mitigate human-bear conflict and potential for bike park collisions.

4. CONCLUSION

The RMOW, its partners and the community continue to make progress in bear management, while still facing some difficult, ongoing problems. People are certainly aware that we must do what we can to reduce the availability of attractants, yet problems still exist. The large turnover of new residents each year means that public education is ongoing and necessary. Many newcomers have no idea bears live in Whistler and don't know what to do with their waste and recycling if they have no car. So we keep learning and improving and talking to people.

We must continue to strive to improve our waste removal and storage systems, our communications, and to provide all residents with information that will make their properties and behaviours truly bear smart. The Human-Bear Conflict Management Plan, 2nd Edition, identifies what has been accomplished since 2009, ongoing and new issues, and lays out a road map for the next five years.

The RMOW, its partners and the community of Whistler accept this challenge.

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Appendix A: MOE Policy, *Preventing and Responding to Conflict with Large Carnivores*: Bear Conflict Response Matrix (April 2016)

Definitions

https://www.dropbox.com/s/lpn0qtge580a23d/BC%20BEAR%20Conflict%20Matrix.pdf?dl=0]

		Bear Behavior/Level of Conflict					
		Level 1 Wary of human (leaves on approach)	Level 2 Habituated (indifferent to presence of humans)	Level 3 Assertive behavior or causes property damage (including livestock, pets)	Level 4 Follows/bluff charges humans (threatening) or is fed by humans	Level 5 Causes human injury (defensive/sur prise attack). Enters unoccupied building	Level 6 Predatory or non-defensive attack. Enter- occupied buildings
	Level A Bear is feeding on natural foods in natural area or continuous bear habitat	Manage	Manage	Manage with option to remove	Manage with option to remove	Manage with option to remove	Destroy
2	Level B Bear is feeding on natural foods in area adjacent to continuous bear habitat	Manage	Manage	Manage with option to remove.	Remove from population	Remove from population	Domy
mag guin	Level C Bear is feeding on natural foods in sub-urban or residential area with immediate escape route	Manage	Manage	Manage with option to remove	Remove from population	Remove from population	Destroy
manuar rype and recumb source	Level D Bear is occasionally feeding on non- natural foods in remote area (camps etc).	Manage	Manage with option to remove	Manage with option to remove	Remove from population	Remove From population	Destiny
Habitat 13	Level E Bear is frequently feeding on non- matural foods in residential area with immediate escape route	Manage with option to remove	Manage with option to remove	Remove from population	Remove from population	Destruy	Destroy
	Level F Bear is frequently feeding on non- natural foods in confined/urban areas with no immediate escape route or enters an occupied building	Manage with option to remove	Remove from population	Destroy	Destroy	Destroy	Destroy

Appendix B: Bear Exclusion Zone ("No Go Zone")

(from 2009 Human-Bear Conflict Management Plan)

Appendix 4 - Enlarged map of Bear Exclusion Zone for Whistler, 2005.



Appendix C: WBAC Recommended Amendments to Garbage Disposal and Wildlife Attractants Bylaw, No. 1861

- Change wildlife resistant container to wildlife-<u>proof</u> in the definition and throughout the sections
 "wildlife-proof container" means a fully enclosed container with a sealed lid and a self-latching mechanism of sufficient design and strength to prevent access by dangerous wildlife, that is securely affixed to the ground or to an immovable object or fixture, and that is described in Bylaw Appendix A;
- Add Section: Landlords must ensure that tenants are provided with bear-proof garbage and recycling disposal – either on site or provide a collection service to remove garbage and recycling from the property on a minimum weekly basis. Any on-site disposal must be bearproof and emptied on a minimum weekly basis.
- Make bear-proof waste shed guidelines requirements mandatory. Change enclosure specs to add that exterior walls should not be made of wood. Delete page 2 that shows an open style shed with saloon style doors. Perhaps, in the interest of encouraging recycling, delete page 1 as well as it only shows a floor plan that includes a garbage bin with no options for recycling. By allowing this design w/o recycling options, we open up the possibility of storing the recycling outside of an enclosure.
- Update Appendix A contact info. in Bylaw
- Amend Section 4 to read: Garbage and recycling containers required for temporary special events, such as sporting events, concerts, weekend ball tournaments, weddings, and outdoor conventions are subject to the requirement under section 3.
- Section 16 > change number of units from 12 to 6: Single family and multiple family residential development having six or more dwelling units shall provide a garbage storage site located inside a building or within a wildlife proof enclosure or within a wildlife resistant container.
- Add a section that deals with ICI waste > No person shall dispose of industrial, commercial
 and institutional waste or recyclable materials except into:
 - (a) a wildlife proof container;
 - (b) a container in a wildlife proof enclosure;
 - (c) a wildlife proof garbage compactor; or
 - (d) subject to section 6, a recycling facility.
- Section 6: should include ICI waste as well as domestic garbage.
- Section 17: No person shall store, handle or dispose of wildlife attractants in such a way that they attract or are accessible to dangerous wildlife.
- Clause 8 –does this include litter or just illegal dumping? Do we need to reference provincial law here?
- Clause 14 reword to be clearer it now says if you have wildlife proof container, it must be
 closed as opposed to containers must be wildlife proof or in secure building/enclosure, also
 requires people to have enclosure as opposed to maintain enclosure if have it.

