HUMAN-BEAR CONFLICT MANAGEMENT PLAN

District of Port Hardy



Prepared for **District of Port Hardy**

British Columbia

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Disclaimer

The purpose of the District of Port Hardy Human-Bear Conflict Management Plan is to develop viable management strategies aimed at reducing human-bear conflict within the community. This document was prepared in accordance with the "Bear Smart" guidelines identified in the "Bear Smart" Community Background Report (Davis et al. 2002). It is the authors' intent to craft this document in partnership with Municipal, Regional, Provincial and First Nations Governments, the Conservation Officer Service and local residents to ensure a high level of achievability. This report is based on the most accurate information available and the author assumes no liability with respect to the use and application of the recommendations contained herein.

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District Of Port Hardy, B.C., Canada 2009

Human-Bear Conflict Management Plan

| Designation of Provincial "Bear Smart" Community Status by the Ministry of Environment requires that the Human-Bear Conflict Management plan be fully adopted and approved by Municipal staff, Mayor and Council. |
|---|
| Recommended: |
| Accepted: |
| The information contained within this document has been designed in partnership with and fully adopted by the District of Port Hardy, BC. |

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I.0 INTRODUCTION:

Conflicts between humans and bears continue to present a growing problem within the District of Port Hardy. Recognizing the importance of developing human-bear conflict mitigation strategies, the local Conservation Officer Service and the District of Port Hardy Staff and Council have partnered to initiate the Ministry of Environment "Bear Smart" Community Program.

The following HUMAN-BEAR CONFLICT MANAGEMENT PLAN (PHASE 2 OF THE MINISTRY OF ENVIRONMENT "BEAR SMART" COMMUNITY PROGRAM REQUIREMENTS) is specific to the District of Port Hardy. The purpose of this document is to provide Port Hardy with a set of attainable strategies designed to address the problems identified in the bear hazard assessment with the main objective of establishing a long-term sustainable "Bear Smart" program. This management plan has been developed in concert with District Council and Staff, the Conservation Officer Service, Fox's Disposal Services, local residents, local businesses, and several subject matter experts with expertise in bear ecology and conflict reduction. Recognizing that a feasible and effective management approach requires commitment from many stakeholders, this plan describes what steps will be (or have recently been) taken and who will be accountable for implementation.

The "Bear Smart" Community Program outlines 6 criteria that provide the framework to support the development of a long-term sustainable bear management program. This document addresses Phase 2 of a series of 6 steps required for Port Hardy to achieve Ministry of Environment "Bear Smart" Community Status:

| Steps | Description of Activity | Completed |
|-------|--|-------------|
| 1 | Prepare a Bear Hazard Assessment using required criteria. | √ Completed |
| 2 | Prepare a Human-Bear Conflict Management Plan designed to address the bear hazards and land-use conflicts identified in the hazard assessment. | In Progress |
| 3 | Revise planning and decision-making documents to be consistent with the human-bear conflict management plan. | |
| 4 | Implement a continuing education program directed at all sectors of the community. | |
| 5 | Develop and maintain a bear-proof municipal solid waste management system. | |
| 6 | Implement "Bear Smart" bylaws prohibiting the provision of food to bears as a result of intent, neglect, or irresponsible management of attractants. | |

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2.0 GOALS AND OBJECTIVES

The goal of the Human-Bear Conflict Management Plan is to directly reduce the probability of negative human-bear conflicts (and reduce the liability related to these encounters through due diligence and best management practices). This goal will be met by achieving the following objectives:

- 1. Implement a bear-resistant waste management system.
- 2. Amend Garbage Bylaw 11-2008 to include "Bear Smart" language and adjust all related bylaws and waste management agreements accordingly.
- 3. Manage community green space areas and trails to accommodate safe pathways for humans and dissuade travel by bears.
- 4. Manage the green space (e.g., brushing, eradicating clover, and improving sight lines) with special emphasis around schools and playgrounds.
- 5. Develop a community specific "Bear Smart" education program.
- 6. Develop a recording and monitoring system designed to accurately capture bear activity within the community to align with existing data collection for the purpose of identifying conflict zones, public education strategies and success measures.
- 7. Sustain an active Bear Stewardship Committee composed of a diverse range of stakeholders for the purpose of assisting with the implementation of the required "Bear Smart" criteria. This team would also be responsible for consistent evaluation of the adopted bear management techniques to ensure their effectiveness and make recommendations for improvement based on feedback from local residents, stakeholders, as well as new scientific and management information.

The following sections of the report describe a plan, based on the recommendations identified in the Bear Hazard Assessment and consultation with the Conservation Officer Service, for achieving each of these objectives.

3.0 "BEAR SMART" COMMUNITY-BASED PUBLIC EDUCATION:

The purpose of a "Bear Smart" public education program is to create a community composed of educated individuals resulting in a tangible reduction of human-bear conflicts.

3.1 CONSIDERATIONS:

Human-Bear conflict is a persistent wildlife management problem within the District of Port Hardy and neighboring communities. Public education is recognized by wildlife management agencies as an invaluable component of the "Bear Smart" Community Program although, to date, we have not seen any considerable measurements of success to indicate that the current blanket approach across the province has been effective.

As evidenced by research, public education programs that are used to proactively manage human-bear conflict issues in urban centers may show a higher level of success when customized to address the community's perception of risk by bears. This information is

collected through strategically planned community surveys and would provide the foundation upon which to build and deliver communication and education programs and also provides a platform for solution building. "Such baseline information is key to strategic management planning; it may be used to inform program strategy, select program actions, and evaluate program outcomes (Crow 1983). The moment a bear enters an urban center wildlife management begins, and each and every resident becomes a "wildlife manager". With this in mind, the development of a community public education program depends on a system of events; uncovering public perception, determining common goals and objectives and subsequently building an education program tailored to influence the majority of the populace.

Historically, the problem of human-bear conflict in urban centers has been mainly reactive, usually ending in the destruction of the bear (Davis et al, 2002). Bears are resilient food generalists and easily adapt to human environments, significantly increasing the risk to public safety. Rapidly increasing populations of food-conditioned bears due to human mismanagement of bear attractants predominantly contribute to the ineffective solution of lethal bear management. Community residents *are* the primary "wildlife managers" of urban bears and, when educated, have the ability to proactively manage this problem upon inception.

The long-term and most dangerous consequence of exclusively applying non-systemic solutions such as the lethal management and/or relocation of food-conditioned bears is the increased need for more and more of the same solution. Retrospectively the possibility exists that this type of intervention is not just ineffective, but "addictive" in the sense of fostering increased dependency on government wildlife management agencies and lessened abilities of local people to solve their own problems. Gradually the potential "cure" may turn out to be worse than the disease as evidenced by growing scientific concern regarding the potential effects of urban bear mortalities on wild land bear populations.

3.2 Public Education & Bear Stewardship Group Recommendations:

| No. | Recommendations | Responsibility |
|-----|--|--|
| 1. | DEVELOP BEAR STEWARDSHIP COMMITTEE INCLUDING THE FOLLOWING STAKEHOLDERS: | |
| | Local Government Representatives including, Chief Administration Officer, District Planner, Bylaw Services and Public Works Superintendant First Nations Government Conservation Officer Service "Bear Smart" Program Advisor Waste Management Contractor Local RCMP Ministry of Forest Naturalist Clubs Rod & Gun Club Tourism Operators | District of Port Hardy Conservation Officer Service |

| | Environmental Management | |
|------|--|---------------------------------|
| | Leader from the Volunteer Education Committee | |
| | Public relations person | |
| | • Fundraiser | |
| 2. | DEVELOP LOCAL VOLUNTEER COMMITTEE FOR THE PURPOSE OF | "Bear Smart" |
| | CONDUCTING COMMUNITY EDUCATION OUTREACH PROGRAMS: | Stewardship |
| | | Committee |
| | School Lectures | |
| | Door- door campaigns | |
| | Public Presentations | |
| | Media Correspondence | |
| | • Fundraising | |
| 2 | | District of |
| 3. | CONDUCT FURTHER RESEARCH ON COMMUNITY RESIDENT'S | |
| | ATTITUDES AND PERCEPTIONS OF RISK BY BEARS: | Port Hardy |
| | | Staff |
| | Develop survey questions | |
| | • Determine Community Study Area(s) | • "Bear Smart" |
| | • Determine Data Collection Method(s) | Stewardship |
| | Determine Data Analysis Method | Committee |
| | Determine Results and Recommendations | |
| 4. | CONDUCT FURTHER RESEARCH ON COMMERCIAL BUSINESSES' | District of |
| | ATTITUDES AND PERCEPTIONS OF RISK BY BEARS: | Port Hardy |
| | | • |
| | Develop survey questions | • Bear |
| | Determine Community Study Area(s) | Stewardship |
| | Determine Data Collection Method(s) | Committee |
| | Determine Data Analysis Method | |
| | Determine Results and Recommendations | Chamber of |
| | Determine Results and Recommendations | Commerce |
| 5. | CRAFT EDUCATION MATERIALS BASED ON THE FINDINGS OF | District of |
|] 3. | COMMUNITY RESEARCH: | Port Hardy |
| | COMMUNITY RESEARCH. | Staff |
| | • Community and office has always | Stall |
| | Community specific brochuresPublic Newsletters | . D |
| | | • Bear |
| | Public Presentations | Stewardship |
| | • School Lectures | Committee |
| | Media Correspondence | |
| | | • Volunteer |
| | | Committee |
| 6. | CRAFT PUBLIC PRESENTATIONS TO INCLUDE THE FOLLOWING: | District Staff |
| | | |
| | Attractant Management | Stewardship |
| | Natural Bear behavior | Committee |
| | Characteristics & behavior of habituated bears | |
| | Characteristics & behavior of food-conditioned bears | |
| | Activity by bears in Port Hardy community green space | Volunteers |
| 7. | DEVELOP A CONSISTENT PUBLIC EDUCATION DISTRIBUTION PLAN | District Staff |
| | CIRCULATED VIA: (SEE EXAMPLES APPENDIX 6). | |
| | | Stewardship |
| | Municipal Development Permits | Committee |
| | Utility Bills | Committee |
| | Municipal Website | |
| | iviumorpai w cosic | |

Regional District Newsletters Schools Chamber of Commerce Fox's Disposal Services Community Service Groups Community Recreation Guides Wildlife Viewing Commercial Enterprise **Tourist Accommodations** Trailheads Municipal Parks Local Radio Local TV Other 8 **SCHOOL EDUCATION PROGRAM:** • District of Port Hardy Develop a lecture designed to teach bear behavior Provide information on how bears move through Port Hardy green School spaces to avoid unnecessary encounters District 85 Develop a Bear Alert system to be activated when a bear enters the Staff school grounds Bear Stewardship Committee 9. DEVELOP A COMPREHENSIVE TOURISM EDUCATION PROGRAM District of AIMED AT VISITORS TO THE COMMUNITY: Port Hardy Brochures with visual and script messaging • Chamber of Consider language barriers Commerce Signs at trailheads Encourage bear-watching via reputable tour-guiding companies • Bear Stewardship Committee 10. EDUCATE LOCAL RESIDENTS ON HOW TO EFFECTIVELY REPORT Stewardship BEAR OCCURRENCE TO THE CONSERVATION OFFICER SERVICE Committee CALL CENTER BASED ON ACCURACY OF THE FOLLOWING: District Staff Exact address & location of occurrence according to district lot boundaries. Exact behavior of the bear

4.0 COMMUNITY GREEN SPACE MANAGEMENT

4.1 CONSIDERATIONS:

The quality and density of community green space plays a critical role in the system of human-bear conflict. Effective green space management including the use of bear-resistant waste receptacles, removal or brushing back of natural bear foods, trail signage and public education can significantly reduce the chance of negative encounters with bears. Field inspection rated all community green spaces within the District of Port Hardy from moderate to high for potential conflict based on the level of connectivity to larger

undeveloped areas, abundance and variety of bear foods, cover, denning potential, availability to non-natural attractants and obvious bear sign such as scat, tree markings and day bedding areas.

The District of Port Hardy originally designed the majority of community green space to accommodate a series of forested human trail systems for the purpose of maintaining aesthetic community appeal and to provide pleasant pathways for locals traversing the community. Unfortunately, these adequately forested trail networks also act as funnels and safe escape routes for bears to efficiently access non-natural foods within the community. This significantly increases the probability that bears will get caught in the chronic problem of food-conditioning due to the abundance of available non-natural foods such as garbage, pet foods, fish waste etc.

The placement of these community trails and their high level of connectivity to the trails on the periphery of the community needs to be reconsidered and evaluated to dissuade bears from easily accessing the community. To minimize the potential of surprise bear encounters, it is advised to thin out the underbrush and wooded areas to improve lines of sight and reduce security cover and food for bears. Bear warning/safety signs should be placed at all trailheads with emphasis on paths accessing high conflict neighborhoods, schools, parks and recreation areas. Bear-resistant waste containers should be placed at all parks and wilderness areas. These containers should meet the requirements for bear-resistance by the Living with Wildlife Foundation (LWW) and should be regularly maintained to ensure that garbage is not overflowing or placed beside the container and that the condition of the container remains fully functional.

4.2 RECOMMENDATIONS:

| No. | Recommendations | Responsibility |
|-----|--|---|
| 1. | NEW DEVELOPMENT ZONES: Review Bear Hazard Assessment for information on habitat value and bear activity in the "bear zone" designated for development. Require areas considered for parks or trails be assessed by a Qualified Environmental Professional (QEP) or an expert on the subject of bears and bear behavior to ensure trails and networks are designed to minimize the chance of bear encounters. Plan all parks and green spaces so they do not connect easily to larger undeveloped areas. Do not place walking trails in riparian areas. Place bear warning and safety signs on all trailheads that may be used by bears. | District Planner Public Works Department Developers Bear Stewardship Committee |

Identify wildlife movement corridors and ensure they pass around developments adjacent to rivers or creeks. Avoid placing schools and children's play parks in areas that back onto the periphery of the green-space. • Clear a minimum of 50-100 m from houses and yard/play areas. Install bear-resistant waste receptacles. Avoid use of major food plants for bears but do not attempt to replace all natural attractants. Require developers to landscape cleared areas with nonattractant native plants. Brush back or remove fruit bearing plants attractive to bears. Visit development sites and provide recommendations for landscaping that will reduce the risk of human-bear conflict by ensuring adequate line of sight to minimize surprise encounters between human and bears (i.e. minimize bear habitat quality and maximize visibility). **EXISTING COMMUNITY GREEN SPACE:** 2. Review Bear Hazard Assessment for information on habitat Public Works quality and bear-use in "bear zones". Department District Staff Install bear-resistant public waste receptacles. Trim and brush out berry bushes in areas of high human-use, Bear especially around parks and schools. Stewardship Committee Thin or remove vegetation that impedes visibility and Volunteer provides heavy cover for bears. Committee Install fencing between playing fields and adjacent forest. Install "Bear Smart" education and warning signs at all trailheads. Monitor the trails for bear sightings and bear sign. Develop a public safety education program. 3. **TRAILS & CORRIDORS:** Install bear-resistant waste receptacles. Public Works Department Maximize sightlines and visibility by reducing thick vegetation alongside the trail such as berry bushes, cow District Staff parsnip, sedges and horsetail.

| | | • Bear |
|----|--|--|
| | • Install "Bear Smart" educational signage at trailheads to alert people that bears use the trails include bear safety. | Stewardship Committee |
| | Monitor the trails for bear sightings and bear sign. | Conservation Officer Service |
| | • Post warning signs when bears are in the area. Remove signs after determined length of time when bears have moved on. | Officer Service |
| | Develop a trail closure and warning procedure for occasions when bears persist in particular sections of the trails. | |
| 4. | SCHOOLS, PARKS & PLAYING FIELDS: | |
| | Install bear-resistant waste receptacles. | • School District 85 |
| | Design, produce and install educational signage at trailheads leading to and from schools, parks and playing fields. | School Staff |
| | Ensure all children's play parks are highly visible to the street by brushing back forested areas and major food plants for bears. | District of Port Hardy |
| | for bears. | Bear |
| | Install fencing as a barrier between school and playing field grounds and the adjacent forest, and control natural attractants. | Stewardship Committee |
| | Remove berry-producing shrubs back at least 3m from fencing. | |
| 5. | LOCAL CAMPGROUNDS: | |
| | Identify campground areas predisposed to human-bear conflict e.g. wash stations, garbage containers & fish cleaning stations. | Campground Owner/Manager |
| | Remove and trim berry bushes and other natural attractants from these high-risk areas within the campground. Thin vegetation to improve visibility of bears from a greater | Bear Stewardship Committee |
| | distance. | Conservation Officer Service |
| | • Encourage campground owner/managers to adopt the "Bare Campsite" program used by the Pacific Rim National Park Reserve to manage garbage and bear attractants and to educate visitors. | Officer Service |
| 6. | COMMERCIAL WASTE CONTAINERS & COMMERCIAL | |
| | BUSINESS BUILDINGS: | |
| | • Do not place commercial waste containers up against large green spaces to reduce the risk of surprise bear encounters | District Staff |
| | and accessibility by bears. Brush and thin natural attractants near buildings and dumpsters to improve visibility. | Waste Disposal Company |
| | aumpore to improve visionity. | Business |

Visit properties to advise how to make vegetation less attractive to bears and reduce the risk of surprise encounters.

Owner/Manager

5.0 BYLAW DEVELOPMENT AND IMPLEMENTATION

5.1 CONSIDERATIONS FOR WILDLIFE MANAGEMENT POLICY FRAMEWORK:

There are four key elements or forces that influence the formulation and implementation of public policy relevant to wildlife management within a community (Kellert and Clark, 1991). These forces include (1) biophysical animal behaviors such as the black bear's ability to find viable food sources (natural and unnatural), (2) social-structural such as the rights and privileges for use and control of wildlife resources including hunting and/or tourism, (3) valuation including the spiritual, ecological, ethical and utilitarian values of community members or groups, and (4) institutional-regulatory that take into account which governing agency should be responsible for enforcing effective wildlife management. Research by these authors also showed that increased awareness of the problem leads to a collective conclusion that there is a critical level of conflict, a human responsibility for the conflict, and a need for collective action to solve the problem.

The "Bear Smart" Community Program recommends that municipalities append clauses to existing bylaws to "prohibit the provision of food to bears as a result of intent, neglect, or irresponsible management of attractants" (Davis et al, 2002). The primary municipal bylaws to address for this purpose are the Garbage Collection Bylaw, the Building Code Bylaw and the Zoning Bylaw.

The District of Ucluelet was the first community in the province to pioneer this interrelated municipal bylaw approach to bear management. Land-user compliance is more readily accepted when "Bear Smart" guidelines are implemented prior to land purchase because potential users are aware in advance of the rules and regulations (Felice Mazzoni personal comment January 9, 2008).

The Garbage Bylaw is the principal document for the inclusion of detailed regulations for bear-resistant residential and commercial waste management and is the keystone document necessary for enforcement of "Bear Smart" regulations in the building code and zoning bylaws (see examples appendix 5). Enforcement and compliance of the municipal garbage bylaw should be viewed as a management tool designed to augment warning strategies and public education outreach for residents and establishments.

The Building Code Bylaw governs standards in respect of the construction, alteration repair and demolition of buildings in municipalities and regional districts in the Province. To prevent the continuation of improper garbage storage, it would be advantageous for the District of Port Hardy to require that site plans define a bear-resistant enclosed area, attached garage or ancillary building for the purpose storage of garbage and/or garbage receptacles. The building code bylaw provides the first hammer of enforcement for all new dwellings under construction and is the appropriate avenue for applying this regulation. This requirement enables the municipality to deny building and occupancy permits until proof of bear-resistant enclosures are secured.

The Zoning Bylaw divides a community into zones and provides for regulations governing the use of land, buildings, structures and landscaping. The zoning bylaw regulates the density and use of land and structures to preserve the amenities of the District and to regulate development for the benefit of the community as a whole. Zoning is a tool used to implement the policies of the Official Community Plan (OCP) and guides the growth of the municipality in a systematic and orderly fashion. This bylaw is the main artery for establishing bear-resistant waste management regulations for the purpose of informing all new developers of the rules and regulations prior to land purchase or land-use. The inclusion of these standards will sever the continuance of creating "problem" neighborhoods; and would conform to section 5.2.1 of the District of Port Hardy Official Community Plan that states, "In the District of Port Hardy, there are many square kilometers of undeveloped crown, private and district land. Therefore, all of these agencies and private individuals can play important roles in protecting the valuable fish and wildlife habitat in the District".



5.2 GARBAGE BYLAW 12-2009 "BEAR SMART" REQUIREMENTS MET:

| Bylaw Section and Title | Completed |
|---|------------------|
| Requirements Met Definitions: "Recyclable Material" means paper, metal, plastic, boxboard, cardboard, and other materials as determined by the Regional District but excludes any material contaminated by food or oil. | √ |
| "Wildlife" means raptors, game or other species of vertebrates prescribed as wildlife. | \checkmark |
| "Wildlife Attractant" means any substance that could be reasonably expected to attract wildlife including but not limited to food products, domestic garbage, pet food, bird seed, restaurant grease, game meat or glass or metal ware or other item containing remnants of food. | V |

| Garbage Bylaw Continued Requirement met: | |
|--|--------------|
| Section 3. General Provisions: | \checkmark |
| (c) Remove "apartment house and any commercial premises" to read "every occupier or owner of any dwelling unit within the District shall provide and maintain in good and sufficient order and repair for such premises regulation garbage receptacles, and shall place all garbage originating in such premises with such garbage receptacles. Insert: No person shall leave garbage or wildlife attractants outside, on top of, or beside a Wildlife Resistant container or Wildlife Resistant Enclosure. | \checkmark |
| Section 7. Storage of Garbage or Refuse: | \checkmark |
| (a) No person shall store any garbage or refuse that is a wildlife attractant in such a manner that is accessible to wildlife. | V |
| (b) All domestic garbage and food waste or other edible waste that could attract domestic animals or wildlife shall be stored indoors in an enclosed building, shed or storage facility. | |

5.3 RECOMMENDATIONS TO STRENGTHEN GARBAGE BYLAW NO. 12-2009:

| Bylaw(s) Section and Title | Responsibility |
|--|---|
| GARBAGE BYLAW No. 12-2009 Definitions Insert and/or Improve Wording: | |
| "Bylaw Enforcement Officer" means the employee appointed by Council to enforce the regulations of this bylaw. "Dangerous Wildlife" means bear, cougar, coyote or wolf, or a species of wildlife that is prescribed as dangerous under the BC Wildlife Act. Consider separate definition for Townhouses and Manufactured Home Parks to remove the usage of regulation garbage receptacles as identified in Section 3 (c). At this time Townhouses and Manufactured Homes are defined as "Dwelling Units" allowing for the usage of regulation garbage receptacles. "Dwelling Unit" (conform to definition in Zoning Bylaw) means one or more habitable rooms, constituting a self-contained unit with one or more separate entrances and containing cooking, eating, living, sleeping and sanitary facilities, and used or intended to be used as that permanent home or residence of one family but shall not include hotels, motels or similar transient accommodations. Currently under | District of Port Hardy Staff Regional District of Mount Waddington Conservation Officer Service Waste Disposal Company |
| Garbage Bylaw 12-2009, "Dwelling Unit" allows townhouses and manufactured homes the use of regulation garbage receptacles in Section 3 (c). | |

Garbage Bylaw Recommendations Continued:

- **Insert Manufactured Homes** as defined in the Port Hardy Consolidated Zoning Bylaw No. 10-2006.
- **Insert Townhouses** as defined in the Port Hardy Consolidated Zoning Bylaw No. 10-2006.
- "Waste" means garbage other than domestic garbage and hazardous waste, including that from utility, commercial, industrial or other non-domestic activities, that could or does act as a wildlife attractant; (captures restaurant grease)
- Consider Removing "Standard Container" and replace with "Wildlife Resistant Container". Discuss the restriction to 3 cubic yard capacity?
- "Wildlife Resistant Container" means a fully enclosed metal container with a sealed metal 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
- Or means a fully enclosed metal container with a sturdy metal cover capable of being completely closed to reduce odors and secured with a latching device of sufficient strength and design to prevent access by Wildlife
- Or a combined definition for "Wildlife Resistant Container" to accommodate a dual system of currently used containers and new self-latching containers during the development of an agreement between the municipality and the local waste contractor to fully implement a "self-latching commercial container system" at which time the latter part of the following definition can be removed leaving a definition that only allows self-latching designs. The definition would read as follows: means a fully enclosed metal container with a sealed metal lid and a self-latching mechanism of sufficient design and strength to prevent access by wildlife or a fully enclosed metal container with a sealed metal lid capable of being completely closed and secured with a latching device of sufficient strength and design to prevent access by wildlife.
- "Wildlife Resistant Enclosure" means a fully enclosed structure or container designed, manufactured and constructed of materials with sufficient strength to prevent access by wildlife that is kept closed and securely latched.

Section 3. General Provisions:

 Consider inserting new regulation for all townhouses, manufactured home parks and commercial businesses to use only "Wildlife Resistant Containers or Enclosures". "All townhouses, commercial businesses, industrial, institutional, tourist accommodation, etc. must provide either a wildlife resistant container or wildlife resistant enclosure for the purpose of storing garbage". "Manufactured Home Parks are required to provide a garbage storage site located inside a wildlife resistant enclosure or a wildlife resistant container for residents. If the owner of a mobile home park instigates a contractual form of garbage removal with a contractor, the regulations and restrictions relating to residential garbage removal and general conditions as laid out in this bylaw will apply.

• Insert: Every occupier or owner of a townhouse, manufactured home park or commercial premises within the District shall provide and maintain in good and sufficient order and repair for such premises, wildlife resistant containers, and shall place all garbage originating in such premises within such garbage container.

Section 4. Accessibility of Garbage Receptacles and Containers.

• Consider adding a new clause: All "Wildlife Resistant Containers" and/or "Standard Containers" and "Wildlife Resistant Enclosures" must be kept closed and secure when waste is not being deposited or dumped to prohibit access by wildlife. If any area, part or piece of the Wildlife Resistant Container and/or Standard Container or Wildlife Resistant Enclosure becomes damaged it must be repaired or replaced as quickly as possible or at the most within fourteen (14) days.

Section 7. Storage of Garbage or Refuse:

 All domestic garbage and food waste or other edible waste that could attract domestic animals or wildlife shall be stored indoors in an enclosed building, shed or storage facility or in a "locked standard container" (may need to change name if amendment is carried through for 'Wildlife Resistant Container') or "wildlife resistant enclosure" (allowing for the use of a bear-resistant poly cart) and shall not be left in or on any area accessible to domestic animals or wildlife.

Consider New Section: "Wildlife Attractants": (Name of Bylaw would need to be reconsidered because the following wildlife attractants are not considered garbage). Example "A Bylaw to Authorize and Regulate the Collection of Garbage and Wildlife Attractants".

- (a) Every owner or occupier of real property shall store or place an outdoor fridge or freezer containing food products or fish on such real property in such a manner that it is inaccessible to dangerous wildlife.
- (b) Now owner or occupier of real property shall permit or allow fruit from a tree or bush on such real property to accumulate on the tree, bush or ground such that it attracts or is likely to attract dangerous wildlife.
- (c) No person shall fail to take remedial action to avoid contact or

conflict with dangerous wildlife after being advised by a designated bylaw enforcement officer that such action is necessary.

- (d) Every owner or occupier of real property shall store antifreeze and paint on such real property in such a manner that is inaccessible to dangerous wildlife.
- (e) All Commercial Businesses must store restaurant grease in an approved bear-resistant container.
- (f) All fish waste shall be deposited in a "wildlife resistant container" or "wildlife resistant enclosure".

Section 17: Contravention and Penalties:

• Consideration: "Every person who continues to violate any provision of this Bylaw, or who continues to permit, suffer or allow any act to be done in violation of any provision of the Bylaw, or who continues to neglect to do anything required to be done by any provision of the Bylaw, may have the case moved by Bylaw Services to a provincial court. Upon summary conviction by the court, the person is subject to a fine not exceeding \$2000.00" or "Any person who violates any of the provisions of this bylaw shall upon summary conviction be liable to a penalty of not more than \$10,000 or a term of imprisonment not exceeding six months or to both".

Consider New Section "Construction Site Refuse Disposal"

- All construction sites must have a designated container that receives construction refuse. The container must be one of the following:
 - (a) be a wildlife resistant container
 - (b) be stored in an wildlife resistant enclosure
 - (c) be emptied at the end of each working day or stored in a building or trailer.

Consider New Section "Bylaw Enforcement Officer":

- The Bylaw Enforcement Officer is authorized and empowered to inspect, compel and require that all the regulations and provisions prescribed in this bylaw be carried out.
- For the purposes of this bylaw, the Bylaw Enforcement Officer means any of the following:
 - (a) Chief Administrator Officer of the District of Port Hardy
 - (b) Director of Development Services of the District of Port Hardy
 - (c) Bylaw Enforcement Officer of the District of Port Hardy
 - (d) Superintendent of Public Works of the District of Port Hardy or their duly appointed designate.
 - (e) Conservation Officer Service
 - (f) Animal Control Officer (contract position)
- No person shall unreasonably obstruct or prevent a Bylaw

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Enforcement Officer from carrying out his duties as prescribed in this bylaw.

- Develop Public Education Campaign to educate local residents on the requirements of this bylaw simultaneously with public education of attractant management.
- Develop a warning strategy to assist with community compliance.

CONSOLIDATED ZONING BYLAW 10-2006

Definitions Insert and/or Improve Wording:

- "Wildlife Resistant Enclosure" means a fully enclosed structure with no more than a 1cm gap or opening at any location containing four walls, a roof, and door(s) capable of being securely latched and of sufficient strength and design to prevent access by Wildlife
- Or means a structure which has enclosed sides, a roof, doors and a self-latching mechanism of sufficient design and strength to prevent access by dangerous wildlife.

Consider New Section titled "Waste Management Requirements" and include the following:

Notwithstanding the requirements of this bylaw, waste management practices for all zones must meet the following conditions:

- All garbage and waste material not stored and located within the principal building shall be kept in an bear-resistant accessory building or wildlife resistant enclosure; (consider adding criteria for this definition)
- All garbage and waste storage for multi-family residential, tourist
 accommodation commercial, industrial and institutional uses mist
 include an animal proof enclosure, attached garage and/or accessory
 building for the purpose of storage for garbage and/or garbage
 receptacles;
- All garbage and waste enclosures are viewed as a accessory structures and must adhere to applicable specifications for each zone and the requirements of Section (to be determined) of this Bylaw;
- All wildlife resistant enclosures for storage of garbage and waste shall be visually screened from all adjacent sites and public thoroughfares;
- All wildlife resistant enclosures for storage of garbage and waste must adhere to designated setback in respective land-use zones; and
- All garbage and waste management practices shall conform to the regulations in accordance with the District of Port Hardy's Garbage Bylaw # 12-2009.

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<u>Insert in VR-1 & VR 2 Zone Vacation Rental Section (to be determined) under Additional Requirements.</u>

• Refer to the general regulations on Waste Management in New Section (# to be determined) of the Bylaw (above waste requirements)

Insert under Additional Requirements in all Zones:

• Refer to he general regulations on waste management in Section (# to be determined) of this Bylaw.

BUILDING CODE BYLAW 11-2005:

Insert into Section 10. Applications for Standard Buildings

- Applications for standard buildings must include a site plan defining an enclosed area attached garage or ancillary building for the purpose of storage for garbage and/or garbage receptacles that is resistant to bears.
- Applications for complex buildings such as multi-family residential tourist accommodation commercial industrial and institutional uses that when completed will be included in the District of Port Hardy curbside garbage collection program must include a site plan defining an enclosed area, attached garage, or ancillary building for the purpose of storage for garbage and/or garbage receptacles that is resistant to bears. Those properties that are excluded from curbside garbage collection program are exempt from this requirement.
- All enclosures and/or buildings used for the purposes of garbage and/or garbage receptacle storage must meet the District of Port Hardy Garbage Collection Bylaw 12-2009 requirements.

SUBDIVISION BYLAW 17-99

Insert similar recommendations into the Subdivision Bylaw as noted above for Building Code Bylaw 11-2005.

5.4 THE WILDLIFE ACT AND DANGEROUS WILDLIFE PROTECTION ORDERS:

Dangerous Wildlife Protection Orders (DWPO; under section 88.1 of the *Wildlife Act*) is a compliance tool issued by the Conservation Officer Service (COS). This management tool can effectively complement the municipal bylaw system and the efforts of the local bear stewardship groups' education campaign as an additional hammer of enforcement. DWPO's are considered a reactive management technique although when consistently used and enforced with a resident or establishment they can aid in stopping future violations of chronic offenders that refuse to voluntarily comply.

Bears do not respect political boundaries, back yards or other defined areas and a bear problem in one yard often becomes a bear problem for the neighborhood. People who leave their garbage and other bear attractants in a non-bear resistant manner should be subject to a fine regardless of their intention because their actions affect the safety of the public as a whole (Ciarniello, 2009, pg.48).

The following are excerpts from 88.1 of the Wildlife Act. *Dangerous Wildlife Protection Orders:*

- If a conservation officer believes on reasonable grounds that dangerous wildlife is or may be attracted to any land or premises other than a private dwelling, the conservation officer may, without a warrant, enter and search the land or premises.
- If a conservation officer believes on reasonable grounds that the existence or location of an attractant in, on or about any land or premises, other than in a private dwelling, poses a risk to the safety of any person because the attractant is attracting or could attract dangerous wildlife to the land or premises, the conservation officer may issue a dangerous wildlife protection order directing an owner, occupier or person in charge of that land or premises to contain, move or remove the attractant within a reasonable period of time specified in the order.

6.0 NEW DEVELOPMENT AND COMMUNITY PLANNING

6.1 CONSIDERATIONS FOR SUSTAINABLE DEVELOPMENT:

Sustainable development can be defined as development that does not sacrifice long-term environmental quality for short-term benefits and preserves resources and the environment for future generations. Sustainable development does not imply total preservation or non-development, but requires that decisions made by Council, industry, and individuals consider all biological, social, and economic consequences.

The groundwork for effective "Bear Smart" management in all new development zones is established by implementing the recommendations in the preceding "Bylaw Development and Implementation" section of this document.

One of the most important steps for preventing the continuation of "problem" neighborhoods in our communities is to obtain professional advise from experts in the field of human-bear conflict reduction at all stages of development. Qualified Environmental Professionals (QEP's) adept at assessing large carnivore habitat and travel patterns should be assigned to evaluate lands proposed for development and subject matter experts should also be included in the pre-planning stages of dwelling placement to avoid critical habitat patches, riparian areas and existing travel corridors. Expertise should be provided on "Bear Smart" landscaping to avoid trees and shrubs that are attractive to bears, bear-resistant solid waste management and public education strategies.

Figure 1. Goleta's Heights New Development Area in Bear Zone 9 (Bear Cove) Port Hardy, B.C.



6.2 DEVELOPMENT AND COMMUNITY PLANNING RECOMMENDATIONS:

| No. | <u>Recommendations</u> | Responsibility |
|-----|--|--|
| 1. | DEVELOP A "BEAR SMART" DEVELOPMENT AND PLANNING GUIDE FOR DEVELOPERS TO INCLUDE: (a) The District of Port Hardy Garbage Bylaw # 12-2009 (b) Excerpts from the Zoning Bylaw identifying bear-resistant solid waste management requirements (c) Excerpts from the Building Code Bylaw identifying garbage storage requirements (d) Excerpts from the Official Community Plan identifying all "Bear Smart" requirements | District Planner Bear Stewardship Committee |
| 2. | ENVIRONMENTAL IMPACT ASSESSMENTS Ensure the Qualified Environmental Professional is qualified to identify quality bear habitat and travel routes. Require Environmental Impact Assessment prepared for subdivisions or development of parcels greater than 2.0 hectares in area for all types of developments and subdivisions. Require that a qualified environmental professional survey large | District Planner District Planner District |
| 3. | trees and large downed wood, root boles and stumps within development areas and map all structures that could be used for denning. ENVIRONMENTALLY SENSITIVE AREAS Collaborate to identify areas deemed to be Environmentally Sensitive Areas (ESA's) until a detailed Environmental Impact Assessment is completed in conjunction with a specific development according to Official Community Plan requirements. These areas could be mapped and included as Schedules in the | Planner • QEP's • District Planner & Council |

| Official Community Plan. | |
|--|--|
| • Review Section 7.41 of the OCP – | |
| (a) Develop guidelines for vegetated buffers within ESA's. | |
| (b) Require Developers to incorporate vegetated buffers into their | |
| plans as defined in the OCP. | |
| (c) Require that 70% of the setback areas be landscaped with non- | |
| fruit bearing, bear-resistant native plants. | |

7.0 OFFICIAL COMMUNITY PLAN

7.1 CONSIDERATIONS:

Limiting development or placing restrictions on private lands is potentially challenging from an economic perspective. However, the recommendations in this plan are intended to complement the existing regulations within the District of Port Hardy Official Community Plan (OCP) with regard to better management and long-term conservation of wildlife and wildlife habitat. Sustainable development does not imply total preservation or non-development, but requires that decisions made by Council, industry, and individuals consider all biological, social, and economic consequences.

Specific sections of the current Port Hardy OCP are listed in the table below with recommendations in **bold** that will further strengthen the descriptions, definitions and policies with regard to reducing conflict with large carnivores such as bears.

7.2 OFFICIAL COMMUNITY PLAN RECOMMENDATIONS:

| OCP Section | Section Title & Recommendation |
|----------------|--|
| New | WILDLIFE MANAGEMENT |
| | a. The District of Port Hardy and the surrounding region share the natural environment with potentially dangerous wildlife, including bears, cougars and wolves. Invariably, human-bear conflicts continue to increase within the town site and surrounding area. It is important to consider the problem of human-bear conflict from a public safety and conservation perspective. It is likely that human-bear interactions will increase since areas of human population growth are adjacent and encroaching into public lands that maintain these large carnivores. As the foraging areas, migration paths and game trails for wildlife are reduced and human contact increases, normally submissive species such as bears, cougars and wolves may become habituated to human activities. Research is still being conducted on how the removal, habituation and food conditioning of these animals may be affecting the distribution, life histories and demography of bear populations. Bears are naturally drawn into the town site in search of natural foods, and frequently find garbage that is not bear proofed increasing the risk to public safety. The District of Port Hardy promotes prevention measures to reduce human-bear conflicts through the Ministry of Environment "Bear Smart" Community Program. Prevention methods include bylaw regulations that prohibit garbage from being stored in a non-bear resistant |
| | manner, placing garbage curbside only during regulated hours on scheduled day of pick up, bear-resistant commercial dumpsters, properly functioning compost |

| | and ongoing public education outreach. Prevention is a win-win situation benefiting both humans and bears. |
|-------|--|
| 5.0 | ENVIRONMENT "Some of the habitat includes eagle-nesting trees, a crane nesting area, beaver habitat and bird and bear habitat. |
| 5.3.1 | LANDSCAPE CORRIDORS: A complete survey of the major landscape corridors should be done to determine the best alignments for a community trail system with special consideration give to the potential for human-bear conflicts. |
| 3.3.2 | LANDSCAPE CORRIDORS POLICIES: • Council and staff should endeavor to ensure that stream and river riparian zones travelling throughout the District will remain in their natural state and form the backbone of the community trail system with special consideration of the potential for human-bear conflict. Provide a forested buffer along this trail, as it will very likely be a travel corridor for bears. Avoid building the trail in areas with high concentrations of natural attractants and ensure sight lines are a minimum of 30 m to reduce the likelihood of surprise encounters between humans and bears. |
| 7.1.0 | LANDSCAPING: • Provide landscaping adjacent to and in large parking lots to provide visual relief, and interrupt paved surfaces to increase natural drainage using non-fruit bearing and bear-resistant native plants. |
| 7.4 | SPECIFIC GUIDELINES FOR ENVIRONMENTALLY SENSITIVE AREAS Review Section 7.41 of the OCP (d) Develop guidelines for vegetated buffers within ESA's. (e) Require Developers to incorporate vegetated buffers into their plans as defined in the OCP. Require that 70% of the setback areas be landscaped with non-fruit bearing, bear-resistant native plants. Require environmental impact assessments prepared for subdivisions or development of parcels greater than 2.0 hectares in area for all types of developments and |
| | of parcers greater than 2.0 nectares in area for all types of developments and subdivisions. Limit or prohibit development within ESA's with guidelines and bylaws to protect the environment. |

8.0 BEAR-RESISTANT SOLID WASTE MANAGEMENT:

8.1 CONSIDERATIONS:

The District of Port Hardy Bear Hazard Assessment (McMillan, 2009), identified human food garbage as the main contributor to human-bear conflict within the community and surrounding areas. This novel food resource (garbage) and the impact of human-altered landscapes have proven to significantly change the natural behavior of bears and are also considered detrimental to carnivore conservation (Beckmann & Berger, 2003). In Port Hardy between 2005-2008, at total of 284-problem wildlife occurrence reports (47% of all occurrence reports) were related to food-conditioned bear behavior, namely access to

residential garbage, commercial garbage, outdoor fridges and freezers, fish offal and other domestic attractants. Residential garbage complaints registered 35% of this total. A door-door "Bear Smart" campaign conducted for the purpose of this report revealed a majority of local residents continue to store their garbage receptacles outdoors within easy access by bears. The key to addressing this issue is to develop a consistent public education program aimed at informing local residents about the negative consequences of human-bear conflict in addition to the requirements of Garbage Bylaw 12-2009.

The Regional District of Mount Waddington operates the 7 Mile Landfill station. Active sections of the landfill are secured with a cattle guard electric fence system that is turned on during closed hours of the station. No detailed research has been done on the landfill station with regard to accessibility and usage by bears therefore its level of contribution to human-bear conflict in the neighboring communities of Port Hardy and Port McNeill are unknown. As a result, the focus on solid waste management is from the point of origin (residential, commercial & recycling stations) to collection by the garbage trucks.

In the fall of 2009, the District of Port Hardy purchased 13 new Haul-all 70 gallon bear resistant public waste containers that were strategically placed in high conflict areas. Through staged implementation, Port Hardy plans to replace all non-bear resistant barrel-style containers within the community over the next few years as affordable. Additional containers will need to be purchased for community trailheads and parks.

The local garbage contractor owns the commercial containers used within the community. A majority of these containers are in poor condition and when not secured, provide a reliable, high-caloric food source for bears. Given the plasticity of black bear foraging behavior, bears will continue to increase their exploitation of available garbage in urban areas if made accessible. Within the North Island communities of Port Hardy, Port McNeill and Port Alice, bears are frequently killed due to public safety concerns as they become accustomed to feeding on human food sources within these communities. Unfortunately, little is known about the extent to which interactions between humans and bears are affecting the distribution, life histories, or demography of carnivore populations. Consequently, for public safety and conservation reasons, the District of Port Hardy and neighboring communities should responsibly establish sustainable bear-resistant solid waste management was developed in partnership with the District of Port Hardy and the local Waste Disposal Contractor to ensure the recommendations brought forward by the author of this report are both financially and administratively feasible.

8.2 RECOMMENDATIONS FOR BEAR RESISTANT SOLID WASTE MANAGEMENT:

8.2.1 Residential Component:

As evidenced by research, a successful bear management program depends on the consistent approach of two important components namely, public education and bear-resistant solid waste management. Case studies from Adirondack Park (New York State), Yosemite National Park (California) and the Lake Tahoe Basin area showed that educational efforts that provided detailed guidelines or instructions about securing foods

from bears were most effective when bear-resistant infrastructure or equipment was readily available (Beckmann et al, 2008).

In order for a "Bear Smart" public education campaign to work well within the District of Port Hardy, the municipality needs to be able to point to easy, effective, and reliable means for local residents to take action. In addition, policy regarding the proper storage of bear attractants and subsequent citations and fines are required for the inevitable non-compliers and hard-core deviants. "Citations and fines have been demonstrated to be effective tools in providing human-bear conflict messages where other messaging techniques have failed to change the behavior of non-compliers" (Beckmann et al, 2008, pg. 59).

The following commentary and recommendations provide information based on research and experience and are intended to assist in developing best practices for long-term sustainable bear-resistant waste management in Port Hardy. The recommendations are also intended to complement the requirements and regulations contained with Garbage Collection Bylaw 12-2009. It must be noted that "townhouses" and "manufactured home parks" will be separated out since they show the highest incidence of human-bear conflict in Bear Zones 1, 2 & 3 within the community and require special attention to mitigate the problem.

8.2.2 Residential bear-resistant poly cart system:

The bear-resistant poly cart system is an option for managing residential garbage although there are some concerns that may impact successful implementation namely; (1) financial feasibility & container quality, (2) container size and compatibility with municipal bylaw regulations and garbage collection agreements and, (3) curb-side container service.

FINANCIAL FEASIBILITY & CONTAINER QUALITY:

Several companies in Canada and the United States advertise bear-Resistant Poly Carts although few of these carts and/or latching devices have passed the highly recognized and reputable testing protocols of the Living With Wildlife Foundation (LWWF) and Interagency Grizzly Bear Committee (IGBC). The LWWF no longer issues a pass/fail test result for products tested through the IGBC Bear-Resistant Products Testing Program; instead the products are now rated with a star rating system. Products rated with 3 stars have met the most rigorous standard of 60 minutes of bear contact time with the test bears and two-star ratings indicate that the product remained intact and functional between 45 and 60 minutes of bear contact time. The following list of vendors and products have been tested and approved for bear-resistance by LWWF and are recommended by the author of this report.

It must be noted for the purpose of this report that the majority of these vendors sell the residential roll-out poly carts in three sizes; 32 gallon (121 L), 65 gallon (246 L) and 95 gallon (359 L) however, not all sizes have been tested. Dawg Inc. is the only company that sells a 20-gallon (75 L) bear-resistant container called the basic "BEARicuda" that has not been tested by LWWF. It is highly recommended that the cost of these containers

are thoroughly investigated and compared according to quality, type, size, quantity, and shipping and/or brokerage fees.

POLY CART SIZE AND COMPATIBILITY WITH MUNICIPAL BYLAW REGULATIONS AND GARBAGE COLLECTION AGREEMENTS:

The District of Port Hardy Garbage Bylaw (12-2009) requires that residential "Regulation Garbage Receptacles" maintain a capacity of not more than 70 liters and weigh no more than 25 kg when full. The Collection Rates Bylaw (17-2009) allows each residential unit to place two 70-litre regulation garbage receptacles curbside weekly. Considering that the minimum capacity of most quality bear-resistant poly carts is 121 L (32 gal), the District would need to modify bylaw regulations and rates to accommodate the usage of these containers. If the "BEARicuda" 20 L (75 gal) container is considered, it is highly recommended that a sample container is provided by the company and thoroughly inspected by the District of Port Hardy to ensure quality and compatibility.

CURBSIDE CONTAINER SERVICE FOR POLY CARTS:

Another major consideration is the viability of curbside service for the poly carts. Due to container size and weight when the poly carts are placed curbside it is recommended that the garbage collection vehicle is equipped with a semi-automated or fully automated system to safely empty the containers. This type of system creates financial implications for the local waste contractor. As an option, bear-resistant poly carts can also be used as "bear-resistant enclosures" for residential units that do not have a secure enclosed building, shed or storage facility for the purpose of storing garbage between scheduled pick-up times. On morning of pick-up, garbage can be transferred from the bear-resistant poly cart to "regulation garbage receptacles" and placed curbside.

| <u>Vendor</u> | LWWF Rating Score | Contact Information | <u>Product</u> |
|------------------------------|-------------------------|---|--|
| Bear Saver | Three-Star | 1390 Miliken Ave, Ontario California 91761 1-800-851-3887 http://www.bearsaver.com | 95 gallon residential roll-out cart Residential Trash Enclosure |
| UnBearAble Bins | Three-Star | PO Box 1313, Bragg Creek, Alberta T0L 0K0 403-609-2242 | 95 gallon residential roll-out cart |
| Bear Necessities | Three-Star | 210 Lady Macdonald Drive, Canmore, Alberta T1W 1H3 403-609-3508 | Residential Trash Enclosure |
| Dawg Inc. BEARicuda | Three-Star | 25 Lassy Court, Terryville, CT 06786 1-800-935-3294 http://www.dawginc.com http://www.bearicuda.com | 95 gallon residential roll-out care "BEARrier Classic" |
| Rollins Machinery Ltd. | Three-Star Two-Star | 21869 56 th Ave, Langely, BC V2Y 2M9 1-800-665-6090 www.rollinsmachinery.com | 65 gallon Schaefer residential poly cart 32 gallon Schaefer poly cart |

Figure 1. Unbearable Bins



Figure 4. BEARicuda Can



Figure 2. BearSaver Bins



Figure 5. Bear Necessities Bin



8.2.3 Residential communal waste collection system:

Communal garbage collection is a residential waste collection system that utilizes strategically placed bear-resistant commercial containers throughout the community as a replacement for curbside pickup. This system was first successfully implemented in the Town of Canmore, Alberta in 1997 and continues to set a great example of community support for minimizing human impact on the environment and wildlife population.

Despite initial resistance by local residents in Canmore and indecisiveness on behalf of Council to eliminate curbside pickup, a dual system was introduced to test the program. This hybrid system gave residents the option of continuing to use curbside collection or use the bear-resistant containers at any time. After one year, consistent monitoring proved that an average of 62% of local residents were voluntarily using the communal system instead of curbside collection. See "The Town of Canmore Experience" (see appendix 3).

In 2008, the District of Ucluelet initiated a Communal Garbage Pilot Program in the new Ocean West Development Area. This program was developed in partnership with the

District of Ucluelet Planning Department, Charles Smith, Land Manager for Weyerhaeuser and the Pacific Rim Bear Smart Committee (Bear Smart BC Society). The OceanWest Pilot Project (see appendix 1) consists of two cul-de-sacs, each having one 4 cubic yard communal container that will service approximately 20 single-family households.

The above examples show that the communal waste system can be applied in a variety of ways ranging from a complete new municipal waste system that replaces curbside collection otherwise implemented in new development zones or in areas within the community that have proven history of high levels of human-bear conflict such as manufactured home parks. The cost to deliver the communal system at any level can be calculated using the same method that is currently used in Port Hardy to assess the cost of the communal container system at apartment buildings.

8.2.4 Residential "Bear-Resistant enclosures":

The District of Port Hardy Garbage Regulation Bylaw 12-2009, Section 7 (b) states that, "all domestic garbage and food waste or other edible waste that could attract domestic animals or wildlife shall be stored in an enclosed building, shed or storage facility or in a locked standard container and shall not be left in or on any area accessible to domestic animals or wildlife". Inspection of the residential areas in Port Hardy provided evidence that many residents continue to store their garbage outside easily accessible by bears. The Problem Wildlife Occurrence Reports provided evidence that many residents store their garbage in sheds or storage facilities that are not secure providing the opportunity for bears to gain access by way of property damage.

To mitigate this problem, the Garbage Regulation Bylaw 12-2009 should include the definition: "Wildlife Resistant Enclosure" means a fully enclosed structure or container designed, manufactured and constructed of materials of sufficient strength to prevent access by wildlife that is kept closed and securely latched. With this in place, the District of Port Hardy can enforce that all garbage enclosures are constructed and/or reinforced to prevent access by bears and encourage the use of bear-resistant poly carts and bear-resistant storage containers for storage purposes.

Recommendations #1 shown in the following table for residential waste management is considered by the author to be most advantageous for long-term sustainability of effective "Bear Smart" waste management with subsequent recommendations #2 & #3 considered sub-optimal requiring time-consuming management on behalf of the bylaw enforcement officer.

8.2.5 Residential Waste Management Recommendations:

| Dwelling Unit Type | Management Recommendation | Responsibility |
|----------------------------|---|---|
| Manufactured Home Parks | Communal Waste System/Public Education. | District of Port Hardy |
| | 2. Require garbage bins are secured in a "wildlife resistant enclosure" between scheduled curbside pick-up times. | MHP Owner/Manager Strata Council |
| | 3. Zero Tolerance for non-compliers to Garbage Bylaw 12-2009 | Bylaw Enforcement Officer |
| Townhouse Units | Communal Waste System/Public Education for all townhouse units specifically located in Bear Zones 1, 2 & 3. This sector of the community recorded the highest level of human-bear conflict within the District of Port Hardy since 2005. Zero tolerance for non-compliers to Garbage Bylaw 12-2009 regulations/Public Education. Townhouse Units are currently categorized as "dwelling units" and required to store garbage in a wildlife proof enclosure (poly carts an option) or securely indoors in an enclosed | District of Port Hardy Bylaw Enforcement Officer Strata Council |
| | building, shed, storage facility or standard container (wildlife-resistant container). | |
| Dwelling Units | 1. Communal Waste System/Public Education. | District of Port Hardy |
| | 2. Zero tolerance for non-compliers to Garbage Bylaw 12-2009 regulations/Public Education. All Dwelling Units must store garbage in a wildlife proof enclosure (poly carts and option) or securely indoors in an enclosed building, shed, storage facility or standard container (wildlife-resistant container) as per bylaw conditions. | Bylaw Enforcement Officer |

8.2.6 Recycling Transfer Stations:

Recycling is now operating in several different locations within the District of Port Hardy. The Kinsmen bottle depot has moved to the opposite end of the North Island mall, behind the courthouse and now appears to be fully contained within the building. The Kinsmen depot is no longer a transfer station for household or commercial waste but will continue to take aluminum cans, juice boxes, plastic pop bottles, wine and beer returnables and plastic milk jugs (but not milk cartons). Fox's Disposal Services yard located on Steele Road in Port Hardy will be the new transfer station accepting residential construction and household waste for a cash-only fee. Commercial waste will not be accepted at this site although pickup can be arranged.

Another significant change in Port Hardy is the addition of no-charge self-serve recycling stations at the Fort Rupert Curling Club and near the downtown Fire-hall. Each recycling station will have two 30-yard bins, one for plastics and the other for mixed paper & cardboard (boxboard) products. The author of this report and the Conservation Officer Service has inspected these new bins. The size of the openings on the container established for cardboard recycling may be small enough to dissuade bears from gaining access although the size of the openings on the container established for plastics are not bear-resistant and will allow access by bears.

The 7 Mile Recycling Station properly disposes of household hazardous waste, including used paint, batteries, plastics, motor oil, all household appliances, cardboard, other paper recyclables and metals and household and commercial waste. These changes reflect Council's wish to provide a more comprehensive and cost-effective recycling program although it is hoped that they will be diligently secured to prevent the continuation of human-bear conflict within the community.

8.2.7 7-MILE Landfill and Recycling Transfer Station Recommendations:

| Recommendations | Responsibility |
|---|---|
| Kinsmen Bottle Depot/Municipal Transfer Stations/7Mile Landfill Station: Enclose with perimeter fencing if recycling materials are easily accessible to bears. Assure perimeter fencing is at a sufficient height as to deter | District of Port Hardy Kinsmen Club Regional District of Mount Waddington |
| Suggested height for perimeter fence is a minimum of 2 meters at all points and may need to be higher on sloped ground. Use electric fencing in any breech areas and at 7-mile landfill station. | |

Landfill Recommendations Continued:

- Monitor the fence perimeter on a regular basis.
- Clean all garbage strewn around the depot and landfill sites.
- Do not locate community transfer stations backed-up against green-space and ensure all openings on the bins are bear-resistant.

8.3 COMMERCIAL COMPONENT:

8.3.1 Considerations:

A large concern that needs to be addressed for the purpose of developing comprehensive "Bear Smart" Commercial Garbage Bylaw regulations is the confusion about what comprises a "wildlife-resistant" commercial container. There are many products on the market that are falsely promoted as "wildlife-resistant" and many products are used in communities that depend on the due diligence of business owners/staff to secure reducing their effectiveness. Bears have no difficulty ripping open loosely secured metal bins even with a lock. Most of the dumpsters in Port Hardy are not properly secured to withstand the strength of a determined bear. Black bears are able to exert several thousand pounds of force and have gained access to garbage in metal containers, garages and cars. Dumpsters with solid self-latching lids and doors greatly improve wildlife resistance. It must be noted that self-latching quality bear-resistant containers are highly recommended in high conflict areas especially where there is frequent access to the containers by multiple users. The level of human carelessness to consistently lock a padlock or carabineer style-securing device has been proven to be high therefore in areas such as high density housing self-latching mechanisms are recommended.

This management plan recommends detailed amendments to Garbage Collection Bylaw 12-2009 that are intended to strengthen municipal authority with regard to effective management of the commercial garbage containment system (see section 5.3 of this document). At this time Section 7 (a) of Garbage Bylaw 12-2009 states that, "no person shall store any garbage or refuse that is a wildlife attractant in such a manner that is accessible to wildlife". Every unlocked or loosely secured commercial container is subject to bylaw fines under this regulation. It is advised that specific criteria is determined to define a commercial container for the purpose of ensuring that quality containers are provided to local businesses for the purpose of reducing human-bear conflict and to make certain they are not unreasonably subjected to bylaw fines.

Restaurants have an additional issue with oil/grease waste, which is particularly attractive to bears. Some restaurants store their grease in a metal container with a metal lid covering a steel grid. The container may be strong enough to keep bears out of the main grease compartment, but the lids are easy for bears to lift and access the grid that is coated with oil/grease residue. Some restaurants avoid the problem of attracting bears by storing oil in plastic buckets with lids inside a secure dwelling. There is also a grease trap product (i.e.,

Solid Waste Systems) that has been tested and passed the Living With Wildlife Bear-Resistant Product Testing Program (www.lwwf.org).

8.3.2 Commercial Waste Management recommendations:

| Recommendations | Responsibility |
|--|--|
| Amendments to Garbage Bylaw 12-2009: | |
| "Wildlife Resistant Container" means a fully enclosed container with a sealed metal 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 Or means a fully enclosed metal container with a sturdy metal cover capable of being completely closed to reduce odors and secured with a latching device of sufficient strength and design to prevent access by Wildlife. Or a combined definition for "Wildlife Resistant Container" to accommodate a dual system of currently used containers and new self-latching containers during the development of an agreement between the municipality and the local waste contractor to fully implement a "self-latching container system" at which time the latter part of the following definition can be removed leaving a definition that only allows self-latching designs. The definition would read as follows: means a fully enclosed metal container with a sealed metal lid and a self-latching mechanism of sufficient design and strength to prevent access by wildlife or fully enclosed metal container with a sealed metal lid capable of being completely closed and secured with a latching device of sufficient strength and design to prevent access by wildlife. "Wildlife Resistant Enclosure" means a fully enclosed structure or container designed, manufactured and constructed of materials with sufficient strength to prevent access by wildlife. All "Wildlife Resistant Containers" and/or "Standard Containers" and "Wildlife Resistant Enclosures" must be kept closed and secure when waste is not being deposited or dumped to prohibit access by wildlife. If any area, part or piece of the Wildlife Resistant Enclosure becomes damaged it must be repaired or replaced as quickly as possible or at the most within fourteen (14) days. | District of Port Hardy Waste Disposal Company Bear Stewardship Committee |

ADDITIONAL COMMERCIAL WASTE RECOMMENDATIONS:

- All commercial enterprises should be informed of the amendments to Garbage Bylaw 12-2009 for "Wildlife Resistant Containers" and the clause "All Wildlife Resistant Containers and/or "Wildlife Resistant Enclosures" must be kept closed and secure when waste is not being deposited or dumped to prohibit access by wildlife. If any area, part or piece of the Wildlife Resistant Container and/or Standard Container or Wildlife Resistant Enclosure becomes damaged it must be repaired or replaced as quickly as possible or at the most within fourteen (14) days.
- Establish a standard inspection form to assess the condition of commercial dumpsters on a regular basis.
- Repair containers and receptacles as needed in a timely fashion
- Keep non-bear-resistant commercial containers or any refuse containment system that is not bear-resistant within a wildlife resistant enclosure.
- Do not locate commercial containers backed onto a greenspace.
- Commercial businesses must store all restaurant grease in an approved bear-resistant container.
- The District of Port Hardy signed a Garbage Collection and Disposal Agreement with a local contractor in May of 2009. It is recommended that a clause be amended into this agreement that binds the actions of the waste collection contractor to the requirements of Garbage Bylaw 12-2009.

Steel Container Systems Inc. located in Nanaimo, BC recently developed high-quality bear-resistant front-loading commercial containers (see appendix 4). To implement this type of bear-resistant container in the District of Port Hardy, a side-loading model would need to be designed.

Container specifications:

- 6 vd, and 3vd sizes
- 12 GA floor, front, back, sides and top rails
- Automatic release bars and opening dump lid
- Predator paw recessed lid
- Self-latching wildlife proof hatches



8.4 MUNICIPAL WASTE COMPONENT:

8.4.1 Considerations:

The District of Port Hardy Bear Hazard Assessment (2009) identified that all municipal public waste receptacles are of a non bear-resistant variety and require upgrading to bear-resistant models. The majority of public receptacles are in areas that are easily accessed by bears and located next to greenbelts or are within close range of travel corridors. Municipal receptacles were also found in neighborhoods that were rated as high bear hazard zones as well as placed immediately outside of the schools.

All municipal bins require regular maintenance and frequent emptying to reduce the odor associated with garbage. Garbage must not be allowed to overflow or remain placed outside the bin at any time and regular checks and maintenance is required to assure the bins remain fully functional and undamaged. Signage and education materials should be used to ensure user compliance.

| Re | ecommendations | Responsibility |
|----|--|--|
| • | Replace all bins that are non bear-resistant with bear-resistant models | District of Port Hardy Public Works |
| • | Begin with upgrades in high conflict zones and areas that back onto parks and green-spaces. | |
| • | Empty and clean bins regularly. | |
| • | Ensure that bins are firmly secured to the ground to prevent tipping by bears especially if container lids are gravity-activated latches instead of spring loaded. | |
| • | Place signage on all bins to ensure user compliance. | |
| • | Assure all highway and park bins are bear-resistant. | |

8.4.2 Waste Management in New Development Zones:

All new Developers should be informed of the "Bear Smart" waste management requirements in the Garbage Bylaw, Building Code Bylaw and Zoning Bylaw prior to development. If the "Bear Smart" recommendations contained within this document are adopted into all related bylaws, new developers will be required to pre-plan their development sites according to the "Bear Smart" conflict reduction strategies established by the municipality.

| Recommendations | Responsibility |
|--|----------------------|
| Amend the Garbage Bylaw, Building Code Bylaw, | District of Ucluelet |
| Subdivision Bylaw and Zoning Bylaw to reflect Bear | |
| Smart standards. | |

Waste Management New Development Zones Continued:

- Pre-plan bear-resistant waste management in new development zones in consultation with a "Bear Smart" expert.
- Inform new developers of "Bear Smart" waste management regulations by providing information in a "Bear Smart" Development Package.

8.5 Unauthorized garbage disposal sites:

Unauthorized sites where household garbage, appliances, fish waste and other potential bear attractants are illegally dumped holds high probability to be a contributing factor to the habituation and food conditioning of bears that use those areas. The placement of educational signs at known locations regarding fines for illegal dumping and the consequences of these actions on public safety, the environment and wildlife are recommended. Enforcement of bylaws and implementation of fines for violators and hard-core deviants is strongly recommended.

| Recommendations | Responsibility |
|--|------------------------|
| Unauthorized Garbage Disposal Sites: | District of Port Hardy |
| Clean up garbage at all existing sites. | - |
| Implement a frequent monitoring system at known dumping sites. | |
| Issue fines for violations. | |
| Post signs with fines for violations at known dumping sites and include information regarding the high probability of contributing to human-bear conflict within the community, wildlife conservation and other environmental hazards. | |
| Consider media messages to highlight the effects of unauthorized dumping on the environment and wildlife. | |

8.6 SCHOOLS -WASTE MANAGEMENT & SCHOOL YARD BEAR-PROOFING:

School District 85 (Vancouver Island North) in Port Hardy is comprised of 3 Elementary Schools, one Secondary School and Fort Rupert Elementary. All the schools are connected by wilderness trail systems that meander throughout the community and are also adjacent to large tracts of undeveloped green space heavily used by bears. The waste containers and commercial dumpsters currently used on the school grounds are suboptimal for effective "Bear Smart" garbage containment and should be upgraded or modified. Litter on the school grounds should also be dealt with effectively as a component of strict school regulations. The overgrown vegetation around a majority of the schools should be removed and/or significantly brushed back to reduce

security/hiding areas by bears increasing safety for the children and school attendants. All vegetation obstructing the view of school play areas should be removed and all vegetation surrounding the play areas should be removed of bear forage plants. See Appendix 2 for a list of bear attractant plants.

| Rec | commendations | Responsibility |
|-----|--|--|
| Sch | ool Garbage Containment: | District of Port Hardy |
| | Upgrade the quality of commercial containers on the school grounds to be of bear-resistant quality according to Garbage Bylaw regulations. | School District 85 |
| | Ensure all existing commercial dumpsters are locked at all times between usages to prevent access by bears or install wildlife-resistant commercial containers. | |
| | Do not place commercial dumpsters backed up against community green space. | |
| | Retro-fit all silver garbage containers designed and manufactured by JM's Mobile Welding with a self-latching man-door to increase public safety and prevent easy access by bears. At this time a small bear could easily crawl into and/or access the container. | |
| Sch | ool Fencing: | |
| | In areas where a school is backed up against green-spaces fencing should be installed. For optimal safety precautions a space cleared of vegetation between the fence and the neighboring green-space of at least 50 – 100 m should be made to deter a bear from coming out into the open. | |
| Sch | ool Play Areas: | |
| | Remove overgrown vegetation on school property and adjacent properties. | |
| | Clear a buffer strip free of all vegetation surrounding green-spaces & plays areas of at least 50 – 100 m. | |
| | Remove all natural bear foods from the school grounds and adjacent green-spaces. | Calcul District 05 |
| Edu | cation: | School District 85 |
| • | Schedule regular bear safety presentations by the "NI Bear Smart" volunteer group/ COS or develop A "Bear Smart" safety program administered several times annually by trained School Staff. | "Bear Smart" volunteer group Conservation Officer Service |

Develop a "Bear Alert" program to alert students when a bear is spotted on or near the school grounds via public announcement and indoor/outdoor posters or signage. The posters/signage could be a class project.

8.7 CONSTRUCTION SITE DUMPSTERS:

Construction of new homes and commercial business is a consideration with regard to construction material dumpsters. Construction sites typically have dumpsters overflowing with large materials, making it difficult to secure a lid. Although most of the materials are non-attractants, the odd food scrap or wrapper would attract bears. Signs may keep attractants out of the bins but the safest solution is to ensure that all garbage is inaccessible to bears.

| Recommendations | Responsibility |
|--|------------------------|
| Consider New Section in Garbage Bylaw 12-2009 | |
| "Construction Site Refuse Disposal" | District of Port Hardy |
| All construction sites must have a designated container that | _ |
| receives construction refuse. The container must be one of the | |
| following: | |
| (d) be a wildlife resistant container | |
| (e) be stored in an wildlife resistant enclosure | |
| (f) be emptied at the end of each working day or stored in a | |
| building or trailer. | |
| Establish signs on bins used at construction sites that indicate | |
| they are not to be used for food waste. | |

8.8 FISH WASTE:

There are many recreational fishing opportunities available in Port Hardy. This can lead to issues in dealing with fish waste, both before and after consumption. Cleaning fish and disposing of waste in the water, as close as possible to the location where the fish was caught, is the best way to avoid attracting bears. When fish are caught in the river, attractants will not linger if the carcass is placed in fast flowing or deep water with the swim bladder punctured.

To a large extent, fish are cleaned at the end of public docks or at docks belonging to the municipality or local resorts and campsites in Port Hardy. Some resorts have adopted a policy for fishing guests that includes rules for keeping fish attractants under control at the site such as the following:

- All fishing related gear is to be stored in your vehicle at all times.
- No fish cleaning on site or in rooms; fish are to be processed and packaged before returning to resort.
- No outdoor freezers on property.
- No coolers stored outside of rooms or in campsites.

| Re | <u>commendations</u> | Responsibility |
|-----|--|-----------------------------------|
| Fig | sh Waste | District of Port Hardy |
| • | Amend Garbage Bylaw 12-2009 to include regulations for the proper disposal of fish waste (see recommendation in Section 5.3 of this document). | Local Businesses and Campgrounds. |
| • | Amend Garbage Bylaw 12-2009 to include regulations for the prohibition of storing fridges and freezers outdoors for the purpose of storing fish or any wildlife attractant (see recommendation in Section 5.3 of this document). | |
| • | Place a "wildlife resistant container" or "wildlife resistant enclosure" at all municipal fish cleaning stations. | |

8.9 CAMPGROUNDS:

Campground owners/managers in Port Hardy are aware of the importance of having bear resistant waste containers on their property to collect garbage and fish waste for the purpose of increasing public safety and wildlife conservation. Most of the campgrounds in Port Hardy are located in close proximity to the Quatse River or adjacent to intertidal zones and high quality bear habitat increasing the risk of negative human-bear encounters.

The "Bare Campsite Policy" developed by Bob Hansen (Wildlife Conflict Specialist, Pacific Rim National Park) is an intensive education program that has effectively reduced the incidence of human-bear conflict at Greenpoint Campground in Pacific Rim National Park Reserve since 1999. The policy requires that every wildlife attractant must be inaccessible when people are absent from the site or asleep.

| Recommendations | Responsibility |
|---|------------------------|
| Campgrounds | District of Port Hardy |
| Camper registration briefing. | Campground |
| • Signing of a camping permit after the on-site orientation to confirm that the campers understand "Bare Campsite" requirements and the consequences of leaving attractants unattended. | Owners/Managers |
| • Campground staff conducts regular attractant surveys of each campsite when people are away from their site or asleep. Those sites where the "Bare Campsite" requirements have been met receives a green card, those with minor attractants receive a yellow card and those rated as highly attractive receive a red card. Red card sites have food and/or garbage left out. When found, bear attractants are removed by campground staff from the site to resolve the public safety hazard. When the campers return they are contacted and may be evicted for putting themselves, campground staff and other campers at risk. | |

- Educational "Bear Smart" signage is placed on all picnic tables.
- Bear-resistant food caches are available for campers that do not have a vehicle to store attractants in.

A "BARE CAMPSITE"



HAS LITTLE OF INTEREST FOR A
BEAR



A Very Attractive Site (for a bear): Coclers, Water Jug, Campstove, Tablecloth, Dishes, Garbage Bag, Empty Beer Bottles, Beverages, Dogfood Dish, Dish Rag Towel, Dish Rag and Clothes on Clothes Line, Tablecloth, Fuel Container, etc.

9.0 FRUIT TREES, BIRD FEEDERS & COMPOST

The Conservation Officer Service Problem Wildlife Occurrence Reports did not show a high level of complaints from 2005-2008 regarding human conflict with bears in neighborhood fruit trees, bird feeders and compost however this does not indicate that they are not contributing factors to the problem in Port Hardy. The management of fruit trees, bird feeders and compost will be addressed in this document for the purpose of providing proactive measures for the community and new development zones. Fruit trees include but are not limited to:

- Apple and Crab Apple Trees.
- Plum Trees
- Pear
- Peach
- Cherry
- Mountain Ash

For further information on natural bear foods that commonly occur throughout the District of Port Hardy and in the CWH (Coastal Western Hemlock) Biogeoclimatic Zone see Appendix 2. This initial list should be modified and updated as required by a qualified professional(s). In addition to the trees and shrubs listed in Appendix 4 bears feed on a variety of grasses and forbs as well which can be reduced in attractiveness to bears by regular lawn mowing.

| Recommendations | Responsibility |
|--|--|
| Fruit Trees • Prohibit planting of new fruit trees in high to moderate | District of Port Hardy |
| conflict zones. | Port Hardy Bear Stewardship Committee |
| Remove unattended and mismanaged fruit trees in high conflict zones. | Local Residents |
| | |

Fruit Trees Continued

- Ensure all fruit trees are properly managed including picking fruit before it is ripe.
- Promote the use of electric fencing where residents are willing to manage their fruit trees.
- Endorse a list of trees and shrubs that are considered bear attractants to inform municipal staff, local residents and new developers.
- Provide public education via TV, radio and signage on effective management of fruit trees to prevent conflict.
- Provide "Bear Smart" educational material at all retail outlets that sell fruit trees and bear attractant plants and shrubs.
- Support any local fruit exchange programs.

9.1 Bird Feeders:

Improperly placed and mismanaged bird feeders provide an easy, high caloric food source for bears especially during springtime when natural forage is limited. Bird feeders may be a contributing factor to the early development of food-conditioned bears within the community.

| Recommendations | Responsibility |
|--|---|
| Bird Feeders Discourage the use of bird feeders in active bear season. As an alternative to hummingbird feeders, plant red or pink native flowers in the garden or in hanging baskets or use birdbaths to attract birds without attracting bears. If bird feeders are used: Hang bird feeders at least 3 meters (10 ft), preferably 5.5m (18 ft) above the ground and 1.5 m (5 ft) from the supporting structure. Clean spilled bird feed daily. Bring in bird feeders at night if possible. Reduce the amount of feed placed in the feeder. Keep all replacement bird seed in a bear-resistant enclosure or dwelling. Enforce Problem Wildlife Protection Orders in addition to other fines for violations and hard-core deviants. | District of Port Hardy Bear Stewardship Committee Local Residents |

9.2 Composting:

Considering the District of Port Hardy is located in prime bear habitat, backyard composting of food wastes should not occur unless it is only for non-food waste compostable materials (e.g., grass clippings). In the spring of 2010 the 7 Mile Landfill Station will be accepting yard waste materials although no food waste will be permitted. In bear country composting of food wastes should be practiced using an indoor composting unit or taken to a bear-resistant communal compost facility either at a transfer station or landfill station. If the District of Port Hardy considers a central or communal compost facility "Bear Smart" education materials should be circulated to all local residents. If outdoor composters are being sold within the community, "Bear Smart" education should be provided with the purchase of all composters. All outdoor composters should be located away from green-spaces, trail systems and neighborhood bushes.

| Recommendations | Responsibilities |
|--|------------------------|
| Backyard Compost: | District of Bort Honds |
| Encourage indoor composting in Port Hard | • |
| Consider a bear-resistant communal composition or bear-resistant composting at 7 M Station. | • |
| 3. For outdoor composting promote "Bear Sn educational material to include: | nart" |
| Keep compost area and container clean. | |
| Avoid placing composts backed up against trail systems. | green spaces or |
| Never compost animal waste, oil, grease, o products. | r dairy |
| All lime to the compost to aid in decompose reduce odour and cover kitchen waste each with non-food wastes. Keep aerated and present the second | time it is added |

10. MUNICIPAL "BEAR SMART" MONITORING AND REPORTING:

The Conservation Officer Service Problem Wildlife Occurrence Reports (PWOR's) are used to inform the officers of the level and intensity of human-bear interactions/conflicts within the community as well as informing biologists and "Bear Smart" contractors with information for the purpose of developing community Bear Hazard Assessments. The

occurrence reports are generated by public complaints called in to the Conservation Officer Service toll free number.

To establish an effective "Bear Smart" program in Port Hardy it is imperative that both the Conservation Officer Service and the District of Port Hardy are aware of day-to-day bear activity in the community on a consistent basis. The information provided by the Problem Wildlife Occurrence Reports is useful for targeting bylaw enforcement, identifying high use and high conflict areas by bears, identifying waste management problems, trail development and maintenance and new development and planning purposes. It is recommended by the author of this report that a third party confidentiality contract is established between the COS and the District of Port Hardy enabling a designated staff member of Port Hardy to access the Problem Wildlife Occurrence Reports. This contract is mandatory in view of the fact that the Freedom of Information and Protection of Privacy Act, SBC 1666, c. 165 (the Act), prohibits the disclosure of Personal Information in other than specified circumstances. Alternately, the local Conservation Officers would provide the designated staff member this information on a regular basis.

| Recon | nmendations | Responsibility |
|-------|--|---|
| | Establish a confidentiality contract with the Conservation Officer Service to gain access to the Problem Wildlife Occurrence Reports or establish an agreement with the COS to provide this information to the District of Port Hardy on a consistent basis. | District of Port Hardy Bylaw Enforcement Officer Conservation Officer Service |
| 2. | Design a monitoring and reporting system for Problem Wildlife Occurrence information within municipal databases to maintain an updated Bear Hazard Assessment System. | |
| 3. | Use the PWOR information for: | |
| | Identifying high use and high conflict areas in the community. Targeting bylaw enforcement. | |
| | • Identify municipal, residential and commercial waste management problem areas. | |
| | Trail development and maintenance & new development and planning | |
| | • Maintaining annual information on the number and nature of calls generated in the community. | |
| | Maintaining up to date assessments of attractants accessed by bears including garbage, fruit trees, fish offal, outdoor freezers etc. (See District of Port Hardy Bear Hazard Assessment). | |

11.0 INTERAGENCY PARTNERSHIPS:

Effective "Bear Smart" community management is a wide-ranging practice that requires day-day communications regarding bear activity, public education initiatives, development and enforcement of bylaws, bear-resistant solid waste management, maintenance and development of trail networks, community planning and consistent monitoring and recording systems. In light of this, the partnership and cooperation of numerous stakeholders with a diverse range of knowledge and expertise is necessary to maximize efficacy of the "Bear Smart" program. The following agencies, positions, and non-governmental organizations are recommended to develop consistent working relationships to achieve the benefits of becoming a "Bear Smart" community:

District of Port Hardy: Mayor and Council

Chief Administration Officer Director of Corporate Services Bylaw Enforcement Officer

Director of Planning and Development

Environmental Manager

Director of Parks and Recreation Public Works Superintendant

Regional District of Mount Operations Manager

Waddington: Waste Reduction Coordinator

Ministry of Environment: Conservation Officer Service

Large Carnivore Specialist

Ministry of Forests: Registered Forest Technologist

Bear Ecology and Behavior: Registered Professional Biologist and/or "Bear

Smart" Specialist

Ministry of Environment

Bear Smart Community Program: "Bear Smart" Specialist

Public Education Outreach: "Bear Smart" trained volunteers

12.0 CONCLUSION:

The District of Port Hardy is located in prime bear habitat and as evidenced by the Conservation Officer Service Problem Wildlife Occurrence Reports; the level of probability for negative human-bear encounters within the community and surrounding area is high. It was the author's intent to develop a user-friendly and practical bear management plan developed in full collaboration with the municipality, the Conservation Officer Service and other major stakeholders. This process of collaboration is hoped to ensure comfortable passage of the document through Council approval and adoption. The author thoroughly informed District Staff of each component of the "Bear Smart" program and worked in partnership to develop feasible means for effective implementation. If the recommendations contained within this management plan are incorporated into Port Hardy's official community documents alongside compliance and enforcement strategies and consistent public education initiatives, the District of Port Hardy can apply to the Ministry of Environment for official "Bear Smart" status.

This Human-Bear Conflict Management Plan is herby presented to Council and District Staff as a community developed "Bear Smart" Human-Bear Conflict Management plan. It is however recommended that the plan be subject to periodic review and updating as new situations arise. The author of this plan is willing to provide continued support to the District of Port Hardy for successful implementation of the recommendations contained within this document.

Thank you,

Crystal McMillan MA Executive Director Bear Smart BC Society

13.0 REFERENCES

- Beckmannn, J.P, Berger, J, 2003b. Rapid ecological and behavioral changes in carnivores: the responses of black bears to altered food. Journal of Zoology 261: 207-212.
- Beckmann, J.P., Karasin, L., Costello, C., Matthews, S., and Smith, A. (2008). Coexisting with black bears: Perspectives from four case studies across North America, WCS Working Paper No. 33. New York: Wildlife Conservation Society.
- Davis, H., Wellwood, D., & Ciarniello, L. (2002, March). "Bear Smart" Community Program: Background report. Retrieved November 29, 2009, from http://www.env.gov.bc.ca/wld/documents/bearsmart_bkgdr.pdf
- Interagency Grizzly Bear Committee/UDSA Forest Service. 2008. Interagency GrizzlyBear Committee: Bear resistant container testing program. USDA Forest Service, Intermountain Region, Ogden, UT. Montana, USA.

14.0 APPENDICES:

APPENDIX 1: DISTRICT OF UCLUELET, COUNCIL REPORT COMMUNAL GARBAGE PILOT PROGRAM

DISTRICT OF UCLUELET COUNCIL REPORT

To:

Mayor and Council

File No:

From:

Felice Mazzoni, Director of Planning

Date:

January 9th, 2008

Communal Garbage Pilot Program Partnership

Recommendations:

- That Council make a resolution to support the Pilot Program; and
- That Council direct staff to pursue the necessary steps to make the proposed Pilot Program operable within existing municipal regulations.

Purpose:

To enable a Communal Garbage Collection Pilot Project to take place in Uduelet.

CAO Comments:

I support the recommendation.

Background:

Throughout 2007 the Pacific Rim Bear Smart Committee (PRBSC), along with the District Planning Department and developer Charles Smith of Weyerhaeuser, have looked at the opportunity of designing new subdivisions to be BearSmart.

The District of Ucluelet is currently working towards achieving BearSmart status from the Province by implementing changes to local bylaws and accepting recommendations presented in a recent Human-Bear Conflict Management Plan. It should be noted that this Pilot Project is greatly supported by the Ministry of Environment and will make Ucluelet the first municipality in BC to implement communal garbage collection to achieve an innovative solution for waste management, wildlife protection and public safety.

Communal garbage collection is currently being operated in the Town of Canmore, Alberta and can act as an excellent source of information as Ucluelet proceeds with exploring this opportunity. The "Canmore Experience" has implemented communal garbage collection into new developments and is currently assessing various neighbourhoods to gauge the possibility of transitioning from curbside collection to communal garbage collection. New developments are easier to implement this new method, because the residents are not present yet and will move into the

neighbourhood knowing that communal garbage collection is the chosen method. It should be noted that through discussion with Charles Smith and Judy Gray of Remax, several prospective buyers for the OceanWest lots surrounding the two cul-desacs (see Schedule "A") have identified that they are very supportive of the idea of communal, bear-proof garbage management.

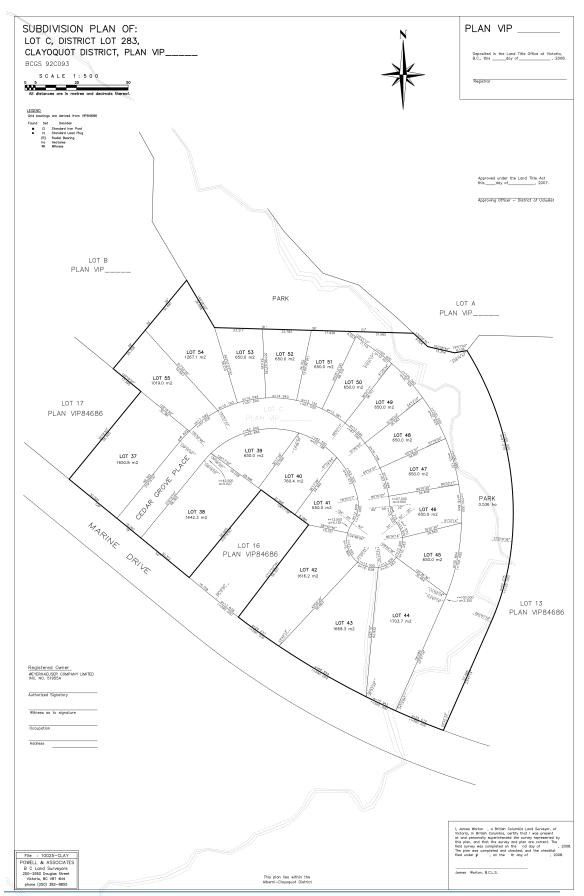
Details of Pilot Project:

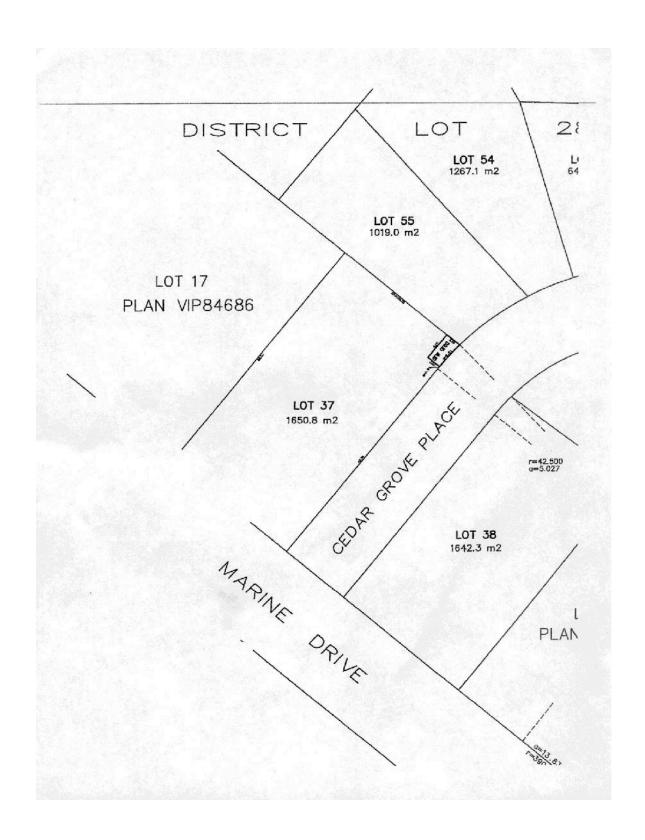
The OceanWest pilot project area, as shown in Schedule "A", consists of two cul-desacs, each having one communal container located on the street as opposed to curbside residential garbage collection. It is planned that each 4 cubic yard communal container will service approximately 20 single-family households. Pacific Rim Bear Smart is pursuing various design features for the bins in order for them to be user friendly; while at the same time, making them aesthetically pleasing in order for them to fit within the surrounding landscape. It is likely that they will be similar in design to the smaller receptacles that District uses on Peninsula Road and at District Parks. The planning department envisions more single-family developments will also want to investigate the opportunity to pursue this innovative alternative and as a result, collectively lower the amount of human-bear conflicts and the number of bears being conditioned to human food waste and ultimately being destroyed.

Much of the work has already been completed to initiate this pilot. Pacific Rim Bear Smart Society, has secured \$10,000 from the Ministry of Environment, of which a portion of this money is to purchase two BearSaver containers for the OceanWest Development (refer to Schedule "B" for further details). Through negotiations between staff and the developer, an area has been designed into Weyerhaeuser's proposed subdivision plan to reserve a space for the container and complete preliminary site preparation for the first cul-de-sac (Road A & Road C on Schedule "A").

It is estimated that the pilot project will continue for a minimum of 3 years, unless specified otherwise. The Planning Department will measure community support for the communal garbage collection method during the OCP review, and therefore will be able to provide further information in the Fall 2008 regarding the level of acceptance from the community, as well as new residents of the subdivision. The PRBSC, in conjunction with District Bylaw Enforcement, will monitor the successes and challenges resulting from the pilot project and will give Council periodical updates. As for now, the Planning Department will continue to work with developers and PRBSC, to assess future subdivisions and identify any further developments that might be eligible to participate in the pilot program.

Felice Mazzoni, M.C.I.P. Director of Planning





APPENDIX 2. PLANTS EATEN BY BLACK BEARS IN AND AROUND THE DISTRICT OF PORT HARDY.

| Common Name | Scientific Name | Portion Consumed | Season |
|--|---|----------------------------------|------------------------|
| MAJOR PLANT FOODS | | | |
| Grasses and Sedges: | | | |
| grasses (bent grasses, oat grasses, wildrye, fescues, meadow barley) * | Poaceae (Agrostis spp. Aveneae, Elymus sp., Festuceae, Hordeum brachyantherum, Calamagrostis canadensis) | leaves, flowers | spring, summer fall |
| sedges * | Carex spp. (Carex lyngbyei and others) | leaves, flowers | spring, summer fall |
| Horsetails: | | | |
| horsetail * | Equisetum spp. | stems, branches | summer |
| Herbs: | | | |
| skunk cabbage * | Lysichiton americanum | underground stems, leaves | spring, summer fall |
| apargidium * (similar to a dandelion) | Microseris borealis | stems, leaves | summer |
| clover * | Trifolium spp. | stems, leaves | spring, summer fall |
| Shrubs: | | | |
| kinnikinnick | Arctostaphylos uva-ursi | stems, leaves, fruit | summer, fall |
| salal * | Gaultheria shallon | flowers, fruit | summer, fall |
| devil's club * | Oplopanax horridus | stems, leaves, fruit | spring, summer |
| thimbleberry | Rubus parviflorus | stems, leaves, fruit | spring, summer |
| salmonberry * | Rubus spectabilis | stems, flowers, fruit | spring, summer |
| willow | Salix spp. | catkins | spring |
| red elderberry | Sambucus racemosa | stems, fruit | summer |
| Alaskan blueberry | Vaccinium alaskaense | leaves, fruit | summer, fall |
| blueberry, huckleberry * | Vaccinium spp (V. ovalifolium, V. uliginosum, V. membranaceum) | leaves, fruit | summer, fall |
| Fungi: | | | |
| bracket fungus * | | fruiting body that grows on tree | summer, fall |

MINOR PLANT FOODS

| Herbs: | | | |
|-------------------------|------------------------|----------------|----------------|
| various wildflowers | Asteraceae | stems, flowers | |
| lady fern | Athyrium filix-femina | fronds | Spring, summer |
| pacific hemlock-parsley | Conioselinum pacificum | stems, leaves | spring |
| hairy cat's-ear | Hypochaeris radicata | flowers | |
| wall lettuce | Lactuca muralis | stems, leaves | spring, summer |
| pacific water-parsley | Oenanthe sarmentosa | stems, leaves | summer, fall |
| sweet-cicely | Osmorhiza spp. | leaves, fruit | summer |
| Shrubs: | | | |
| bunchberry | Cornus canadensis | fruit | fall |
| crowberry | Empetrum nigrum | leaves, fruit | |
| black twinberry | Lonicera involucrata | fruit | summer |
| pacific crab apple | Malus fusca | fruit | summer, fall |

| stink currant | Ribes bracteosum | fruit | summer, fall |
|-----------------------|-----------------------|------------------------|--------------|
| five-leaved bramble | Rubus pedatus | fruit | summer |
| twisted stalk | Streptopus sp. | fruit | |
| evergreen huckleberry | Vaccinium ovatum | leaves, flowers, fruit | fall |
| red huckleberry | Vaccinium parvifolium | stems, leaves, fruit | summer, fall |

APPENDIX 3: TOWN OF CANMORE COMMUNAL EXPERIENCE:

TOWN OF CANMORE SOLID WASTE SERVICES

Bear Proof Waste Handling System - The Town of Canmore Experience

Overview

This paper will detail the events, challenges and successes that lead to the elimination of curbside waste collection and the implementation of a complete animal proof waste handling system. The following will be addressed:

- Atmosphere leading to the decision to eliminate curbside waste collection
- Importance of public involvement (Waste Management Committee)
- Requirements for expert input
- Steps taken to site the containers
- Public education process
- Ongoing challenges

In The Beginning

The Town of Canmore is situated in the Bow Valley at the gateway to the Canadian Rockies. Canmore, straddling the Trans-Canada highway, is 100 Kilometres from Calgary and 2 Kilometres from the gates of Banff National Park in Alberta.

Canmore was developed as a coal mining town at the end of the 1800s. The mine remained the Town's primary employer until 1979 when the mine was closed permanently. It went through some tough economic times until the 1988 Olympic Games in Calgary that saw the Nordic events competed at the newly constructed Canmore Nordic Centre. Since the Olympic Games, the economy has improved steadily with a growth rate from 6% – 10% annually throughout the 1990s. We now have a population over 10,500 of permanent residents.

Canmore Demographics

Demographics of the population range from the service industry, professionals, home businesses, construction and trade, small business, retirees and non-permanent persons. Approximately 20% of the homes serve as second homes and are not occupied year round. The average home in Canmore is worth \$250,000 (1999).

Future Growth

Do we foresee an economic slow down? Are things going to decrease, plateau or increase? Alberta is booming, oil prices are in our favour and there is a moratorium on development in Banff. Presently, these factors contribute to an increase in development in Canmore and therefore, the potential for an increase in bear-human encounters.

Objectives To Minimize Impact

Throughout the 1990's, as Canmore was experiencing steady growth, there were pressures on the Town to implement programs that would minimize the impact on our environment and wildlife population. In the Solid Waste Services department this translated to the establishment of recycling programs, toxic round-ups and an animal proof waste handling system.

To assist with program implementation, the Town took advantage of grass roots movement and established a Waste Management Committee (WMC) made up of interested and concerned citizens. The WMC was used extensively during the implementation of the animal proof waste handling system and proved to be a tremendous asset.

Waste Collection - History

Up until 1997, the Town of Canmore provided its residents with a traditional curbside waste collection program.

In the fall of 1996, responding to increasing concerns from the public and environment groups regarding bears in waste, Council requested the Waste Management Committee to investigate options for animal proofing the Town's waste handling system. The committee recommended that the Town eliminate curbside collection and implement a communal 'bear bin' collection system. Despite this recommendation, Council voted in favour of a dual system waste handling system that included both curbside collection and neighbourhood animal proof waste containers. There was the perception at the Council level that residents were opposed to the complete elimination of curbside collection. This hybrid system gave residents the option of continuing to place waste out for curbside pick up on their collection day or use the bear proof containers any time.

Coinciding with the start of the dual system in April 1997, strict new standards for storage and placement of waste were written into the Town's Waste Control Bylaw. These include:

- Waste must be stored in an animal proof location between pick-up days (i.e. house or garage not garden, shed or wooden box)
- Waste placed for collection must be in a can with secure lid (i.e. no boxes or waste bags)
- Waste could not be placed out for collection earlier than 6AM on collection day (i.e. not the night before)

Anyone not able to meet these storage and/or placement requirements would have the option of taking their waste to one of the central animal proof waste containers.

Commercial Sector

The commercial sector were required to have implemented animal proof waste handling systems as well. Existing businesses were allowed one year from the Waste Control Bylaw's enactment to replace their waste handling container with an acceptable animal proof container. New businesses were required to conform to the new Waste Control Bylaw immediately.

What Type of Container

Providing a communal waste collection system required the evaluation for an acceptable waste container. Of the tender submissions received, there were two types of containers that met the criteria for animal proof as established by the lead biologist for the Eastern Slopes Grizzly Project Committee on Resources and the Environment who was also a member of our Waste Management Committee. Having a respected bear expert working with us as part of the WMC proved to be a valuable tool as it gave the WMC clout and credibility.

The containers had to meet the following criteria to be defined animal proof:

- · Tight lids to reduce odours.
- · Lids must be self-closing.
- Latches for its lids and bag removal must be bear proof (i.e. claws unable to reach the latch trigger mechanism.
- Hinges and latches for lids must be sufficiently strong such that they can not be pried open by claws (able to withstand several thousands of force). The rule of thumb is that it can be dismantled using a crowbar then it is not bear proof
- The container must be sufficiently stable or capable of being anchored to prevent tipping by large bears.
- Container material must be sufficiently strong to prevent bears chewing, battering or crushing the containers (i.e. able to withstand several thousand pounds of force).

After review it was agreed that the Town of Canmore would purchase the Haul-All Equipment container system manufactured in Lethbridge, Alberta due to following advantages:

- Proven track record within the national parks
- Aesthetic appearance
- Ergonomic access doors
- 20 year life expectancy

Communal Waste Container Locations

The first order of business in implementing the dual system was the siting of sixty bear proof containers in neighbourhoods and multi-residential areas. Placement of the sixty waste containers proved to be a difficult exercise for several reasons:

- New Introduction of container and service (new containers and service)
- NIMBY Proximity of containers to homes
- Space constraints Multi-Family Complexes have limited common space

Despite the difficulty, we felt the containers should be located within the neighbourhoods for several reasons:

- Ownership
- Self-policing
- Shared services

The Siting Process

A review was completed of the entire community to find sixty suitable locations. The process started with administration sending a letter and map to all visually affected homeowners of all proposed locations. The public was given two weeks to reply with comments and / or concerns. The majority of the public was receptive to the introduction of the waste containers, as they were aware of the wildlife concern and community obligations. Some other comments received included:

- Money and time could be better spent destroying the bears.
- Several people who agreed with the new service did not want the containers close to their homes as the containers would attract wildlife.

The placement hurdle succeeded with a comprehensive education program which included the following:

- Flyer mailed to every household (explaining the new system with helpful hints)
- Information booth at Canmore Trade Show
- Advertisements in Canmore Leader (local paper)

Was It Working?

An evaluation of the program began immediately based on the following criteria:

- Were bears and /or other animals getting into the waste?
- Cost to deliver program
- Use of communal containers by residents

Minimize Animal / Waste Encounters

When the program began there were several bear / waste related altercations in each year. The change to the new system saw a slight decrease in activity. However, the number of bear / waste altercations did not drop as significantly as hoped. Despite the stiff fines under the Waste Control Bylaw for improperly storing waste, some residents continued to keep waste generated between collection days outside in sheds or storage boxes that were not animal proof. Therefore the bears continued to have access to as easy food source.

Cost To Deliver Program

The Town of Canmore contracts out is waste collection program. A new contract was tendered for the start of the new dual waste collection system. The contract was awarded on:

- a price per residential unit (includes single units and units in multi-family complexes),
- a tipping rate for container service,
- and a disposal fee at Calgary area landfill site.

After several months, the community began to warm to the containers and their convenience and they became very popular. People could dispose of their waste at any time, 6PM on a Thursday or 8AM on a Sunday. Typically larger volumes of waste are generated on weekends (especially with many homes occupied on weekends only). The containers were quickly becoming the only means of disposal for many of Canmore's residents.

On the downside, the program was becoming very costly to operate as the town paid for a complete curbside program for all residents many of who were now choosing to utilize the bear proof system. As more and more residents chose to utilize the communal containers, the operating price tag increased.

Communal Containers Use

During the summer months of 1997, members of the Waste Management Committee completed a Curbside Monitoring Program. The committee members rode on the trucks during the curbside collection days and recorded the number of homes that did not have waste out at the curbside. It was assumed that if no waste was placed out for collection, then the household was utilizing the animal proof waste containers for disposal of waste.

The monitoring results indicated an average of 55% of households used the bear proof waste containers. It was also noted that some neighbourhoods achieved up to 77% in favour of the animal proof waste containers. This information was provided to Council who indicated they would consider eliminating curbside collection if the total number of households using the bear proof waste containers reached 66%.

Summer of 1998

In the summer of 1998, due in part to a poor berry crop, the number of bear sightings grew in town and the number of bear / waste related incidents increased substantially. Local Fish & Wild officers pleaded with the Town via the local newspaper to remove curbside collection and provide a complete animal proof waste handling system. In addition, members of the public were sending letters to the paper editor requesting the Town eliminate curbside collection.

The summer season continued and the number of bear / waste related problems increased to such a level that the Mayor sent a letter to all residents urging the utilization of the animal proof waste containers only until the bears went into hibernation.

When the summer season ended there were over 300 bear sightings recorded, nine bears relocated and four habituated bears destroyed.

As in 1997 the Waste Management Committee conducted a curbside monitoring program from March to August of 1998 and the total town participation in the animal proof waste containers was 62% for 1998. The use of the animal proof waste containers increased 7% over the previous summer to 62%.

Council Eliminate Curbside Collection

That September the Waste Management Committee undertook another audit and found that only 23% of households were utilizing the curbside collection program.

Despite this fact the Town was paying the contractor based on a 100% of households receiving curbside collection. The costs associated with running the dual collection system continued to rise. The recommendation was accepted unanimously by Council.

The Second Siting Process

Town administration and the Waste Management Committee were now faced with the task of siting an additional sixty animal proof waste containers to service all neighbourhoods. Providing adequate volume for weekends and holidays when Canmore triples in population was imperative. The following criteria was developed:

- 3.0 m³ waste container for every 20 homes
- 4.5 m³ waste container for every 30 homes
- · Waste containers would be a maximum of one block from every home
- Waste containers would be located on municipal reserve (i.e. public land)
- Waste containers would be doubled only when required
- Waste containers would be not be combined with other services whenever possible (i.e. beside a Canada Post mail kiosk)

Similar to the first siting process, the next hurdle was to work with the public to identify suitable locations for placement of containers. The following steps were taken to establish container locations:

- Administration and the Waste Management Committee (WMC) reviewed the entire community to determine ideal locations based on the above criteria.
 Maps were used to determine adequate coverage.
- A letter and site map indicating the exact location was sent to all visually affected residents. The letter stated the Town's intent and stated there was a two-week response period for comments or complaints.
- If no comments were received the locations was deemed permanent.
- If a comment or complaint was received it was recorded and brought to the following WMC meeting for further review.
- The WMC reviewed the contested locations by:
 - 1. Reviewing letters of protest
 - 2. Conducting site visit
 - 3. Identifying alternative locations
- If the WMC agreed with the concerns another location was sought with the process starting over again.
- If the WMC disagreed with the concerns the location was not changed and the homeowner was notified that they had with the option to take their concerns to Council for a final decision.

Siting Hurdles

The community wanted the containers but did not within their neighbourhoods. Over 600 letters were sent out and almost immediately we received phone calls and letters of concern or comments as listed below:

- Animal attractant Bears will be attracted to the containers
- Smell Rotting waste
- Real estate depreciation Price of home will drop in resale value
- Soil contamination Effluent from containers entering storm sewer or groundwater
- Eye sore View container from kitchen window
- Noise Banging of lids
- Difficult to use Doors are hard to operate for disabled and elder members of the community
- Increased automobile traffic Neighbours will drive to container
- Closer? Can we have it closer to our home?

Public & Council Meetings

Several sites required public meetings that included the affected residents, administration, a Waste Management Committee member and a Council representative.

After the public meetings were completed and no consensus was met some neighbourhoods requested that their site be reviewed and decided on by Council. The council meeting was standing room only and it was quite evident that people were tense and stressed. In the end administration and the Waste Management Committee successfully located all but one of the proposed animal proof waste containers.

Bear Proof Waste Containers Only

In May of 1999 the curbside collection system was eliminated and the residents of Canmore had the communal waste containers only. Throughout the summer the success of the complete animal proof waste handling system became evident. There were several sitings of bears in and around Canmore town site however there were zero bear / waste incidents.

The next community to our east was not as lucky. They still provided a curbside collection program and were inundated with bears eager to continue consuming human food.

Thankfully the community introduced an animal proof waste handling system this March with much success and minimal public opposition, due in part to the large media attention received in Canmore.

Presently - 2000

Since the change to a complete bear proof waste handling system it is very evident that we have had a positive impact on waste / bear related encounters as we did not have one this summer.

We are experiencing a concern with respect to large sundry items such as mattresses and chairs being left beside the containers. We do provide a large item clean up in the spring and fall but some people have chosen not to wait. Town staff remove these items as soon as they are identified and together with the waste collection contractor ensure that areas around the containers are kept as tidy as possible.

Other challenges include:

- Graffiti on containers
- Litter around containers
- Increase volume of material disposal (easier to throw items away at the end of each block then compared to our recycling depot)
- Abuse of containers from commercial businesses such as contractors and landscapers, etc.
- Container screening

Where Do We Go From Here

We have several residents who actively compost both leaf and yard waste. Some also include kitchen organic material, an obvious animal attractant if not composted properly. The town is reviewing the option of banning backyard composting of kitchen organic waste material. Residents will still be encouraged to compost leaf and yard waste and compost kitchen organic material in an indoor vermi-composter.

Though not waste related, birdfeeders have become somewhat of an issue recently. We have had several damaged birdfeeders or sightings of bears caught up a birdfeeder pole this summer. Birdfeeders fall into a grey area in our community in terms of where we address them in our bylaws. Because of the association of bears and food waste it will be addressed in our Waste Control Bylaw. Our Fish and Wildlife office have requested that the Town to ban the use of birdfeeders from early spring until early fall while the bears are active.

Summary

Points that greatly assisted the implementation and success of the program:

- Waste Management Committee Committee made up of concerned and interested citizens established and sanctioned by Council
- Public concern / environmental group putting pressure on Council
- Experts Wildlife biologists working with Town
- Waste Control Bylaw a Council approved bylaw with teeth that listed the infractions and subsequent fines

Conclusion

The Town of Canmore is now very proud of its waste handling system and how the community has embraced the change. We are very fortunate to be living in the Rockies with its mountainesque landscape and the opportunity to catch a glimpse of our graceful wildlife when we can. We have completed a long successful process due to public consultation that has enabled us to co-exist with wildlife in terms of waste generation and disposal.

APPENDIX 4: EXAMPLES COMMERCIAL CONTAINER PRODUCTS:





Nanaimo Head Office 2935 Trans Canada Hwy. Nanaimo, BC V9X 1T2 Toll Free 1 (877) 727-7833 Phone (250) 245-4262 Fax (250) 245-2413



COMMERCIAL CONTAINERS



Standard style dumpster



Counter-balance lid dumpster

BearSaver Ontario, Calif.

Ph. 909-605-1697 Fax 909-605-7780

www.bearsaver.com

sales@bearsaver.com

From the North American leaders in bear-resistant containers.

Standard dumpsters are available in front load 2, 3 and 4 yard sizes. Counter-balance lid dumpsters are available in 2 thru 6 yard sizes. With either swing-open doors or easy-to-lift counter-balance lids, getting trash or recyclables inside is easy and clean. Dumping is made easy by gravity latches releasing the unloading lid during the emptying process. Clip-down lids are also available as an option.

- 2 THRU 6 YARD FRONT LOAD STYLES FOR REFUSE OR RECYCLING
- POLE MOUNTING OPTIONS TO AVOID TIPPING
- GRAVITY LATCHES OR CLIP-DOWN LIDS
- BEAR-RESISTANT AND RODENT PROOF
- CORROSION RESISTANT MATERIALS AND POWDER COATED FINISHES
- STANDARD COLORS ARE FOREST BROWN, FIR GREEN, BLUE AND BLACK



MINI DEPOT TRASH/RECYCLING CONTAINER





BearSaver Ontario, Calif.

Ph. 909-605-1697 Fax 909-605-7780

www.bearsaver.com

sales@bearsaver.com

Manufactured by the North American leaders in bearresistant containers.

Designed to hold three different recyclables, the Mini Depot can be configured just by changing the decals. Standard openings are 5" x 5" but a 5" x 10" opening can be ordered in the center position for trash input. Heavy steel construction insures years of service in the most demanding environments. With a baffle plate installed on the inside beneath the loading holes, bears (or people) cannot remove the contents.

- EASY LOADING AND UNLOADING
- BEAR-RESISTANT AND ADA
 COMPLIANT
- LOCKABLE FRONT SERVICE DOORS, 90 GALLON CAPACITY
- TRASH, RECYCLING, OR COMBO CONFIGURATIONS
- CORROSION RESISTANT MATERIALS
 AND POWDER COATED FINISHES
- STANDARD COLORS ARE FOREST BROWN, FIR GREEN, OLIVE GREEN, BLUE AND BLACK



Haul-All is a third generation manufacturer of fully integrated waste management and recycling equipment systems including <u>semi-automated drop-off containers</u>, <u>bear proof containers</u>, <u>side-loading collection vehicles</u> and rapid cycle, self-dumping modular <u>transfer stations</u>. Contact: 1-888-428-5255 (USA & Canada) or solutions@haulall.com.







Cost Efficient and Wildlife Friendly

Savings...

- · Eliminates costs associated with managing wildlife related issues
- · Saves time by eliminating incident investigations and relocations.
- · Saves money through cost efficient collection and by eliminating property
- · Saves lives of people and bears.

Durable...

· All of our animal proof containers are constructed using galvanneal steel panels and stainless steel hinges to provide the most durable, rust resistant container on the market.

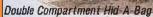


· Design compliments natural areas and allows placement in high profile locations.

Options...

- · Containers range in size from 32 gallons (120 L) to 6 cubic yds (4.5 cu m).
- Food Storage lockers and recycling containers are also available









- · Servicing the Hid-A-Bag is easy. The slide-out design eliminates heavy lifting.
- · Hid-A-Bags are securely mounted to a concrete base.
- The self tipping Hyd-A-Way container allows collection of up to 6 cu yds (4.5 cu m) in less than three minutes.
- · The container looks new after years of service thanks to a "no contact collection" method using hydraulic power from the collection vehicle.



- · Secure storage of two 36 gallon, (136 L) cans.
- Service door allows easy handling of bagged material.

Grizzly Bear photo by B.M. Wolitski, Courtesy of Friends of Kananaskis Country http://www.kananaskis.org



Printed in Canada

Haul-All reaches you through a network of selected distributors whose integrity and product knowledge qualify them to assist you in the selection and planning of your solid waste and recygling equipment, needs. HAUL-ALL, HID-A-PAC, HID-A-VAY and HID-A-CAN are registered trade-matter.



Phone 888-428-5255 Fax (403) 328-9956

E-mail: sales@haulall.com www.haulall.com

Hid-A-Meal

ehicle and property damage from the improper storage of food supplies is a growing concern. In one national park alone, annual damage has been reported as high as \$250,000. Locking food supplies in a bear proof food storage locker eliminates private property damage and keeps the bear's diet natural.

The Hid-A-Meal is the perfect solution for storing your food without the worry of attracting animals. It is a proven method of eliminating food rewards, keeping shared wilderness locations safe for people and bears.

Making communities, parks and wilderness locations safe for people and bears

Fortify your lunch and protect wildlife







Hid-A-Gan

he Hid-A-Can is the perfect solution for storing your garbage without the worry of attracting animals. By animal proofing our garbage, everyone benefits, including the wildlife.



CONSTRUCTION FEATURES

- Sturdy construction and bear proof latch eliminate animal access.
- 12 gauge, Galvanneal steel panels for strength and unmatched rust resistance.
- Powder paint provides unbeatable impact resistance.
- The finished size of 48 x 23 x 38 inches is perfect even in tight locations.
- An optional concrete mounting pad prevents the container from being tipped or moved.

OPERATIONAL FEATURES

- Secure storage of two 36 gallon, (136 L) barrels.
- Service door allows easy handling of bagged material.



 Available in a variety of colours to blend with neighbourhood aesthetics.

Making communities, parks and wilderness locations safe for people and bears.

Haul-All reaches you through a network of selected distributors whose integrity and product knowledge qualify them to assist you in the selection and planning of your solid waste and recycling equipment needs HAUL-ALL and HID-A-CAN are registered trademarks.

Grizzly Bear photo by B.M. Wolitski, Courtesy of Friends of Kananaskis Country http://www.kananaskis.org Phone 888-428-5255 Fax (403) 328-9956 E-mail: sales@haulall.com www.haulall.com



APPENDIX 5: EXAMPLES OF MUNICIPAL BYLAWS FOR REGULATING WILDLIFE ATTRACTANTS:

5.1 Excerpt from the District of Ucluelet Official Community Plan (2004)

The Official Community Plan (OCP) serves as a foundation for all policies, regulations, and decisions pertaining to land use and development in the municipality. The Plan provides guidance for economic, environmental, physical design and development, and social considerations. The OCP's section "Wildlife Management Plan" reflects Ucluelet's designation and status as a B.C. Bear Smart Community and describes the particular standards set by the District of Ucluelet with which all citizens, visitors and developers must comply.

For your guidance and easy reference, the following sections of the OCP describe the Bear Smart requirements of both individual and corporate Developers.

Definitions:

Environmental Impact Statement (EIA) (page 49)

A study undertaken by a registered professional biologist to evaluate the impacts of a proposed development on the natural environment including the following subject areas:

Physical Environment:

Including soil erosion, unstable slopes, streams, flooding, ground water, air quality, noise, contamination of land or water, and aesthetics;

Biological Resources:

Including birds, mammals, food chain effects, vegetation, biological diversity, loss or reduction of habitat, rare and endangered species, and rare or representative ecosystems.

Section 4 Wildlife Management:

Part 1, Background (page 3)

Ucluelet and surrounding areas share the natural environment with an array of wildlife, including bears, cougars and wolves....

The frequency of human contact with bears, cougars and wolves increases as land development continues. As human development spreads out and encroaches upon wildlife habitat, the wildlife and human interaction increases...

As the foraging areas, migration paths and game trails for wildlife are reduced and human contact increases, normally submissive species such as bears, cougars and wolves begin to be habituated to human activities. They become accustomed to odors and noises and are less afraid of cars, bicyclist and runners. Game trails and migration pathways in the area that have existed for hundreds or even thousands of years are encroached upon by development causing animals to learn, evolve and cope with human activity....

Ucluelet promotes prevention measures to reduce human-bear conflicts through a bear aware program. Prevention methods include keeping garbage inside until the day of

pick-up, bear-proof dumpsters, properly functioning compost and networks of communication between friends and neighbors about sightings. Prevention is a win-win situation because both people and bears win.

Part 3, The Plan

General Development Strategies (page 21)

Ucluelet as a Sustainable Community

...sustainable development involves a better integration of the environment and the economy on an ongoing basis. It does not imply total preservation or non-development, but requires that decisions made by Ucluelet Council, industry and individuals consider all biological, social and economic consequences....

<u>Ucluelet as a Sustainable Community – 2) Smart Growth Policies</u> (page 22)

The District shall endorse and promote the following Smart Growth principles in new development and redevelopment of existing properties:

- Protecting Environmentally Sensitive Areas (ESAs)
- ➤ Reducing (eliminating) detrimental economic, environmental and social effects of development....

Specific Development Policies

2) The Natural Environment (page 25)

Goal:

To identify, protect and, where possible, enhance environmentally sensitive aquatic and terrestrial natural resources for the long term benefit of fish and wildlife, natural ecosystems, and the enjoyment of present and future population and visitors.

Objectives:

- 1) To protect and enhance natural land forms and ecosystems
- 2) To ensure the health and safety of residents and visitors, and minimize the risk of damage to property and life from hazardous natural conditions
- 3) To harmonize existing development and the natural environment.

Policies:

- 1) Identify, protect and enhance environmentally sensitive areas (ESA). These include natural watercourses, marine foreshore areas, and steep rocky terrestrial areas.
- 3) Require Environmental Impact Assessments (EIA) prepared for all subdivisions and development of parcels greater than 2.0 hectares in area for all types of developments or subdivisions.
- 9) Limit or prohibit development within ESA's guidelines and bylaws to protect the Environment.

PART 4 Implementation:

Development Permit Areas 3, 4, 5, 6, 7 (pages 43-47)

Guidelines:

7) An Environmental Impact Assessment shall be required to evaluate the impacts of a proposed development on the natural environment.

Development Permit Area 8 (pages 47-48)

Guidelines:

- 4) A native vegetation management plan shall be implemented to blend developed areas with existing natural vegetation
- 5) Buildings, structures, campsites and roads shall be located so as to minimize alterations to foreshore, treed areas and other environmentally sensitive areas
- 7) An Environmental Impact Assessment shall be required to evaluate the impacts of a proposed development on the natural environment

5.2 District of Ucluelet Zoning Bylaw "Bear Smart" amendment:

DISTRICT OF UCLUELET Bylaw No. 1049, 2007

A bylaw to amend "Ucluelet Zoning Bylaw No. 800, 1999"

WHEREAS Council, in order to health and safety of its residents and visitors, has indicated a desire to decrease the interaction between humans and bears and other animals;

AND WHEREAS the establishment of regulations pertaining to the storage of garbage and other wastes that attract bears and other animals will assist in the reduction of human/animal interactions;

NOW THEREFORE the Council of the District of Ucluelet, in open meeting assembled, enacts as follows:

"Ucluelet Zoning Bylaw No. 800, 1999" is hereby amended, as follows:

1. Insert under Definitions:

Animal Proof Enclosure means a structure that has four enclosed sides, a roof, door(s) and a self-latching device, of a design and strength sufficient to prevent access by animals, as per criteria listed in Section 7 of the District of Ucluelet Garbage Collection & Regulation Bylaw No. 960, 2004.

- 2. Insert in VR-1 Zone Vacation Rental 2.5.6 Additional Requirements.
- 3. Insert in VR-2 Zone Vacation Rental 2.6.6 Additional Requirements

- Insert under Additional Requirements in all zones:
 Refer to the general regulations on waste management in Section 6.12 of this Bylaw.
- 5. Insert in Part VI General Regulations:
 - 6.12 Waste Management Requirements

 Notwithstanding the requirements of this bylaw, waste management practices for all zones must meet the following conditions:
 - a) All garbage and waste material not stored and located within the principal building shall be kept in an accessory building or animal proof enclosure.
 - All garbage and waste storage for multi-family residential, tourist accommodation commercial, industrial and institutional uses must include an animal proof enclosure, attached garage and /or accessory building for the purpose of storage for garbage and/or garbage receptacles;
 - All garbage and waste enclosures are viewed as an accessory structure and must adhere to applicable specifications for each zone and the requirements part of Section 6.5 of this Bylaw;
 - d) All animal proof enclosures for storage of garbage and waste shall be visually screened from all adjacent sites and public thoroughfares;
 - e) All animal proof enclosures for storage of garbage and waste must adhere to designated setbacks in respective land-use zones; and
 - f) All garbage and waste management practices shall conform to the regulations in accordance with the District of Ucluelet's Garbage Collection & Regulation Bylaw.
 - 4. Replace Schedule "C" attached thereto with Schedule "C" attached hereto and forming part of this bylaw.
 - 6. This bylaw may be cited as "Ucluelet Zoning Amendment Bylaw No. 1049, 2007.

ADOPTED this * day of *, 2007

CERTIFIED A TRUE AND CORRECT COPY of the "District of Ucluelet Zoning Amendment Bylaw No. 1049, 2007."

5.3 Excerpt from District of Ucluelet Consolidated Building Code Bylaw

- 10.1.13 applications for standard buildings must include a site plan defining an enclosed area attached garage or ancillary building for the purpose of storage for garbage and/or garbage receptacles. (Bylaw No. 1017)
- 10.1.14 Applications for complex buildings such as multi-family residential, tourist accommodation, commercial, industrial, manufactured home parks and institutional must include a site plan defining an animal proof enclosure, attached garage, or accessory building for the purpose of storage for garbage and/or garbage receptacles. (Bylaw No. 1057)

10.1.15 all enclosures and/or buildings used for the purposes of garbage and/or garbage receptacle storage must meet the District of Ucluelet Garbage Collection and Regulation Bylaw requirements. (Bylaw No. 1017)

5.4 Excerpt from the Alberni Clayoquot Regional District Solid Waste Management Plan

7.9 Bear-Human Conflict Management

The ACRD is home to a large population of black bears that are integral to the local ecosystem. Developing and maintaining a bear-proof solid waste management system will enhance public safety and prevent the unnecessary destruction of bears. The following policies and practices will be enacted by the ACRD and local municipalities:

Waste Management Facility Requirements

All government-owned waste management facilities that handle putrescible solid waste, including transfer stations, landfills, recycling facilities and composting facilities, located in areas that are accessible to, or frequented by bears, are bear-proofed. Landfills in particular have a properly designed, constructed and operated electric fence.

Public Waste Receptacles

Litter and recycling receptacles in public areas such as ballparks, parks, trailheads and municipal roadways are approved bear proof containers.

Waste Collection Bylaws

Waste collection bylaws contain requirements that minimize the opportunities for bears and other wildlife to access waste. Such requirements will include:

- Bear-proof garbage storage of residential waste prior to collection
- Specific time for residential curbside set out of waste on day of pick-up
- Mandatory use of approved containers by residents and criteria for approved residential containers
- Mandatory use of approved bear proof collection containers by commercial waste generators that set out putrescible waste for collection and criteria for approved bearproof commercial collection containers.

Awareness and Education

On-going awareness and education campaign for waste generators that addresses "bear awareness". Backyard composting education materials will address how to compost in a manner that does not attract wildlife into residential areas.

Implementation by: ACRD, Municipalities, Local Bear Aware Groups

Start Up: On-going

Staffing Implications: 2 weeks per year for an FTE

Costs: \$500 per year for education materials

5.5 District of Squamish Wildlife Attractants Bylaw

DISTRICT OF SQUAMISH

WILDLIFE ATTRACTANT BYLAW NO. 2053, 2009

WHEREAS Council for the District of Squamish deems it advisable to enact a bylaw to store and secure refuse and food sources securely so as to discourage and prevent bears, cougars, coyotes and wolves from accessing and becoming conditioned to or dependent on food sources generated or controlled by human activity,

NOW THEREFORE Council for the District of Squamish enacts as follows:

CITATION

1. This bylaw may be cited as the District of Squamish Wildlife Attractant Bylaw No. 2053, 2009.

INTERPRETATION

2. In this bylaw:

"animal" means domestic animals, birds, mammals and, without limitation, wildlife;

"animal attractant" means any substance or material, with or without an odour, which attracts or is likely to attract animals; and without limitation includes food or other edible products, whether intended for humans, animals, or birds, grease, oil, antifreeze; paint; petroleum products; and compost other than grass clippings, leaves or branches;

"commercial automated lift container" means a metal receptacle that is designed or intended to dispose of waste by automated means;

"Manager of Operations" means the person appointed to hold that position for the District, or a person designated to act in his or her absence;

"District" means the District of Squamish;

"refuse" means any discarded or abandoned food, substance, material, or object, whether from domestic, commercial, industrial, institutional or other use;

"special event" means a temporary, outdoor gathering for Canada Day; a sporting event; a wedding; or a convention, parade, public display, festival or other gathering for which any required permit has been obtained;

"wildlife" means a bear, cougar, coyote or wolf;

"wildlife resistant container" means a refuse container that is sufficient to accommodate normal uses of the property, is designed to discourage and prevent access by wildlife, and:

- (a) has a sturdy cover capable of being completely closed and secured with a latching device; and
- (b) if intended for use other than residential, is made of metal and is self latching;

"wildlife resistant enclosure" means a fully enclosable structure having four enclosed sides, a roof, doors and a latching device, designed to discourage and prevent access by wildlife.

TREATMENT OF REFUSE

- 3. Except as permitted in this bylaw, a person must not store any refuse that is an animal attractant in such a manner that it is accessible to wildlife.
- 4. Without limiting section 3, a person must not leave, place or store outdoors any refuse that is a animal attractant except:
 - (a) in a wildlife resistant container;
 - (b) in a container enclosed within a wildlife resistant enclosure that meets the criteria established in Schedule A; or
 - (c) in a commercial automated lift container that meets the criteria established in Schedule B.
- 5. The requirements of Sections 3 and 4 do not apply with respect to a parcel of real property:
 - (a) between the hours of 5:00 a.m. and 7:00 p.m. on a day that is designated by the District for refuse collection from that parcel; or
 - (b) during a special event on the real property if refuse that is generated by that event:
 - (i) is kept in containers as required by any permit issued for that event; or
 - (ii) if no permit is required, is kept in containers that are sufficient in size and number for that event; and

the containers used for refuse are emptied into a container in accordance with Section 4 by midnight on each day of the special event.

- 6. Every owner and occupier of real property must ensure that a wildlife resistant container, a wildlife resistant enclosure, or a commercial automated lift container located on the property is of a size that is suitable for the amount of refuse generated and is kept and maintained:
 - (a) in a clean and sanitary condition;
 - (b) in a closed and secure manner when refuse is not being deposited or emptied; and
 - (c) in a good, workable condition and in accordance with the criteria set out in Schedule A or B as applicable.
- 7. If a wildlife resistant container, a wildlife resistant enclosure or a commercial automated lift container is damaged, the owner or occupier of the real property on which it is located must ensure that it is repaired within 5 business days of the damage occurring. In circumstances of adverse weather or delivery conditions, strikes, material or labour shortages, or similar hardship beyond the control of the owner or occupier, the 5-day period may be extended by the Manager of Operations in writing and in accordance with any specified time limits, conditions or requirements that the Manager of Operations may determine as being appropriate and necessary in the circumstances.

GENERAL REQUIREMENTS

- 8. A person must not feed wildlife, and must not feed animals in a manner that is likely to attract wildlife.
- 9. Every owner or occupier of real property must ensure that:
 - (a) any fruit that has fallen from a tree is removed from the ground within 3 days and if stored outdoors, only in a wildlife resistant container or wildlife resistant enclosure;
 - (b) any bird feeder containing bird feed, suet or nectar is suspended on a cable or other device in such a manner that it is inaccessible to wildlife; and the area below any bird feeding devices or activity is kept free of accumulations of seeds and similar animal attractants;
 - (c) any composting activity is carried out and any composting device or equipment is maintained in such a manner that it is inaccessible to wildlife;

- (d) barbecue equipment and tools that remain out of doors must be clean and free of residual food or grease;
- (e) any refrigerator, freezer, storage container or similar appliance, device or apparatus that contains animal attractants of any type, if placed or located outdoors, is located and equipped in such a manner that it is inaccessible to wildlife; and
- (f) any grease, antifreeze, paint or petroleum product is stored in such a manner that it is inaccessible to wildlife.
- 10. Without limiting any other provision of this bylaw, any person responsible for a site that is used for filming, circus or catered event or a construction site must ensure that any animal attractants are disposed of in a designated wildlife resistant container that is located on that site.

ENTRY & INSPECTION

11. A bylaw enforcement officer for the District may enter onto any property in accordance with section 16 of the *Community Charter*, S.B.C. c. 26 to inspect and determine whether this bylaw is being met.

Where a bylaw enforcement officer believes that, as a result of a breach of this bylaw, wildlife is located on or near the property and has endangered or harmed a person, or presents an imminent threat to the safety of any person, the officer may take steps to prevent, avert, reduce or mitigate the harm or threat or provide assistance. In so doing, the officer may seek the assistance of a conservation officer appointed under the *Wildlife Act*, R.S.B.C. 1996, c. 488, or a police officer, as may be reasonable or necessary in the circumstances.

12. A person must not obstruct or interfere with a bylaw enforcement officer who has entered onto property pursuant to section 11, or other person assisting the officer.

OFFENCE, PENALTY & ENFORCEMENT

- 13. Any person who contravenes or violates any portion of this bylaw, who fails or omits to do anything required under this bylaw, or who permits, suffers or allows any act or thing to be done or omitted to be done in contravention or violation of this bylaw, commits an offence; and where the offence is a continuing one, each day that the offence is continued shall constitute a separate offence.
- 14. Upon being convicted of an offence under this bylaw, a person shall be liable to pay a fine of not more than \$10,000.
- 15. This bylaw may be enforced by means of a ticket issued under the *District of Squamish Municipal Ticket Information Bylaw No. 1832, 2004*, as amended or replaced from time to time.

SCHEDULES

14. Schedules A and B are attached hereto and form part of this bylaw.

SEVERABILITY

16. If any portion of this bylaw is held to be invalid by a court of competent jurisdiction, the invalid portion may be severed and such invalidity shall not affect the validity of the remaining portions of this bylaw.

SCHEDULE A

Wildlife Resistant Enclosures

The following criteria apply to a wildlife resistant enclosure:

- 1. The structure must be of sufficient size to allow for placement of containers for refuse and recycling, and for removal and emptying of those containers.
- 2. The foundation must be a concrete up stand of at least 600mm with a 100mm reinforced concrete slab on compacted gravel fill.
- 3. The structure must include a floor drain to sanitary in accordance with the British Columbia Building Code.
- 4. The exterior of the structure must be made of split face block or hardy plank nailed to ¾ inch plywood backing with 3 ¼ inch nails, in accordance with the British Columbia Building Code for wood-frame construction, and with a minimum gap between sheets and a minimum gap between door and foundation.
- 5. The structure must include two separate entrances, one for personnel to enter and exit, and one service door.
- 6. Both doors must be installed with a minimum gap on tracks and latches on both sides and must close tightly to prevent access by wildlife.
- 7. The service door must be constructed of 18-gauge steel and be either of a garage door style or hinged, with no latches or opening mechanisms located on the exterior. The service door must have cane bolts at both the top and bottom and if garage style, must have cane bolts on each side.
- 8. Personnel doors must be constructed of 18-gauge steel, open outwards, have a reinforced window, a self-closing device, and a lever opening on the interior. The exterior doorknob must be of such design that is accessible to persons with disabilities, in accordance with the British Columbia Building Code, and resistant to interference by wildlife.

9. Enclosures must have interior and exterior lighting, and bear-proof venting.

A structure that is of substantially similar design, and being of equivalent or superior strength and resistance to interference or access by wildlife, as approved by the Building Inspector for the District, may be employed as an alternative to the criteria set out above. A wildlife resistant enclosure that meets the criteria of Guideline A is deemed to comply with this bylaw.

Bumpers may be placed on door openings to prevent damage to building when the doors are opened.

SCHEDULE B

Commercial Automated Lift Container

The following criteria applies to a commercial automated lift container:

- 1. The lid or lids, and any man doors, must close tightly to prevent access by wildlife.
- 2. The lid or lids, and any man doors, must be:
 - a) self-closing; or
 - b) self-latching; or
 - c) capable of being closed with a secure latching device.
- 3. The latches for the lid or lids and bag removal must be such that an adult bear using its claws will be unlikely to reach the latch trigger mechanism.
- 4. Hinges and latches for lids must be sufficiently strong, and sufficiently affixed to the container, that they cannot be pried open by an adult bear using its claws. As a guideline, a lid that can be dismantled using a crowbar is not sufficient.
- 5. The container must be sufficiently stable or capable of being so anchored as to prevent tipping by an adult bear.
- 6. Container material must be sufficiently strong to prevent wildlife from chewing, battering or crushing the container. The container material should be able to withstand at least 3,000 pounds of force.

APPENDIX 6: EXAMPLES OF "BEAR SMART" PUBLIC EDUCATION INFORMATION AND SIGNAGE:

6.1 Example of "Homeowners's Checklist" distributed through the City of Port Alberni Utility Bills.



Port Alberni is in Bear Country



Homeowner's checklist

Step 1: Bear-proof your home...

- Garbage: Store garbage indoors or in a bear-proof enclosure until morning of scheduled pick-up day.
- Coolers: Store all coolers indoors, even clean empty ones.
- Pet Food: Bring pet dishes inside and clean up any spillage. Store all pet foods inside.
- Bird Food: Use birdfeeders only in winter. Keep ground free of seeds.
- **Barbecue:** Burn off the grill after each use. Store covered and in a secure area.
- Fruit Trees: Pick ripe fruit and fallen fruit daily. Remove unused fruit trees.
- **Recycling:** Wash and store recycling indoors or in a bear-proof enclosure.

Step z: "If you see a bear..."

- Go indoors: DO NOT RUN from the bear or taunt it. Space is Safe!
- ALERT your neighbors.

Step 3: To report a Human-Bear conflict...



Such as property damage, threatening or aggressive behavior or if the bear has no escape route call the Conservation Officer Service at 1 877 952 7277.



For information on bear-proofing your property or to report sightings call: Crystal McMillan Bear Aware Program Supervisor - BC Conservation Corps 250 266 BEAR (2327)







www.getbearsmart.com www.bearaware.bc.ca



BE SCENTS-IBLE about bears...

BEARS LIVE TO EAT ...

- consuming up to 25,000 calories a day.
- While they prefer natural foods, they will eat almost anything and will do almost anything to obtain food.
- Bears have a keen sense of smell and are driven to investigate. Carelessly stored garbage, birdfeeders, or an unclean barbeque are open invitations to bears. Bears in pursuit of an easy meal may damage property or, in rare cases, cause injury to people.
- Paying attention to common household activities will reduce encounters and contribute to a 'Bear Smart' community.

 Encourage your friends and neighbours to participate as well.



IF YOU SEE A BEAR... ACT RESPONSIBLY

REMAIN CALM

*

Often the bear is just passing through. If it finds no food, it will simply move on. Keep well away. Do not crowd the bear – give it plenty of space. Warn others to be respectful; bring small children and untrained pets in the house.

LET THE BEAR KNOW IT IS NOT WELCOME

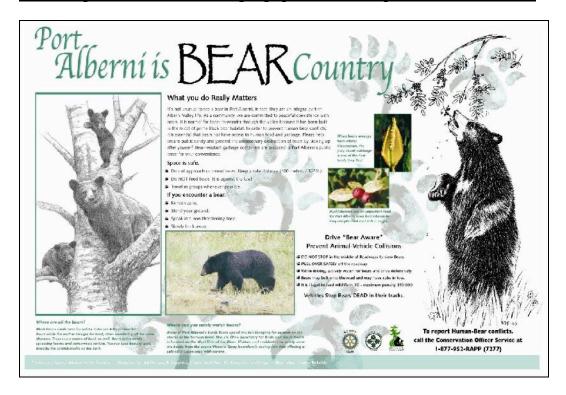
ø:

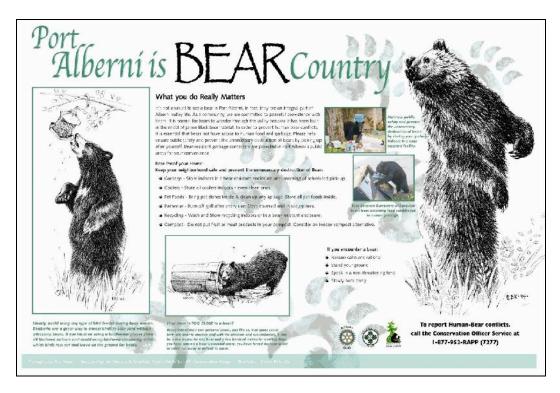
Do not allow the bear to feel comfortable in your backyard. Retreat to a safe place, allow the bear an escape route and make lots of noise to encourage the bear to leave. After it has left the area, remove anything that attracted the bear.



Illustrations by Evelyn Kirkaldy

6.2 Example of "Bear Smart" Signage placed at local parks in Port Alberni:





You Are In Wildlife Country







Avoid Wildlife Conflicts:

- Do not leave any garbage behind
- Keep children close at hand and in sight
- Keep dogs on a leash
- Stay on established trails
- Keep a safe viewing distance at all times. (30-100 meters)
- It is illegal to feed dangerous wildlife

For Emergencies call the Conservation Officer Service at 1-877-952-RAPP (7277)







