

Community-Based Human-Bear Interactions: Common Questions

REVIEW DRAFT – DO NOT DISTRIBUTE

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June 2003

EDITOR'S NOTE TO REVIEWERS

This document is largely the result of volunteer effort and is still considered a work in progress. Several of the answers need further research or documentation.

Comments have been inserted throughout the text where we feel more information is needed (select View and then Comments on the toolbar). In addition, there have been considerable changes to the Provincial management of bears that have occurred since this document was initiated and some major changes to answers may be needed to reflect these changes.

Acknowledgements

Between April 25 and 27, 2002 the Kamloops Wildlife Park Society hosted the workshop "Educating people about community-based human-bear conflict: ecology, behaviour and prevention". The workshop was held at the Kamloops Wildlife Park where an earlier draft of this document was reviewed and discussed. Many of workshop participants not only volunteered their time and expertise but also paid their travel and accommodation costs as well as a workshop fee! We would like to extend a BIG thank you for the generous efforts of the following participants:

Tony Boschmann, bearaware.com, Bear/Human Population Management Services

Kelly Dahl, B.C. Ministry of Water, Land and Air Protection, Conservation Officer

Sylvia Dolson, J.J. Whistler Bear Society, Director of Operations, Educator

Glenn Farenholtz, Farenholtz Forestry Consulting, Forestry Negotiation Facilitation

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Jason Lee, Working Dog Natural Resource Management Consulting,
Biologist/Park Ranger

Grant MacHutchon, Consultant, Wildlife Biologist

Robert Paddon, B.C. Wildlife Federation, Core Coordinator

Pat Petley, Kamloops Wildlife Park Board of Directors and retired Elementary
School Environmental Educator

Mathew Sasaki, Eco-Education B.C., Griz-Ed Educator

Tanya Tarlit, Tourism Manager and Professional Volunteer Manager (not in
attendance but provided report for workshop presentation)

Tanya Thompson, B.C. Conservation Foundation, Bear Aware, Educator

Kim Weir, Parks Canada, Jasper National Park, Communications

John Wiczorek, B.C. Conservation Foundation, Bear Aware Provincial
Coordinator

We would also like to thank the many volunteers at the Kamloops Wildlife Park for making our workshop a success and our stay comfortable including Jordan Amon, James Aird, Alysa Deshima, Jerilyn Goforth, Anika Hewitt, Quinn Leitch, Leah McRoberts, Carla Rankin, James Sudhoff, Lisa Szedgedi, Ruth Ullman, and Kelly Zak. In addition, we are very grateful for the excellent facilitation of the workshop provided by volunteers Glenn Farenholtz and Don Trethewey.

We would like to thank the Kamloops Wildlife Park Society and British Columbia Conservation for their financial and logistical contributions to the workshop.

Finally, we would like to extend a special thanks to Lana Ciarniello, Mary Ellen Grant and Frazer McKenzie for reviews of previous drafts of this document.

Introduction

The following is a list of frequently asked questions and answers discussed at the workshop “Educating people about community based human-bear conflict: bear ecology and behaviour and prevention of conflicts” held April 24 to 27, 2002 in Kamloops, British Columbia. Nineteen participants at the workshop included bear biologists, managers and educators interested in supporting the development of bear awareness education and “Bear Smart” communities. An earlier draft of this document was reviewed and discussed at the workshop.

This document provides some of the framework and background information that an educator should be familiar with before formulating situation specific answers to the following commonly asked questions. In addition, we strongly recommend that the educator view or read the following resource materials to further increase their knowledge with respect to the reasoning for and context of much of the information that we provide in this document.

Recommended Videos

Safety in Bear Country Society. 2001. Staying safe in Bear Country: a behavioral-based approach to reducing risk. Video produced by Wildeye Productions Atlin, BC in association with AV Action Yukon Ltd.

Copies of “Staying safe in Bear Country: a behavioral-based approach to reducing risk” and “Working in Bear Country: for industrial managers, supervisors and workers” can be purchased from Magic Lantern Communications Ltd.

Web Site: (<http://www.magiclantern.ca>)

Phone: 1-800-263-1818

E-mail: west@magiclantern.ca

Watch for the release of “Living in Bear Country” which is currently in production.

Recommended Further Reading

Ciarniello, L. M. 1997. Reducing human-bear conflicts: solutions through better management of non-natural foods. Bear-human conflict committee: British Columbia Ministry of Environment, Lands and Parks.

Davis, H., D. W. Wellwood, and L. M. Ciarniello. 2002. "Bear Smart" Community Program: background report. British Columbia Ministry of Water, Land and Air Protection. Victoria, British Columbia, Canada.

Herrero S. 2003. Bear attacks: their causes and avoidance. New Revised Edition. McClelland & Stewart Ltd.

Community and audience-specific information and the length of time available will influence the nature of the answer provided by the educator. However, we provide answers to frequently asked questions based on scientific knowledge and expert opinion that may be used to guide the educator's response. Depending on the knowledge, background and interests of the audience, it may be appropriate to define scientific words or substitute them with commonly used words. The educator should also consider and incorporate area specific information, such as knowledge of bear habitat use or evaluation of habitat quality for bears in and adjacent to the community. In addition, the amount of information provided will vary with the time available to deliver the information (e.g., an hour-long presentation versus 2 minutes on the doorstep). *Regardless of the type of delivery, many answers should start with how the actions (or inaction) of humans relate to the perceived problem.*

Common Questions

Perceptions

- **There are too many bears and they are dangerous so why don't you kill them?**

Refer to question 3 regarding factors that influence actual or perceived numbers of bears.

Regarding the threat to human safety, bear attacks are rare. On average, three people per year are killed by bears in North America. Most bears show considerable tolerance and restraint in their interactions with people. In addition, most bears avoid people and as a result, frequently go undetected (Safety in Bear Country Society 2001). We recommend that people living in "Bear Country" can further reduce their risk of conflicts with bears by viewing the video "Staying safe in Bear Country: a behavioral-based approach to reducing risk" (Safety in Bear Country Society 2001). Another video, currently being prepared, "Living in Bear Country" (Safety in Bear Country Society in prep.) will also be a valuable source of information for reducing community-based conflicts with bears. The Safety in Bear Country Society (2001) states that:

"The best way to minimize conflicts with bears is by practicing prevention. Though bears are forgiving of almost all human behaviour by following some simple rules you can reduce your chances of encountering a bear, and just as importantly attracting one. But despite the best precautions, you still may occasionally meet a bear. Bears often display many of the same types of behaviours towards humans that they use with each

other, therefore, the safest way to reduce risk during an encounter is to have knowledge and understanding of their behaviour and motivation. You should be able to anticipate the most common situations where you might encounter bears and it's a good idea to mentally practice how you should respond. This knowledge and preparation can empower you to act appropriately around bears and avoid an attack. You have control over most of the factors that determine your safety. Safety is no accident. It is your responsibility."

Many people in British Columbia are currently working towards a proactive rather than reactive approach to reducing human-bear conflicts because bears are an important part of the natural biodiversity in BC. In addition, bears in natural surroundings have an economic value. They are a source of inspiration and wonder for many residents of B.C. as well as a major attraction for tourists.

- **Bears are not dangerous animals so:**
 - why can't I approach a bear to get a better photograph?**
 - why do we need to bother with preventing encounters?**
 - what is the problem with attracting bears to my yard?**

Although a bear may appear to be 'friendly' it has tremendous strength. Even small bears, that have become food-conditioned, have been known to remove doors from cars to obtain human food.

Bears are wild animals that should be treated with caution and respect and given plenty of space. While bears pose a risk that is much less than many people think, bears can injure or even kill a person if they feel threatened. Invasion of a bear's "personal space" may be perceived by the bear as a threat and force the bear to act to defend itself or its young, as would many other animals. The distance at which a bear will react to an approach by humans can vary among individual bears or bear species. Even a particular bear may react differently in different situations or locations. When a bear loses its fear or wariness of humans it may become more bold and approach humans to closer and closer distances. In the end, most bold bears are removed from the community.

- **Why are there more (or less) bears around the community than there were years ago?**

or

There are too many bears so why can't we destroy bears that come into the community rather than waste time and money on preventing conflicts?

You will need to consider the area specific context when answering a question relating to bear abundance. Consult with bear biologists or Conservation Officers that are familiar with the area for help in determining which of the following points may apply to your community when developing your response. Remember that in most cases there will not be a definitive answer. However, you can educate the public to consider the numerous variables that can influence the real or perceived abundance of bears in the area.

Often we don't know if there are actually more (or less) bears or if bears are only seen more (or less) frequently or in different places than they used to be. Many things can influence our perceptions of bear abundance. There are more and more people living, travelling, and working in bear country, so more people are likely to see and interact with bears. Only if we look more closely at the situation and over a long period of time are we likely to find the true answer. A combination of factors can influence the number of bears that we see including:

- an actual increase or decrease in bear numbers,
- changes in the quality of habitats that provide natural bear foods. For example, early vegetative regeneration in clear-cuts can provide abundant sources of energy (e.g., berries) that may lead to an increase in bear abundance. However, this increase in population may be followed by a decrease in population if the clear-cuts regenerate into mature forests with a closed canopy that blocks out sunlight needed for berry production,
- an increase in the availability of non-native plant species, that bears like to eat, along highways and other roads. Many road right-of-ways are wider than in the past. In addition, roadsides are often seeded with grasses and clover to increase slope stability and reduce erosion. Some plant species that are used for seeding can attract bears to roadsides. In addition, some weeds that are efficient invaders of roadsides, such as dandelions, are also favourite bear foods and have likely become more prevalent in some areas than they were in the past. Despite the apparent abundance of bears along roadsides in some areas, roads can negatively impact a bear population because mortality rates can be higher near roads,

- changes in landscape that can affect the visibility of bears. Bears can be seen easily when feeding in clear-cuts or along roadsides, but not in forests,
- through community expansion and development in bear habitat we may be creating more food sources that are attractive to bears. Attractants include human food and garbage, fruit trees, bird food, pet food, barbecues, compost, beehives, smokehouses, livestock & poultry operations, grey-water and sewage. When bears forage in or near the community they become more visible. If a bear that is foraging on human sources of food is moved or destroyed and the attractants are not contained another bear can be lured into the same situation and it may also be removed, and so on. Ultimately, in this situation the bear population may actually be declining,
- if bears do not have negative interactions with humans, they may learn to tolerate people at closer distances. Bears that tolerate humans in close proximity are referred to as human-habituated. A human-habituated bear may not avoid people and hence, is more likely to be seen if the bear is feeding in or near a community. These bears are also more likely to be removed from the population, and
- it is important to remember that bears do not have population “explosions”. Any increase in a bear population occurs slowly because, relative to many other mammal species, bears have a late age of first reproduction, small litter size and long intervals between litters.

Attractant Issues

- **Why can't we feed bears? Why should I care about whether bears get into garbage? (Revised from Ciarniello 1997)**
Firstly, in British Columbia “the Wildlife Act now prohibits feeding or intentionally attracting bears. Persons who do so are subject to penalties under the Wildlife Act” (B.C. Government). Secondly, human food and garbage can be rich sources of energy for bears that provides incentive for hungry bears to overcome their wariness of humans. Habituation (loss of wariness) of bears to humans associated with human food-conditioning (bears that have learned to seek out non-natural foods) leads to closer and closer distances between humans and bears than would otherwise be the case. Bears may become more persistent in their attempts to get food from people, their dwellings, or vehicles. Bears that are habituated and human food-conditioned bears may pose a threat to human safety, damage property, are costly to manage, and may pose a legal liability. Attacks by bears on people are relatively rare. However, human food-conditioning is often cited as a contributing factor in attacks that do occur.

A significant consequence of food-conditioning and human habituation is the threat to bears themselves. When confrontations arise between bears and humans the bear is often destroyed. Furthermore, household garbage and garbage at landfills contain substances and objects that can harm foraging bears (e.g., toxic substances, broken glass, tin cans, plastic buckets).

Many bears that are killed by humans are human food-conditioned. Studies indicate that in some cases high quality human foods can increase the reproductive success of a female bear (i.e., earlier age of reproduction, shorter reproductive interval, larger litter size and increased cub survival). Cubs learn how and where to access food resources from their mother and if their mother is a “garbage bear” then this foraging behaviour is passed to her cubs. However, one study in Alaska found that independent subadult and adult grizzly bears that fed on garbage also had higher mortality than bears that were not feeding on garbage. These bears were more likely to be killed by hunters or destroyed by humans in defence of life or property. Hence, despite the increased reproductive success of the bears that were feeding on garbage the population remained relatively stable. In some cases, by providing bears access to our garbage we may be contributing to the production of bear cubs that will be predisposed to an early death.

- **It seems cruel to cut off the food supply of bears that have learned to depend on garbage as part of their diet. Should feeding stations be established nearby when an electric fence is installed? (Revised from Ciarniello 1997)**

Continuing to provide bears with non-natural foods, such as garbage, will only perpetuate the problem of food-conditioned bears because the habit is continued when the mother teaches her offspring the behaviour. The objective is to break the cycle of non-natural feeding in future generations.

The establishment of feeding stations to enhance visitor enjoyment was attempted in two areas within Yellowstone National Park. These areas were discontinued in 1935 and 1942, when it was found that permitting bears access to non-natural attractants enforced unwanted behaviour and habituated bears to humans and their structures.

Bear numbers may be artificially elevated because of free and easy access to human-supplied food that can be high quality and easy to digest. Many of these bears will continue to rely on human-supplied food so the problem of food-conditioned bears will not go away (refer to question 4).

The Provincial Wildlife Act prohibits feeding or intentionally attracting bears (B.C. Government; refer to question 4).

- **Viewing bears at the local landfill is an educational experience for many people who would otherwise not be able to view bears. Aren't you eliminating an educational opportunity and tourist attraction by installing an electric fence around landfill sites? (Revised from Ciarniello 1997)**

The primary reason for eliminating bear access to landfills and, therefore, bear viewing at landfills, is the harm feeding on garbage does to both bears and people (refer to question 4). As mentioned above, bears feeding on garbage become food-conditioned. Food-conditioned bears pose a greater threat to human safety. They are also responsible for damage to property and may pose a legal liability both at the landfill and at nearby communities or residents. In addition, food-conditioned bears are frequently killed in defence-of-life or property or killed in control actions. Reactive management of food-conditioned bears can be costly. Watching bears forage in a landfill site does not promote an understanding of natural bear ecology and behaviour and in fact has been reported to foster inappropriate public attitudes, such as a perceived over abundance of bears due to their concentration or that bears are slow and stupid.

Bears may also suffer injuries such as cuts to their tongues from lids left on metal cans as well as cuts to their footpads from foraging through discarded glass and garbage. Overall, these bears may be subject to higher mortality through the consumption of poisonous substances that have been discarded in landfills.

- **Can an electric fence harm or kill people? (Revised from Ciarniello 1997)**
An electric fence hurts but does not harm people. Most modern fence energizers can deliver the desired effect with total safety in the event of accidental human contact. High voltage is combined with low amperage in a pulsating charge. Amperage in an electric fence is at a level to counter the resistance of the fence wire. When a shock is experienced, there is an involuntary muscle contraction. The pulsating charge allows you to let go during the 3/4 of a second time off. This is why it is important to use smooth wire and not barbed wire. It is possible that a person's clothing could get caught in the barbs. Similar electric fence systems are employed at zoos and in livestock areas where there is a requirement for animal control with close proximity to people. Remember, farmers do not want to injure or cause damage to their property (livestock) or to their children and other family members.
- **Will an electric fence installation around a landfill re-direct bears into town? (Revised from Ciarniello 1997)**
People often comment that constructing an electric fence at a landfill site will push bears into town. Remember, an electric fence is only part of the solution

to restricting non-natural attractants to bears. Local government and individuals must also do their part to ensure that their food and garbage is stored in a bear-resistant manner from the point it is generated (e.g., household garbage is stored in a secure location until pick-up) to the final disposal (e.g. household garbage is taken to a landfill that does not allow access to bears).

There are many variables that can influence the potential for bears to move into a community in search of food from humans following the electrification of a landfill. No one can predict, with absolute certainty, bear behaviour in and adjacent to communities once access to garbage at a landfill site has been denied. Bears likely include garbage from a landfill site as a part of their overall diet and not as a complete component. However, the reliance of a bear on a landfill varies and can depend on many variables including the individual bear, the season and alternative options for feeding. The timing of fence installation or activation may also affect the response by bears.

When the community of Mackenzie, B.C. fenced its landfill there was a marked increase in complaints and human-bear conflict within the community. However, many communities in B.C., Alberta, Yukon and NWT did not experience this increase after electric fencing. Haines Junction, Yukon, had many radio-collared grizzly bears using their site and few became problems in the adjacent area.

Before electric fencing a landfill or excluding bears from a landfill by closing the site, several proactive measures can be taken to reduce the potential for increasing human-bear conflicts (e.g., an increase in bear activity in town by bears that used the dump) including the following:

- conduct a pre-exclusion assessment of bear use (e.g., recommendations may be made, based on this information, for the destruction of some bears that are largely dependent on garbage),
- conduct a human-bear conflict hazard assessment of the site and surrounding area to assess the potential for conflicts to occur in response to closure (e.g. quality of natural habitats, location of travel corridors, proximity of the landfill to the community) and recommendations to mitigate conflicts (e.g. recommendations may be made for bear-proofing specific sites, areas or sources of attractants),
- develop a human-bear conflict management plan including steps for closure and actions to be taken if human-bear conflicts occur,
- ensure that residential garbage and attractants are secured as much as possible prior to exclusion, and

conduct bear awareness education and enforcement programs to support bear-proofing of the community and identify and address problem areas or activities as they occur.

Municipalities sometime cite that the installation of an electric fence, is a liability issue that puts them at risk of legal action if bears that were using the dump move into town . However, if we continue to create human food-conditioned bears by choosing not to act, we continue to increase risk to humans and mortality of bears that could have been prevented.

- **If garbage dumps are attracting bears, why don't we just burn the garbage?**
The problem with burning garbage is that very high temperatures are required to burn garbage effectively. These temperatures cannot be achieved with open burning and wet waste, such as human foods that attract bears, will not be completely burned. Unfortunately, commercial fuel-fired, forced-air incinerators that burn garbage at a very high temperature and can handle the volume of garbage generated by even a small community can be expensive to purchase and maintain. However, incineration may be a viable option for camps in remote locations (e.g., recreation lodges, logging and mining camps) if the incinerator is properly designed and the appropriate size for the amount of waste to be handled.

When burned improperly, human garbage can release a multitude of synthetic chemicals and pollutants into both the atmosphere and aquifer. Contamination of either the atmosphere or aquifer can be detrimental to the health of all living things, including humans. Each community will have to do their own cost-benefit analysis and feasibility/regulatory compliance assessment when deciding what is the best method of waste management for their individual community.

- **If garbage dumps are attracting bears, why don't we truck our garbage somewhere else?**
Bears, especially black bears, are common throughout B.C. and there are few places where bears are not likely to be close by. If the transfer station and site that garbage is taken to are not bear-resistant then bears continue to have access to garbage.
- **Is one bear feeding at a landfill site considered a problem? (Revised from Ciarniello 1997)**
If there is one bear using the site there is likely to be others. We may not be aware of some bears that are using a site because they remain wary of people and only use the site when people are not around.

Bears learn quickly and are very efficient at adapting their behaviour to maximize their opportunities to access food. These bears may learn to tolerate people in close proximity as landfill operators and other people utilize the landfill. Furthermore, since landfills are frequently close to communities these bears have a higher risk of being lured into adjacent areas of the community by accessible attractants. As bears are successively rewarded for their behaviour (i.e., access to human sources of food) some bears will increase their tolerance of humans in even closer proximity in order to access these foods. In extreme examples of the learned behaviour of human food-conditioned bears, some bears have become so bold that they have entered occupied houses or restaurants to access food.

- **What evidence is there that education and bear-resistant waste management will work?**

National and provincial parks have been leading the way in bear awareness education and restricting access to non-natural foods through bear-resistant waste management and other measures. Bear Management Plans have been produced for many parks and within these plans there are provisions for bear awareness education and bear-resistant waste management. In the early to mid 1970's, U.S. National Parks produced Bear Management Plans for several parks including Yellowstone, Yosemite and Sequoia and Kings Canyon National Parks. By the mid 1980's Canada followed their lead by producing Bear Management Plans for several National Parks including Banff, Jasper and Kluane National Park. Subsequently, by the late 1980's BC Parks began producing Bear Management Plans for their parks starting with the West Kootenay District and South Tweedsmuir Provincial Park. In Jasper National Park Ralf (1995) states that:

“It wasn't until the early 1980's before park managers started to implement an effective program to eliminate bear access to human food and garbage. The number of bear destructions and relocations which occurred in the 1960's, 1970's, and early 1980's were drastically reduced and virtually eliminated in the 1990's as different stages of the program were implemented.”

By the mid to late-1990's a few proactive communities in British Columbia began developing innovative strategies to reduce human-bear conflict in communities. Many of these strategies are based on the success of bear management strategies used by U.S. Parks and Parks Canada. Whistler and Revelstoke, two proactive towns in B.C., have experienced a substantial drop in the number of complaints and bears killed after implementing education programs and increasing efforts to bear-proof their towns (Davis *et al.* 2002).

- **How much effort does a community have to put into eliminating access to attractants before they see a benefit?**

The benefits per unit of effort of bear-proofing a community have not been studied. The level of effort required is likely to vary among communities depending on bear abundance, natural habitat quality, inter-annual and seasonal variability in natural food abundance and quality, inter- and intra-specific competition and the quantity, quality and accessibility of non-natural foods. However, the physiology and behaviour of bears (e.g., long period of denning and relatively inefficient digestion of plant material) are strong incentives for bears to forage in areas where they can maximize their energy intake. Studies have shown that bears spend a majority of time feeding and that they select foods based on the abundance, quality and ease of handling of foods available. Therefore, when bears are foraging for non-natural foods they will cue in on sources of non-natural foods that are also high quality, accessible and digestible. Any reduction in the amount of non-natural food available should produce some benefit because there will be less opportunity and benefit to feeding on non-natural foods and hence fewer bears will be in close proximity to people and/or these bears will be in close proximity for less time. However, bears that are highly human food-conditioned have been known to go to great lengths to obtain foods from humans. As some areas or sources of non-natural foods are bear-proofed some bears that are already human food-conditioned may become more persistent in their efforts to access other sources of non-natural foods. Therefore, the more a community does to ensure that attractants are contained in a bear-resistant manner, the better. An assessment of the availability and historic use of non-natural foods by bears in the community will assist managers in developing strategies and prioritizing sites and areas for bear-proofing. A side benefit to bear-proofing is that a clean community is more attractive for both residents and tourists.

- **Apples are a natural food, why shouldn't I let bears eat them? I like to see bears so why shouldn't I let them eat fruit from my trees?**

You may be comfortable with bears in your yard, but your neighbour may not have the same level of tolerance. Bears are unable to distinguish property lines and even though you don't mind seeing bears someone in your neighbourhood will. There are at least two reasons to not allow bears access

to fruit trees. Firstly, bears can cause considerable damage to fruit trees. This is damage that you may be willing to accept but may not be acceptable to your neighbours. Damage to fruit trees is a major source of complaints to the Conservation Officer Service. Secondly, fruit draws bears into close proximity to people. This increases the potential for interactions and conflict. Bears that feed along the perimeter of town may gradually move further and further into town as the supply of fruit on the perimeter is depleted and the bear becomes more comfortable being in close proximity to people. The reward of obtaining fruit encourages habituation to humans and can eventually lead the bear to investigate sources of garbage.

Potential solutions to the issue of fruit as an attractant:

Bear awareness educators or committees in the Okanagan and Kootenays area can inquire whether their program area is within the Sterile Insect Release (SIR) program area. The SIR program provides cheap replacement trees or cheap fruit if fruit trees are cut down. This is a program that can be piggy-backed with bear awareness programs to promote the removal of fruit trees that are an attractant.

Bear awareness educators or committees may want to promote the development of bylaws that prevent the planting of fruit trees in community projects.

Several bear awareness programs have a fruit exchange program. In an exchange program, people volunteer to pick unwanted fruit in exchange for all or a portion of the fruit.

- **What can be done about leakage of grain onto railway lines?**
If bears are attracted to grain leakage on railway lines, the bear awareness educator or a member of the bear awareness committee should contact the local railway company and ask for assistance if finding a solution that prevents the problem.
- **Can I use an electric fence to keep bears away from attractants?**
Yes, an electric fence can be very effective at preventing bears from accessing attractants. However, an electric fence is only effective if it is installed properly. Appropriate grounding and voltage, secure wiring and regular maintenance to ensure that materials, such as grass, do not cause a short in the fence, are important factors that influence the effectiveness of an electric fence.
- **What are some of the major attractants around homes or farms?**
Attractants include garbage, fruit, compost, birdseed, pet food, barbeques, empty beer bottles and cans, fish/meat smokehouses, garden produce, livestock and pets (particularly smaller animals that are easily accessible), livestock feed, livestock carcasses, salt for livestock, water (in dry areas such

as Kamloops) and beehives. Some of the less obvious items that are known to attract bears include dynamite (glycerine), fertilizer, bone meal, petroleum-based products (fuels and oils), plastics, rubber and sewage.

- **What items should NOT be put in compost?**

The following items should not be put into your compost: all animal products (meat or bones) including fish, bacon fat, oil, grease, dairy products or egg shells. In addition, limit fruits or vegetables to small amounts that have been cut into smaller pieces to promote faster decomposition. Turn your compost regularly to aerate and encourage active decomposition and sprinkle soil or lime on the top of your compost to reduce odours. If you are in a high traffic bear area or bears are known to access attractants in your area, more preventative measures include:

- supporting the establishment of and using a community bear-resistant compost,
- installation of an electric fence around your compost, or
- indoor worm composting and limiting outdoor compost to items that have a lower likelihood of attracting a bear such as leaves and grass clippings.

- **Why shouldn't I put up bird feeders when bears are active?**

Birdseed is an excellent source of fats. Birdseed, whether it is in feeders or seed that falls onto the ground, can be highly attractive to bears. Hummingbird feeders can also be an attractant. Consult with the Conservation Officer Service to determine the period that bears are most likely to be active in your area. Note that some bears may be active in winter, particularly in coastal areas of British Columbia where milder winters and the availability of salmon may draw some bears out of their dens. Consider using bird feeders that are designed to be bear-resistant (e.g. a feeder hung at least 6 meters above the ground on a metal pole that a bear cannot climb) or do not put out bird feeders during the period that bears are active (e.g. the Town of Canmore, Alberta only permits the use of birdfeeders between October 31 and April 1). A bear-resistant bird feeder is a feeder that bears cannot access fat, oils or seeds from the feeder or on the ground. In most cases, there should be little cause for concern if bird feeders are not available to birds in summer because natural bird foods are abundant in summer, and thus not critical for birds to survive. If you want to watch birds, another option may be to attract birds by planting natural bird foods that are not also bear foods. Birdbaths can also be used to attract birds without attracting bears.

- **How do I know if a structure or container is bear-resistant?**

The Town of Canmore (Town of Canmore unknown) provides the following criteria for bear-proof garbage containers in their Waste Control Bylaw No. 12-97:

“Bear Proof Garbage Containers Must Meet the Following Criteria:

Tight lids to reduce odours.

Lids must be self-closing.

Latches for 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 cannot be pried open by claws (able to withstand several thousand pounds of force). The general rule of thumb is that if 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.

Bin material must be sufficiently strong to prevent bears chewing, battering or crushing the containers. i.e. able to withstand several thousand pounds of force.”

Sealing garbage or other attractants in plastic bags or tightly sealed containers before storing these items in bear-resistant containers or structures can further reduce the potential of odours attracting bears.

- **I built a box of plywood and 2x4s to store my garbage cans and now the bears don't get into my garbage. Why do I need a more expensive/secure container?** *Note: the person saying this still has neighbours with abundant and easily accessible attractants. What will happen if everyone uses plywood boxes?* Bears are strong and their claws well adapted for breaking into wooden containers. In their natural habitat, bears commonly rip apart logs to forage on ants in summer. Furthermore, bears, even small black bears, can easily rip the doors off cars or the sides off of trailers to access human foods.

Containers made of wood are not considered bear-resistant. Bears may not break into your garbage storage box now because there are abundant and easier opportunities nearby. If others around you also secure their garbage, bears, particularly bears that are already food-conditioned, may become more persistent and inventive in their efforts to access garbage.

- **How can I prevent bears from getting into my garbage if I don't have a garage or basement to store my garbage in?** Garbage should not be stored in areas that are not bear-resistant including open carports and aluminium garden sheds. Some dwellings such as mobile

homes, condominiums, and apartments may have storage space constraints. In addition, some communities have many homes that do not have a basement or securely enclosed garage. If stored in living areas, the odour from garbage can be offensive. Solutions to this problem include freezing smelly garbage until pick-up day. In areas where there is no garbage pick-up more frequent trips to the garbage dump may be managed in co-operation with neighbours. For those that want to invest in an effective personal solution, Haul-All Equipment Systems provides bear-resistant solid waste and recycling containers including a bear-resistant, 2 can storage container. Effective solutions may also be achieved at a municipal level by investigating alternative waste storage options such as bear-resistant dumpsters that can service multiple dwellings.

- **What can I do to avoid attracting bears if I'm camping at a community campsite?**

First, take a look around the campsite. Is there garbage strewn around the campsite? Does it appear that the last campers also kept their food and garbage out of reach of bears? Are there a lot of natural bear foods surrounding the campsite, such as berries? Is the campsite located along a river, where it might be difficult for bears to hear humans prior to encountering them? Do landscape features around the campsite or trails indicate that the easiest way to move through the area is past your campsite (e.g. a small flat bench with a river on one side and a steep mountain slope on the other side). If you answered yes to any of these questions, your risk of a negative encounter with a bear may be high. You may want to consider finding another campsite especially if you think that bears in the area may be getting food from people.

The "Staying safe in Bear Country: a behavioral-based approach to reducing risk" video (Safety in Bear Country Society 2001) states that:

"Many odours attract bears. Don't cook or store food in your tent. Minimize smelly food and garbage. Store all food and garbage so bears cannot smell or reach it. Manufactured bear-resistant food containers have proven effective for camping and are required in some areas. Handle pet food with as much care as your own. If possible, completely burn your garbage in a hot fire. Seal and pack out anything you can't burn completely. Don't bury it. A bear is just going to dig it up. Bears are attracted to petroleum based products such as fuels, oils, some plastics and rubber. Keep these out of reach." They also recommend that campers "Clean and store your cooking utensils and dishes after each use.")

Do not burn plastics because they release toxic materials into the air. For those things you cannot burn, store them with your food and other attractants. Refer to recommendations for storage.

Avoid campgrounds that have attractants that are available to bears, particularly if there is evidence that bears are in the area. Choose a campsite that is in an open area as far as possible. Areas with dense vegetation, such as trees and shrubs, provide security cover for bears and there is higher risk for human-bear conflict in these areas. If there are no buildings or vehicles nearby, camping beside a tree that you can climb may provide an alternative for escape, if necessary, from a grizzly bear.

If you have a vehicle, store all of your food and garbage in sealed containers or plastic bags and make sure that all attractants are out of sight, even if your vehicle is locked, in the trunk of your car or the cab of your pick-up truck. Bears can easily break into aluminium truck canopies. If you are travelling by bicycle or motorcycle, some campgrounds may provide bear-resistant storage lockers. If not, hang your food at least 6 meters above the ground on a rope strung between two trees and be part of the long-term solution, write or phone the campsite owner or operator and suggest that bear-resistant storage lockers be installed. Have your tent facing your food storage area, should you need to see the activity of an animal.

Bear Behaviour

- **Are bears dangerous? Should you play dead when you see one?**
Bears can be dangerous. Experts only recommend playing dead in specific situations. Knowledge and understanding of bear behaviour and motivation is the safest way to reduce risk in an encounter (Safety in Bear Country Society 2001). View the video “Staying safe in Bear Country: a behavioral-based approach to reducing risk”.

Refer to Question 1 regarding prevention of conflict.

Recommended reading:

Herrero S. 2003. Bear attacks: their causes and avoidance. New Revised Edition. McClelland & Stewart Ltd.

- **Are bears being aggressive when they stand up on their hind legs?**
On the contrary, bears stand on their hind legs when they want more information about their surroundings. By standing they increase their abilities

to look around or detect scents carried by the wind. The video “Staying safe in Bear Country: a behavioral-based approach to reducing risk” focuses on interpreting the defensive and non-defensive behaviours of bears (refer to question 25).

Grizzly Bear and Black Bear Species Traits

- **All black bears are black and all grizzly bears are brown.**
Colour is not generally a reliable characteristic to use to identify bear species. Grizzly bears and black bears can have considerable variation in coat colour and markings. For example, black bears can be black, brown, white, or cinnamon. There is even a colour phase that is a steel bluish colour that is called a glacier bear. A white colour phase of the black bear that occurs on British Columbia’s mid to north coast is commonly referred to as spirit bear or Kermode bear. Grizzly bear coats can be shades of black, brown or blonde and sometimes darker hairs can be noticeably blonde or silvery tipped. Both species can be a relatively uniform colour or have marking of various shades or colours.
- **Are brown bears, Kodiak and grizzly bears different species?**
Grizzly bears, brown bears, and Kodiak bears are all the same species (*Ursus arctos*). The name brown bear is commonly used for bears in Alaska whereas grizzly bear is more commonly used for bears in Canada and the southern U.S.A. Kodiak bears, well known for their large size, have been identified as a different subspecies (*Ursus arctos middendorffi*). This subspecies occurs only on Kodiak Island.
- **Are black bears, cinnamon bears, Kermode bears (white bears) and glacier bears (blue bears) different species?**
No, they are all the same genus and species (*Ursus americanus*).
- **Is size a reliable way to distinguish between black and grizzly bears?**
No, size can vary depending on the age and sex of the bear. An adult black bear can be larger than a subadult (juvenile) grizzly bear. Size can also vary among geographic areas, as well. For example, grizzly bears in the Rocky Mountains are generally smaller than grizzly bears in coastal British Columbia.
- **Can grizzly bears climb trees?**
Yes, grizzly cubs can climb trees very well. Subadult and adult grizzly bears can also climb trees. However, the ability of adult grizzly bears to climb trees is generally not considered as good as that of black bears. Black bears and younger grizzly bears, especially cubs, have shorter claws than adult grizzly

bear that make it easier for them to climb trees. Nevertheless, adult grizzly bears have been observed climbing trees. Black bears are very good tree climbers.

- **Are all black bears submissive?**

Refer to the “Staying safe in Bear Country: a behavioral-based approach to reducing risk” video (Safety in Bear Country Society 2001).

Not all black bears are submissive to humans. Like humans, all bears have an individual personal space. When you enter their personal space you may force them to flee or defend themselves. The size of this space and the response of the bear can depend on many things including the individual bear, the species of bear, the past history of the bear and its prior experience with humans, and the situation. While black bears commonly climb trees or run for cover to escape a threat, a black bear may choose to defend itself. Black bears are strong animals that are capable of injuring or killing a human.

Ecology and Behaviour

- **Do bears mostly eat meat?**

Bears are opportunistic omnivores that will eat meat and fish, but in some places opportunities are rare. In general, a large part of the diet of grizzly and black bears is comprised of vegetation. Animals such as ungulate calves or ground squirrels are an excellent source of protein and fat and are well-used foods in some geographic areas, particularly in early spring and late fall when the abundance or quality of food plant species may be lower. In some areas of British Columbia, spawning salmon also provide an important source of protein and fat, particularly in fall when bears are focused on storing fat to survive winter denning and produce and feed cubs. Bears also eat insects such as ants and wasps.

- **Bears are not afraid of people**

The response of bears to people can be influenced by previous experiences that the bear has had with people. Most commonly bears are wary of and will avoid humans. However, a bear that has repeated exposure to humans at close range, without negative experiences, can learn to tolerate humans. These bears are called human-habituated. Some bears may even use the presence of humans to avoid more dominant bears. A human-habituated bear is not a tame bear. These bears may have a smaller personal space but a dangerous situation can be created if they are forced to defend it. Very rarely, some bears have been bold enough to treat humans as prey.

- **Bears are stupid animals**
There is considerable evidence to indicate that bears are very intelligent animals. Their intelligence is indicated by their ability to return to locations where they obtained food in previous years. Many bears have found their way back to a garbage dump after being translocated far from their home. Furthermore, bear cubs learn all they need to survive from their mother in the 1.5 to 4 years she spends with them.
- **Bears have poor hearing and eyesight**
Bears are able to see and hear very well. However, their sense of smell is far better than human's and their sense of smell is the sense that they rely on the most.
- **Can bears run down/uphill?**
Yes, they can run up and downhill very well and they can run faster uphill and downhill than the fastest human being.
- **Do bears hibernate?**
"Bears in hibernation exhibit several characteristics distinct from the deep hibernation of rodents, such as lesser reduction in body temperature, protein conservation, lack of defecation and urination, and normal bone activity." (Hellgren 1998). Both "denning" and "hibernation" are terms that are used in scientific literature for the winter period of inactivity of bears. While the length of denning varies, all bears in B.C. den for the winter even on the coast where winters are warmer. In coastal B.C. female bears with cubs of the year may den up to 6 months. Conversely, some bears may be active in any month of the year, particularly in coastal B.C. where salmon may be available in some winter months.

Safety Issues

- **Are human food-conditioned bears more dangerous than other bears?**
Yes, food-conditioned bear have learned to associate humans with food and they can become very persistent in their attempts to obtain human food.

- **How can I reduce risk for my children who have to walk to school?**
If your child's school is located in an area that bears are known to frequent, organize a reporting system so parents can be alerted when a bear is in the area. Organize with other parents so that an adult walks with your child to school. If an adult is not available or children are older, arrangements can be made for several children to walk together in a group. Teach your children to avoid areas that are used by bears, especially at night.
- **What should my child do if he/she sees a bear?**
Any instruction of bear awareness and safety with respect to bears for children should be delivered so that it encourages an understanding, respect and tolerance for bears. Children can be taught to respect a bear's "personal space", as this is terminology that they are familiar with. In addition, parents and children's supervisors should keep children under close supervision when a bear has been reported in the area.

If you see a bear from a distance, STOP. If the bear has NOT seen you, you should leave the area quietly. Go to a safe place (anticipate where you child may encounter bears and identify safe areas, such as homes displaying a Block Parent sign or people your child knows and can trust, to your child ahead of time) and tell an adult. If you see a bear and the bear sees you, back away speaking in deep, low tones at normal volume.

Teachers or parents should practice with children and show them the following:

 this is how big you should make yourself,
 this is how you should back away,
 this is how loud your voice should be, and
 this is how deep your voice should be.

Practice will embed this information in the child's mind for the future. While this should be a learning experience done in a "fun" manner, the children should be well aware of the importance. Reinforcement is critical. Children have active imaginations; some are concrete learners while others have the ability to think in abstract terms. Make sure both learning styles are covered. Have a picture of a bear for visual learners. Establish a consistent phrase for the child to repeat while backing away. For example, teach children to say in a low deep voice "hello bear, I won't run away. You can stay and play. I'll come back another day." These words are all low sounding phonetics and not high pitched. By establishing a consistent phrase and having children memorize the phrase, the development of a learned behaviour occurs. Remember practice, practice and practice.

- **What should I do if there is a bear in my yard (urban situation)?**
First, ask yourself “what has attracted the bear to my yard?” Second, do not let the bear feel comfortable in your yard. If you are concerned about confronting the bear, make a loud, preferably low frequency, noise (e.g., bang pots together) from the safety of your house. If you can do it safely, it may be more effective to try scaring it away from outside, but do not get too close and always have the ability to retreat to safety. If the bear is not deterred by your efforts, call the Conservation Officer Call Service (Toll free # 1-800-662-9453).
- **What are higher risk recreational activities?**
Some higher risk recreational activities include running, mountain biking and walking dogs off-leash.
Running or mountain biking can increase the potential for bear encounters because people are moving relatively quickly giving the bear less opportunity to detect and avoid the person. Cross-country skiing when some bears are still active may also have increased risk of sudden encounters.

Herrero (2003) states that:

“These activities which are characterized by speed, not cautious attention to the possibility of encountering a bear, increase the chances of sudden encounters and related injuries.”

Herrero (2003) also states the following regarding avoidance of sudden encounters with grizzly bears:

“As soon as visibility becomes restricted, such as dense brush, and there is a chance of suddenly confronting a grizzly, I often start making noise. Some people shout or chant their favorite protective mantra: others sing, wear bells, blow whistles, or bang pots or sticks together. I prefer to yodel. The more you know about bears, and where you might confront one, the more selective you can be in your use of warning noise. Remember that the bear is supposed to hear your sound when it is still far enough away from you that it does not feel threatened. Keep in mind that most sudden encounters leading to injury have occurred when the person was not aware of the grizzly until it was less than fifty-five yards away. Supposedly the bear was not aware of the person any sooner, and when it became aware, the person was already too close. I recommend making loud noise, as opposed to a few small bells hung from your pack and left

tinkling.” and “Near rushing water, in a strong wind, or even in dense forest, the noise of such bells or even the human voice does not carry very far. Low frequencies are supposed to travel better around trees. I sometimes use a combination of deep guttural sounds with a yodel and a short, explosive, high-pitched sound at the end.”

You may want to conduct a test where you make the noise you would normally make and then have a friend walk away from the noise and note the point at which the noise is no longer heard. This will help you assess how far away a bear may be able to detect you.

Herrero (2003) also notes that:

“There may also be a danger in making noise, however. While you are trying to avoid a sudden encounter, especially of females with cubs, you may attract some grizzlies. Young adult grizzly bears are particularly curious, and their curiosity is often not yet tempered with a knowledge that humans can mean trouble. This type of bear *may* be attracted to human sounds. Bear may also be attracted to high-pitched squeaking sounds, which may sound like distressed animals to bears.”

Walking dogs without a leash, especially dogs that are not well trained and not familiar with bears, may provoke an attack. The response of some dogs may be to threaten or harass a bear and then return to the owner, possibly with an angry bear in pursuit. An angry bear in pursuit may turn its attack on the dog to an attack on the person.

Recommended reading:

Herrero S. 2003. Bear attacks: their causes and avoidance. New Revised Edition. McClelland & Stewart Ltd.

- **Are bears more likely to attack menstruating women?**

“There is no evidence bears are more likely to attack menstruating women but it is wise to use tampons instead of pads and dispose of them as you would any attractant” (Safety in Bear Country Society 2001). There is scientific evidence that indicates that black bears are not attracted to menstrual odours. In a study that presented used tampons to black bears in north eastern Minnesota “Menstrual odours were essentially ignored by black bears of all ages and either sex, regardless of season or the bear’s reproductive status” (Rogers *et al.* 1991).

Provincial Bear Management

- **Why doesn't the province look after the (their) bears? Bears are a provincial problem and the province is down loading by asking communities to support programs such as bear education and bear-resistant waste management programs.**

Problem bear management requires the cooperation of the community to be successful. Bears can be attracted into communities by sources of non-natural food. Prevention of access to attractants in the community can only be achieved with the co-operation of provincial and local governments and individuals within the community. Removal of a bear does not eliminate the source of the problem, the attractant, and frequently another bear is often quick to take its place.

- **Why should I report a problem with a bear to the Conservation Officer Service (COS)? They will just kill the bear?**

The COS does not only destroy bears. They also collect information that can be used to detect problem areas and identify the causes of the problem. Generally, they will assess the situation (e.g., history of complaints or behaviour of the bear) to decide whether to destroy the bear. This information can then be used by the provincial government, bear awareness educators and community managers to address the source of the problem, deliver proactive education campaigns and help communities and individuals develop other strategies to reduce community based bear-human conflict. In recent years, funding priorities for the Bear Aware Program has been based to a large extent on the number of complaints a community has received. When people do not report bear problems, the extent of the problem may not be evident and hence the argument for support to develop solutions may be less.

- **Why can't the bear just be moved (translocated) to an area away from people? (Revised from Ciarniello 1997)**

Translocation of bears does not address the source of the problem. Focusing efforts on proactive solutions that prevent the problem from occurring, rather than on translocation that reacts to the problem are likely to produce better results in the long term. Some bears may return to the area they got into trouble or another bear may enter into this same area into the same problem situation.

For translocation to have a reasonable chance of success, bears need to be moved to good quality bear habitat that is a considerable distance from the attractant. Some bears that are translocated may have difficulty establishing a new home range and may be killed as a result of competition with other bears. Furthermore, human food-conditioned bears are not considered good candidates for translocation because these bears may pose a threat to humans

even in places that are seemingly remote. There are not many places in B.C. where people do not live, work or recreate. Moving the bear may only deflect the problem to someone else's backyard. In addition, funding is frequently insufficient to attempt translocation of bears even though they may be considered good candidates for translocation. Funding is also rarely available to document the success of translocations in British Columbia. The reality is that killing the bear is the most cost-effective means of dealing with a problem in the short term. If you want to help bears, now is the time to support the development of proactive solutions that are cost-effective over the long term.

- **Why can't you take bear cubs to the zoo?**

The point of proactive efforts to reduce human-bear conflict is to keep bears wild. You can take a bear cub to the zoo, if you can find one with space left. When a bear family is lured into feeding on human sources of food the mother and cubs may be destroyed. Some cubs (the lucky ones) get to go to the zoo, for life! Bears at zoos require specialized structures with secure, electrified-fences, adequately insulated denning space and expensive veterinary care. Appropriate exhibit space is not always readily available when a cub is orphaned. Bears also require large volumes of food and not all zoos can afford to keep bears. The Kamloops Wildlife Park Society estimates that it costs \$40 per day to feed their orphaned grizzly bears, which in the mid 1970's were two of the more fortunate food-conditioned cubs to be given a home rather than be destroyed.

- **Why are the cubs also killed when the mother is killed?**

Depending on the age of the cub, the cub may be unable to survive on its own. Cubs learn where to find food from their mother. If the mother was foraging for human sources of food the cub will likely continue the mother's behaviour. Recent changes to provincial government policy now allow for identified animal shelters to adopt cubs. However, there are stringent and costly criteria that the shelter must comply with. Using zoo and animal shelters to keep or rehabilitate orphaned cubs of mothers that were food-conditioned is a costly reaction to the problem. If you want to help bears, now is the time to support the development of proactive solutions that are cost-effective over the long term. "Save a baby - don't feed the mother."

- **Who makes the final decision on whether a bear is killed or not?**

Regional wildlife managers, or
in the case of dangerous/emergency situations, conservation
officers or RCMP.

- **Aren't CO's trained or equipped tranquilize and translocate bears?**

By the time Conservation Officers arrive to deal with a bear they have usually received numerous complaints about the bear. Once the bear has been food-conditioned, which is usually the case by the time officers arrive, it is considered too late for rehabilitation or translocation.

Conservation Officers are trained and equipped to capture and translocate bears. However, if a bear is free roaming and considered a threat to public safety, a conservation officer may choose to destroy the bear if it is a safe shooting situation.

If a bear is determined to be a nuisance and not an immediate threat, a conservation officer may choose to live capture the bear by using a trap or snare. Because of their higher conservation priority and if they are considered good candidates for success, sometimes grizzly bears, are translocated.

If a bear is captured and no longer a threat, the decision to destroy or release the bear is made by the regional wildlife manager.

Also refer to question 46.

- **Does insufficient funding or manpower influence the decision to kill bears rather than translocate them?**

The availability of resources definitely affects the decision to kill or release captured bears. If a wildlife manager approves a release location, and the bear is a candidate for release the bear may still be killed if manpower and equipment are not available for the release.

- **Why do Conservation Officers destroy bears that behave submissively? Shouldn't a bear demonstrate aggressiveness before a Conservation Officer decides to kill it?**

Conservation Officers may kill bears that are human-habituated. In an urban environment, the decision to kill a bear may be based on the potential to cause harm.

- **When bears are sighted regularly in a community's greenbelt why does the Conservation Officer Service not act immediately? When will the Conservation Officer Service respond to a bear complaint?**

In many parts of the province, it is common for bears to use the greenbelts of urban areas for feeding and cover. It is also common for Conservation Officers to receive reports of bear sightings in greenbelts. In general, if the bears using these areas are behaving in a non-threatening manner, the public is encouraged to show respect and tolerance for bears using these areas. To reduce the potential for encounters or displacement of bears, some communities will implement area or trail closures so that the bear can

continue to use the area. The Conservation Officer may decide to attend a complaint if there are reports of aggressive behaviour by bears.

- **If a Conservation Officer has the opportunity to kill a “problem” bear and chooses not to, is the officer legally liable for future damage caused by that bear?**

Conservation Officers have a legal duty to deal with problem bears using their best judgement. If a Conservation Officer has an opportunity to safely kill a free roaming bear, and chooses not to, the officer may be legally liable for harm caused by that bear later. Conservation Officers must consider legal liability when assessing and responding to “problem” bear situations.

- **Can police or by-law officers respond to bear complaints?**

Yes, police and, in some cases, by-law officers, can and do respond to bear complaints. However, most police and by-law officers lack the training, experience, equipment and time to deal with problem bears in an urban environment. In many communities these agencies will provide assistance to attending Conservation Officers. In some communities that do not have a Conservation Officer, police commonly respond to bear complaints.

- **If a person won't secure their garbage and it is attracting bears, does a Conservation Officer have any authority to order the person to secure their garbage?**

Conservation Officers have the authority to issue Dangerous Wildlife Protection Orders (DWPO) under Section 88.1 of the Wildlife Act. Dangerous Wildlife Protection Orders can be issued to homeowners who have not secured their garbage. The DWPO allows a Conservation Officer to provide instructions for proper garbage storage. Failure to comply with a DWPO may result in prosecution under the Wildlife Act.

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