

## **BEAR SAFETY AWARENESS**

### **PROGRAM SYNOPSIS:**

Bear sightings throughout North America have been on the rise in recent years due to a thriving bear population. Because this population has been expanding so rapidly, it has increased the possibility of encountering a bear in most areas of the US and Canada. While bear attacks are uncommon, it is important that you know and follow basic precautions when you are in areas that bears are known to inhabit. In this program, EMT/Firefighter/Best-Selling Author Martin Lesperance reviews the safeguards that should be taken to prevent bear attacks as well as the reactionary measures to take should an attack occur.

Topics include traits and characteristics of bears, signs of bear presence, food sources, staying out of bear trouble, how to react to defensive and non-defensive attacks, how to properly use bear spray and precautions to take while camping and hunting.

### **PROGRAM OUTLINE:**

#### **TRAITS OF BLACK & GRIZZLY BEARS**

- Black bears have a long snout, often called a Roman nose. They have shorter claws and there will be no obvious hump between their shoulders.
- Generally, black bears weigh from 75-100 kilograms or 165-220 pounds and will stand about 75-100 centimeters or 29 to 39 inches at the shoulder. Black bears on the coast and in other parts of Canada and the United States can be larger.
- Black bears are usually found in forests and in lower levels. They usually do not hang out higher up in the mountains or in open prairies. They can be found in most forested areas in North America.
- It is not uncommon for black bears to find themselves in cities or towns. Vancouver, British Columbia often has bears within the city limits.
- Compared to black bears, grizzly bears have a flatter, disc-shaped face and they have an obvious hump between their shoulders. Grizzly bears have long claws that they use for digging.
- Male grizzly bears may weigh 225 kilograms or about 495 pounds, while females weigh about 170 kilograms or 375 pounds. Grizzly bears can weigh as much as 400 kilograms or 880 pounds.
- Grizzly bears were prairie dwellers, but civilization has forced them into the mountains. They can be found at lower elevations early in the spring due to the new vegetation that exists.
- They will follow the new green spring shoots up the mountain as the snow melts through the spring and early summer. They can also be found in the foothills and prairies throughout the spring, summer and fall, at times causing conflict with local farmers' livestock and livestock feed.

#### **GENERAL CHARACTERISTICS**

- Bears have good eyesight and hearing, though it may be considered variable between individuals. Their sense of smell is very acute; they can smell garbage and food from long distances.
- Bears are usually more active at dawn or dusk, but some individuals can be active any time throughout the day.
- In many cases, when a bear stands on its hind legs, it is doing this to gather more information such as getting a better view or trying to smell or determine what you are. Just because a bear is standing on its hind legs does not mean it is getting ready to attack.

#### **BEHAVIOR**

- Both black bears and grizzly bears live in a system of hierarchy or dominance. Adult male bears are typically the dominant bears, while the females and younger bears are subdominant.

- They often resolve their differences through various forms of communication such as body language or vocalization, resulting in minimal injury to either animal. Knowledge of how bears interact with each other may help to minimize negative interactions with people.
- Black bears are forest dwellers and will often retreat up a tree as a defense mechanism. Grizzly bears evolved on the prairies and are known to stand their ground as a defense mechanism.

### **BREEDING**

- Males will emerge from hibernation first while the females emerge with the cubs later. The cubs are born during hibernation, usually around January or February.
- Black bear cubs will stay with their mother into the second year, while grizzly bear cubs could stay with the mother for up to four years. Generally, the cubs will stay with the female for about three years.

### **HIBERNATION**

- Once the food supply, including berries and vegetation are gone, bears will hibernate. This usually happens in early to late fall.
- When a bear hibernates may vary depending on the area and is usually dependent on the availability of food. For example, in a warmer area where food is more plentiful and available, bears may hibernate later than bears in northern Canada, where the berries and other edible vegetation disappears earlier than it would in a warmer climate.
- When bears hibernate, their body metabolism slows down. Their heart rate slows from 40 to 50 beats per minute to eight to 10 beats per minute and they won't eat for approximately six months.
- This is why a bear's waking moments are in search of food. They must eat enough food to put on weight to survive the winter. They may eat up to 25,000 calories per day.
- Black bears will look for a hollow opening in the base of a tree to hibernate, while grizzly bears usually dig a hole for their hibernation.
- Workers in the bush have disturbed bears during hibernation. In these circumstances, some workers who have stumbled onto a den site have been injured by bears in the middle of winter.

### **SIGNS OF BEAR PRESENCE**

- Face it, there is a possibility you could encounter a bear in most areas in North America. The following are some signs that bears have been or may still be in the area you're in.
- Of course, if you see a posted sign that a bear is in the area, use extra caution or you may decide to stay away from that area completely. Wildlife officers do a good job of placing signs if bears have been spotted in populated or recreational areas.
- Crows, ravens and magpies will feed on dead animals; so do bears. If you notice scavenger birds in the area, they may be feeding on an animal carcass. Bears will also be attracted to the carcass. Use caution. If you see an animal carcass, leave the area.
- If you see tracks, bears have been in the area. If the tracks are fresh, the bear may be close by. Grizzly bears have long claws, longer than 7.5 to 10 centimeters or three to four inches. The tracks will have claw marks five to 7.5 centimeters or two to three inches in front of the toe pad prints.
- Black bear claws are shorter than grizzly claws. Their claws are about 2.5 centimeters or one inch long. The claw marks will be closer to the toe pad print or may not be visible at all.
- Remember, bears often dig for their food. They often overturn rocks and logs looking for insects. They will also dig for rodents such as ground squirrels and marmots.

- You may come across fresh scat. The scat can vary in appearance. If the bear has been eating green vegetation, it may be quite dark.
- Berries are a great source of food for bears. You may see berries in the scat. If the berries are lighter in color, such as buffalo berries or strawberries which are red, you may notice that the scat has a reddish color to it. You may also notice seeds from the berries.

## **FOOD SOURCES**

- Bears are omnivores. This means they will eat meat, plants, berries and fish. Actually, they eat almost anything, including rotting meat and toothpaste.
- Bears are known to pay visits to backyards once the fruit is ripe on trees.
- The smell of dead animals can attract bears from great distances.
- When the fish are running in streams and rivers, bears may be in the area. When salmon are spawning, bears will be attracted to the streams and rivers.
- Bears like grain. Many bears are killed every year when they are hit by trains. Often, the bears were feeding on grain that had spilled from the railroad cars. Bears may also be attracted to granaries on farms.
- Bears love garbage. They can smell it from a far distance and will seek it out. If you are traveling or working near areas with garbage dumps, use caution.
- It's important to dispose of your garbage in the appropriate containers or to burn it if it's safe to do so. If you burn it, the garbage should be burned completely. Leaving partially burnt food scraps will attract bears.
- If you are camping, make sure you do not store any food or anything that may smell of food in your tent or tent trailer. As we know, bears have a great sense of smell and the smell of food will direct them right into your campsite and possibly your tent.
- Store food in airtight containers and keep it at least 100 meters or a 110 yards away from sleeping areas. Hang the food between two trees. Bears can reach very high so the food should be stored at least three and a half meters or 10 feet above the ground.
- It should also be hung between two trees. Hang it so there is at least one and a half meters or five feet away from the trees or anything else the bear could climb to reach the food.
- It's important to remember that you do not have to be in a remote area to encounter bears. For example, on July 11, 2014, a woman saw a grizzly bear in her yard just outside Calgary, Alberta and bears have been spotted in many, many cities.

## **STAYING OUT OF BEAR TROUBLE**

- When you are working or playing in bear country, remember you are the visitor. Chances are you will not have any problems. After all, in most cases, bears don't want to run into you just as much as you don't want to run into them.
- If you let them know you are coming, for example by making some noise to let them know you are there, they will probably move into cover and let you go by.
- Avoid surprising the bear by making noise to let them know you are coming. This gives the bear a way out. You can shout, talk loud or sing to let them know you are in the area. Whistles and air horns will also alert the bears to your presence.
- Travel in groups if possible. Be very cautious while walking close to running streams or approaching areas with poor sight lines such as bushy corners on trails. These are areas where bears travel and feed so the potential for an encounter is higher.

- The sound of water may drown out any noise you are making and you could surprise a bear. The same may be said for windy days. Depending on the wind direction, it may assist or hinder the noise you are making from reaching the bear.

### **HOW AN AGITATED BEAR MAY REACT**

- When a bear is feeling threatened, agitated or stressed, it may show the following signs: swatting the ground, snapping his jaws and swinging his head back and forth, making growling, huffing or making woofing sounds. Such an encounter can also end with no attack or with the bear leaving with no altercation at all.
- It is a sign that you have invaded the bear's personal space and you need to leave in a non-threatening manner by increasing your distance and walking away slowly.
- Bears may also make a bluff charge. In a bluff charge, a bear may run towards a person, but stop before reaching them or it may run right past them.

### **DEFENSIVE ATTACKS VS. NON-DEFENSIVE ATTACKS**

- A defensive attack usually happens after a surprise encounter. For example, you may come around a corner on a trail and surprise a bear while it is feeding on some berries or a mother bear with her cubs.
- Coming across a kill a bear is feeding on or even getting close to the kill is a very dangerous position to be. There is a good chance the bear may attack. Use caution and clear the area as quickly as possible. Defensive attacks often occur at close range.
- The bear may approach from a distance, resulting in a non-surprise encounter. The bear could be habituated or indifferent, meaning it may be used to being around people.
- It could also be food conditioned if it has been fed by humans or it is used to eating garbage. The bear could also be testing his dominance or in rare cases, it could be predatory.
- In the event of an encounter, whether it's a defensive or non-defensive attack, you want to exhibit behaviors that will allow the bear to perceive you as a human and non-threatening. These behaviors include not looking the bear in the eye, turning sideways and increasing the distance between you and the bear and speaking softly to the bear.
- Realistically, in a defensive attack, it can happen so fast, you may not have time to do this. You may not even have time to get your bear spray out and then your best course of action is to drop to the ground and play dead. No matter how scared you are, never run from the bear.

### **HOW TO REACT IN A DEFENSIVE ATTACK**

- The bear may initiate a defensive attack if it is feeling threatened. Remove the threat by acting subdominant or submissive. Whatever happens, do not run. This could provoke an attack.
- Talk softly and turn sideways while walking away. Do not look the bear in the eye.
- If the bear charges and is about to make contact, drop to the ground and play dead. The intent is to show the bear that you are no longer a threat. Once the threat is removed, the bear will most likely leave.
- In a defensive attack, it can happen so fast that you may not even have time to get your bear spray out; and, in a case like that, your best bet is to play dead.
- It's important to realize though that you do not play dead until the bear is just about to make contact with you. Now here's how I'm going to do it: I'm going to throw myself down onto my belly, I want to lay, tight to the ground. This is going to help protect my internal organs. I'm going to put my hands behind my neck; I'm going to grasp them like this to help protect the neck.
- I'm going to keep my legs spread apart; this makes me a little bit more stable so if the bear does try to roll me over, it's going to be a little bit more difficult for him. If I do get rolled over, I roll over onto my belly as fast as I possibly can. So

here's what it's going to look like. It's important that I stay with my hands behind my neck and I lay close to the ground, as tight as I possibly can.

- Now, if the bear does start to bite and starts chewing on me, this is no longer a defensive attack, because if it was a defensive attack, he should probably just walk off. But if he starts eating me and chewing on me, this is a predatory attack, a non-defensive attack and now he sees me as dinner, so it's important that I fight for my life, I do everything I possibly can to fight that bear.

### **HOW TO REACT IN A NON-DEFENSIVE ATTACK**

- This is not a surprise encounter. In this situation, the bear has time to leave, but doesn't. Try and be non-threatening. At times, the bear will not respond by leaving but instead will continue to close the distance.
- It doesn't matter whether the bear is habituated or predatory, if the bear is closing the distance, you need to display dominance and encourage it to leave. Stand your ground, face the bear and talk to the bear in a firm voice while looking directly at it.
- If the bear continues coming towards you and is about to make contact, fight the bear. Whether it's punching it in the nose, poking it in the eyes, hitting it with rocks or sticks or stabbing it with a knife, fight like your life depends on it because it does. Use bear spray if you can.
- Bear bangers are not typically used as a noise prevention tool. They are used in a non-defensive situation, when the bear is not leaving and you want to exert dominance. You may shoot one off as a dominant move on your part to make the bear leave.
- Be aware, this is a dominant move on your part and that the bear, while moving off most of the time, could respond in a dominant fashion and come towards you. Have your bear spray ready. Another point to be cautious with bear bangers is if it is fired and explodes behind the bear, the sound may scare the bear right towards you.

### **BEAR SPRAY AND HOW TO USE IT**

- Bear spray is made with capsaicin pepper. It works on the mucus membranes of the eyes, nose and mouth of the animal. The concentration should be at least one percent and the label should say "bear deterrent.". The canister should weigh at least 225 grams and the spray should be effective up to 9 meters or 30 feet away.
- The can should have enough spray for 5.6 to eight seconds. This depends on the manufacturer and size of the can. Most cans that are 225 grams say it's good for 5.6 seconds of spray. The can should have an expiry date on it which is often on the bottom of the can. It is usually good for 3 years.
- Always read the labels when you purchase it. You should have quick access to the canister. Have it on your person and not in a pack or in a pack in your bike.
- Bear spray is effective in both defensive and non-defensive encounters, though you may not have enough time to use it in a defensive attack.
- Always read the manufacturer's directions. Slide off the safety clips with your thumb. Spray the bear in the face with a short burst, approximately two seconds. The capsaicin must go into the mucus membranes of the eyes, nose and mouth.
- In many cases, bears needed a second spray. Don't waste your bear spray as every drop may count. The spray is effective up to six to nine meters or about 20 to 30 feet. Only use it at close range.
- Wind will certainly have an effect on the spray pattern of bear deterrent. Watch closely. There was a breeze coming from the left side. Notice the spray drifting with the breeze. The target was about eight meters or 26 feet from the can. If possible, try to take the wind into consideration before spraying.
- If you or anyone else is sprayed with bear spray, flush the eyes with copious amounts of water for a minimum of 15 minutes. Wash your hands after using or touching anything that has been sprayed. It will hurt if any residue touches your eyes.

- Bear spray should not be stored where it will be subjected to an extreme temperature range, such as a vehicle parked in the sun. In some cases, cans have been known to leak or exploded. If you must keep it in your vehicle on a hot day, it's a good idea to keep it in a PVC pipe in case it does leak.
- Bear spray cannot be carried inside a helicopter or a plane. It has to go in the cargo hold. Check with the airline or pilot before flying.
- Do not test the can in an area where you will be staying in. The diluted odor of the spray can actually attract bears. If you do test the spray, be aware that you are shortening the duration of the spray left in the can. After testing it, wash any residue off the nozzle.

## **CAMPING**

- When hiking or camping, dogs should be kept on a leash. In many cases, dogs have chased bears and then ran back to the owners with the bear in hot pursuit.
- Don't set up your camp near game trails or areas where natural foods such as berry bushes are abundant. Ensure there are good lines of sight available so bears are aware of your presence and can avoid you and vice versa.
- Keep the clothes you cooked food in out of your tent. The smell may attract bears. Store food in airtight containers and store it away from your campsite, preferably in bear proof containers or hung from a bear pole.
- Keep bear spray in your tent. Keep the safety clip on.

## **HUNTING**

- Hunters typically travel quietly and try not to be seen and are generally out at dawn and dusk when animals are most active. Bears can also be attracted to animals and carcasses that have been successfully killed by hunters. All of these scenarios can increase the chance of an encounter between hunters and bears.
- Always carry bear spray while hunting. Bear spray has proven to be more effective than a gun in an attack. You have to be experienced with firearms, very fast and an excellent shot to hit a charging bear with a quick kill shot.
- Animals can attract bears. The calls may sound like animals mating or they can sound like an injured animal in distress.
- If you wound an animal, use caution while tracking it. If you are with a partner, have them keep watch. If you see a bear in the area, leave the area. It just isn't worth a possible confrontation.
- If you kill an animal, when field dressing it, the scent may attract bears. Have a partner stand guard and make noise to let bears know you are in the area.
- Separate the gut pile from the animal by at least 200 meters or about 220 yards. Often bears will be attracted to the gut pile first. Do not drag a carcass back to camp. This will leave a scent that the bear may follow right back to your camp.
- When returning to the kill site, use caution. Approach from upwind so the bear can't smell you and try to look at the site from a distance. Use binoculars if possible. You want to be able to see the carcass from a long way off to see if a bear is on it or not without the bear knowing you are there. This ensures the bear will not see you as a threat and attack.
- This is why it's important to skin the animal out in a location that you can see it from a safe distance if you need to return the next day, for example, about a half a kilometer or a third of a mile or more.
- Once you decide to go to the actual carcass site, make sure it's safe based on what you saw from a ways off. Approach making noise and from downwind to alert any animals that may be in the area, but only if you are fairly confident that a bear is not around based on your previous assessment.

- If a bear is feeding on your kill or the kill has been moved or buried, leave the area. Do not approach or try to scare the bear away. Report the event to the fish and wildlife officers.
- For those of you who still think you can outrun a bear, think again.

## **PREPARE FOR THE SAFETY MEETING**

Review each section of this Leader's Guide as well as the program. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

Here are some suggestions for preparing your video equipment and the room or area you use:

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the program.

## **CONDUCTING THE PRESENTATION**

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to review the safeguards that should be taken to prevent bear attacks as well as the reactionary measures to take while being attacked.

Introduce the program. Play it without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about the types of bears that are present in your region and how employees can avoid coming in contact with them.

After watching the program, the viewer should be able to explain the following:

- How to determine if a bear has been in a given area;
- What actions to take to avoid trouble in bear country;
- How to react to defensive and non-defensive bear attacks;
- How to properly use bear spray to fend off a bear attack;
- Precautions to take to avoid attracting bears while camping and hunting.



**BEAR SAFETY AWARENESS**  
**REVIEW QUIZ**

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

*The following questions are provided to check how well you understand the information presented during this program.*

1. It is uncommon for black bears to be found in cities or towns.
  - a. True
  - b. False
  
2. Bears may eat up to 25,000 calories in food per day.
  - a. True
  - b. False
  
3. \_\_\_\_\_ usually dig a hole for their hibernation.
  - a. Black bears
  - b. Brown bears
  - c. Grizzly bears
  
4. When it comes to food intake, bears are \_\_\_\_\_.
  - a. Carnivores
  - b. Herbivores
  - c. Omnivores
  
5. In most cases, bears don't want to run into you as much as you don't want to run into them.
  - a. True
  - b. False
  
6. You should only run from a bear when it is initiating a defensive attack.
  - a. True
  - b. False
  
7. During a defensive attack, you shouldn't play dead until the bear is just about to make contact with you.
  - a. True
  - b. False
  
8. What should you do during a non-defensive attack if the bear is about to make contact with you?
  - a. Turn sideways and walk away
  - b. Fight the bear
  - c. Talk softly to the bear
  
9. Bear spray should be effective up to \_\_\_\_ feet away.
  - a. 30
  - b. 45
  - c. 60
  
10. If a bear is feeding on a hunting kill when you return to a kill site, you should immediately try to scare the bear away.
  - a. True
  - b. False

*ANSWERS TO THE REVIEW QUESTIONS*

1. a

2. b

3. c

4. c

5. a

6. b

7. a

8. b

9. a

10. b