



**WILDLIFE AWARENESS
TRAINING MANUAL
STS # WLA 2016 REV1.2**

Copyright © 2014 by iSafety Ltd.

All rights reserved. This book or any portion thereof may not be reproduced or used in any manner whatsoever without the express written permission of the publisher except for the use of brief quotations in a book review.

Printed by High Speed Printing, Promotional Products and Sportswear

5531 - 99 Street NW, Edmonton, AB T6E 3N8

780-434-7631 artroom@highspeed.ca

First Printing, 2013

iSafety Ltd.

Industrial Park, Site One, Lot 143, Fort McKay, AB, T0P-1C0

Ph: (780) 756-9191 info@isafety.ca www.isafety.ca

Disclaimer

This workbook has been developed by and for the use of iSafety Ltd and its authorized representatives during iSafety instructional courses.

This workbook is not intended nor designed to be a replacement for proper training. Proper training includes the use of standards and methodologies designed to ensure understanding of predetermined course curricula.

No item or aspect of this workbook, be it format, illustrations, text, or combination thereof, may be copied, distributed, or stored within any type of retrieval system without the express written consent of its sole owner, iSafety Ltd.

This document and its contents are protected by standard copyright laws.

TABLE OF CONTENTS

Learning Objectives	4
---------------------------	---

WILDLIFE

Importance & Benefits of Wildlife.....	4
Wildlife Management	5
Tips to Prevent Wildlife Encounters	
Site Controls	5
Garbage Deserves Special Mention.....	6
Attitude / Behavior Controls.....	6
Other Things to Keep in Mind	6
Let's Review (1, 2, 3)	6

BEARS, GENERAL

General Characteristics	7
Diet.....	7
Hibernation	7,8
Breeding	8
Bears and Their Cubs	8
Let's Review (4, 5, 6)	8

BLACK VS. GRIZZLY

Bear Distribution in Alberta	9
Grizzly Bears and Black Bears.....	9,10
Physical Characteristics of Black Bears	10
Black Bear Behavior	11
Physical Characteristics of Grizzly Bears	11
Grizzly Bear Behavior	11
Bear Tracks	12
Misidentification.....	12

Identification Quiz	13
Let's Review (7, 8, 9)	13

BEAR COUNTRY

Avoiding Prime Bear Habitats	14
Bear Signs	14
Working in Bear Country.....	15
Let's Review (10, 11, 12)	15

BEAR ENCOUNTERS

Bear Sightings	16
Body Language	16
Types of Bear Behavior	17
Defensive Behavior and Attacks.....	17
Reaction to Defensive Encounter.....	17
Defensive Encounter Escalates to Attack	17
Playing Dead.....	18
Case Study of a Defensive Attack	18
Non-Defensive Behavior	18
Reactions to Non-Defensive Behavior.....	18,19
Predatory Attacks	19
Reaction to Predatory Attacks	19,20
Climb a Tree?.....	20
Using Bear Spray.....	20
Things to Look For on Bear Spray.....	21
Warnings When Using Bear Spray.....	21
Let's Review (13, 14, 15)	21

OTHER WILDLIFE

Cougar	22
Cougar Encounters	22,23
Wolf.....	23

Wolf Encounters	23
Coyote	23,24
Coyote Encounters	24
Fox.....	24
Fox Encounters	24
Moose	25
Moose Encounters.....	25
After The Encounter	25
Let's Review (16, 17, 18)	26

CASE STUDY EXERCISES

Case Study 1	26
Case Study 2	27
Case Study 3	27
Case Study 4	28,29

LEARNING OBJECTIVES

- After completing this class, you will be able to:
 - Identify the benefits of wildlife
 - Outline the controls for dealing with wildlife
 - Accurately identify a grizzly bear or a black bear
 - Explain how to avoid a bear encounter, or deal with one if it occurs
 - Utilize bear spray effectively
 - Explain how to avoid or deal with encounters with cougars, wolves, coyotes, foxes, and moose

CHAPTER OVERVIEW – WILDLIFE

- Importance & Benefits of Wildlife
- Wildlife Management
- Tips to Prevent Wildlife Encounters
- Garbage

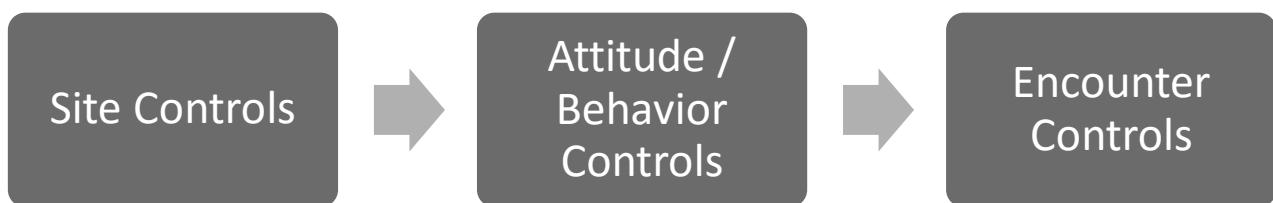


IMPORTANCE & BENEFITS OF WILDLIFE

- Important to people
 - Canadians identify with the Wilderness
 - Nature is used to relax and recharge
 - Up to 85% of the population takes part in activities that involve the wilderness each year (including going out and being part of nature, to watching documentaries). Wildlife still fascinates people.
- Important to natural processes
 - The circle of life and its maintenance directly effects our way of living
 - Wildlife is responsible for things like pollination, germination, predation, pest control, etc. These things may not seem to directly influence human life, but they do. Some Birds, for example, eat pests that kill certain trees (like apple trees). But, if the population of birds isn't controlled, then they begin to eat other insects that are more beneficial to have around. It's all a balancing act.
- Important to science & medicine
 - Source and inspiration for numerous studies and modern pharmaceuticals
 - Lots of medicines originated (or still come from) plants and animals. New research is being done every day to find new and better pharmaceutical products to ease or extend our lives.
- Important to the economy
 - Tourism (Canadian and foreign), hunting, and fishing
 - Billions of dollars is generated every year from tourists from across Canada, or from outside it, who take part in nature. Hiking, hunting, whale watching, etc., all generate money that supports our economy.

WILDLIFE MANAGEMENT

- Hierarchy of Controls
 - The hierarchy of controls must be used when the risk to worker health and safety cannot be eliminated. Personal protective equipment, such as bear spray, shall be carried as the last line of defense when proactive controls have been implemented and do not provide sufficient risk reduction. PPE should be used as part of an integrated organizational approach to health and safety management. It should complement other control methods, not replace them.



TIPS TO PREVENT WILDLIFE ENCOUNTERS

SITE-CONTROLS:

- Avoid attracting small animals to the site (this can invite predators)
- Keep the perimeter clear of brush or tall vegetation (it won't seem as safe for the animals to take a break)
- Close off any open spaces under buildings, stairs, or decks to prevent animals using the area as shelter
- Install motion-activated lights to scare off curious animals
- Vehicles and sheds with unsecured doors are not Wildlife-resistant
- Take precautions so that animals are not attracted to 'site'
 - Bears tend to use trails and paths, so don't setup near these
 - Cook downwind of site, don't sleep in cooking clothes, and don't cook or eat inside tents (or other places you don't want wild and hungry animals)
 - Store food, garbage, and beverages in air-tight containers (and the trunk of your vehicle if possible)
 - Lunchrooms doors and windows must be closed when not in use. If workers need to have food in vehicles, ensure the windows and doors are closed

GARBAGE DESERVES SPECIAL MENTION

- Outdoor garbage needs to be wildlife-resistant (see images) and must be used properly
- Frequently wash garbage cans (don't forget the lids) to remove the smell
- Don't bury food or garbage, animals can easily find it
 - Paper and other combustibles can be burned (though be careful with fire)



- Ensure garbage cans are emptied regularly, are properly closed, and are strong enough to resist a determined animal (like bears)



ATTITUDE / BEHAVIOR CONTROLS

- Avoid surprising the animal (such as bears)
 - Make noise when travelling, such as talking, singing, and whistling
 - Effectiveness of bear bells is highly debated
 - Be especially careful when travelling near running water
 - Be aware of wind direction
 - Animals are more likely to attack if you surprise them or enter their ‘personal space’

OTHER THINGS TO KEEP IN MIND

- Drive carefully – Watch your speed, and the road
 - If you see an animal: Do not stop to take photos, and report the sighting
- Travel in pairs (or more) and keep your focus on your surroundings, not on your conversation
 - Do not wear headphones or engage in any activities that take your attention off of your surroundings
- Never approach wildlife
 - This can cause ‘Human Habituation’ where animals lose their instinctive wariness/fear of humans
- Never feed wildlife (or leave food where it can be found)
 - This can cause ‘Food Conditioning’ where animals associate humans or human buildings/properties with an easy meal

ENCOUNTER CONTROLS

- Will be talked about specifically under the individual animals in later slides
- Some general rules
 - Don’t get between a mother and her young
 - If you stumble across a food source (dead animal), leave the area
 - Pay attention to your training so that you can recognize the type of encounter, and know how to deal with it

LET'S REVIEW

1. Wildlife is important to Canada.
 - a) True
 - b) False
2. Surprising a wild animal is a good way to scare it off.
 - a) True
 - b) False
3. Food-conditioning is when animals associate humans or human areas with an easy meal.
 - a) True
 - b) False

CHAPTER OVERVIEW – BEARS, GENERAL

- General characteristics
- Diet
- Hibernation
- Breeding
- Bears and their cubs



GENERAL CHARACTERISTICS

- Size, weight, and color can vary between different habitats.
- Bears can move very fast when they need or want to
- Bears are intelligent, curious, and have excellent memories
- Bears see in color and have good eyesight
- Bears have excellent hearing
- Bears use their sense of smell to collect information
- A bear standing on his hind legs is not necessarily an aggressive bear
 - Elevation allows the bear to get more information about their surroundings
- A bear's motivation in life is about finding food
 - This can make them both curious and defensive

DIET

Bears are Omnivores

- Plant food makes up 85-90% of the bear's diet
- Fish and meat are important sources of protein and fat

During the spring some of the bear's food sources include:

- Winter-killed animal carcasses
- Elk, deer, and bison calves, or the weak or injured

Summer food sources may include:



Thistle, Fireweed,
Bistort, Mushrooms,
Roots, Wild Berries,
Spawning cutthroat
trout

Fall food sources may include:



Seasonal Fish, Roots, Berries,
Moths, White bark pine nuts,
Ants, Animals injured or killed in
rutting

HIBERNATION

- Bears sleep outside in day beds from Spring through Fall
- Bears hibernate from October or November until April or May
- Bears hibernate due to decreased food supply, not because of cold temperatures
- Grizzly bears usually excavate their own dens





- Black bears often locate a natural cavity, such as a rock crevice or a hollow tree
- During hibernation, a bear's fat is metabolized
- Bears do not eat, drink, urinate, or defecate for up to six months
- Heart rate drops from 40-50 beats/minute to 8-10 beats/minute
- Body temperature only drops a few degrees
- Up to 30% of a bear's body weight is lost while in hibernation
- In the Spring, males emerge from their dens first
- Females emerge last with their cubs
- Bears can be easily aroused from their winter sleep
 - A bear's hibernation is not considered 'true' hibernation, more of a torpor

BREEDING



- Breeding season is mid-May to early-July
- Mating occurs mainly in June
- Cubs are born in January or February while the mother is in hibernation
- A litter is usually two cubs, but can range from 1-4
- Play is important to cubs for social and physical development
- Cubs stay with their mothers for up to 3 years, depending on the type of bear

BEARS AND THEIR CUBS

- Black bear mothers are more likely to send her cubs up into a tree if they feel threatened
- Grizzly bear mothers are more likely to act aggressively on the ground if she or her cubs feel threatened
- Do everything you can not to get between a mother and her cubs
- 'Defensive Behaviors' will be discussed later.

LET'S REVIEW

4. Bears have poor eyesight and are unlikely to notice you if you are more than 20 feet from them.
 - a) True
 - b) False
5. Bears can be easily aroused from their winter sleep.
 - a) True
 - b) False
6. Bears are omnivores, eating plants, fish, meat, and animal carcasses.
 - a) True
 - b) False

CHAPTER OVERVIEW – BEARS, BLACK VS GRIZZLY

- Bear distribution in Alberta
 - Grizzly Bears and Black Bears
 - Bear tracks
 - Misidentification



BEAR DISTRIBUTION IN ALBERTA

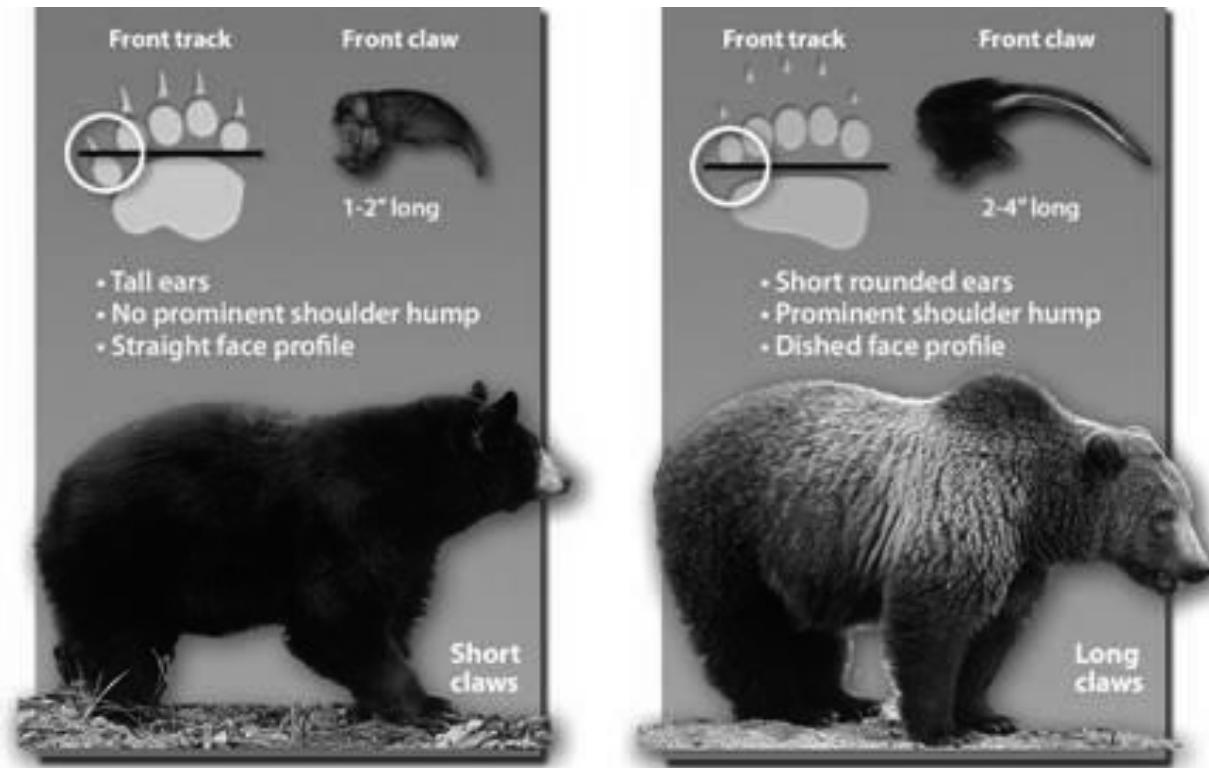
- Black bears rarely travel far from the shelter of the trees
 - Black bears now exist in 75% of their former range
 - Black bears are returning to forested areas near major cities and have shown the ability to live near people
 - Grizzly bears are considered a Special Concern species

GRIZZLY BEARS AND BLACK BEARS



Grizzly Bears and Black Bears are two of the most common types of bears in Canada

- Their mannerisms are different
 - Both can be brown in color



PHYSICAL CHARACTERISTICS OF BLACK BEARS



- A Black Bear can be black, brown, blonde, cinnamon, or rust coloured
- Black or brown bear, with a light brown snout, is the most common
- The face is straight and the muzzle is relatively long
- Their ears may be long and prominent
- A black bear's rump is usually higher than its front shoulders
- Black bear height ranges from 75-100cm at the shoulders when on all fours, and 150cm when standing up
- Black bears range from 45-140 kilograms
- Males are larger than females
- Black bear paws are good for climbing
- The front claws are less than 5cm long, sharp, curved, and usually dark in colour





BLACK BEAR BEHAVIOR

- Den in open spaces under roots and rocks, low to middle elevation
- Active mainly between dawn and dusk
- Are excellent tree climbers

PHYSICAL CHARACTERISTICS OF GRIZZLY BEARS

- Grizzly bear colouring varies from blonde to black
- Common colourations for grizzlies
 - a) Medium to dark brown legs, hump, and underparts
 - b) Light tipped or grizzled fur on the head and upper body
- A dished-profile between the eyes and end of snout distinguishes grizzlies from black bears
- Ears are round and small
- Average weight of a grizzly bear
 - 225 kg for males
 - 170 kg for females
 - Males may weigh up to 400kg
- Grizzly bears have a shoulder hump that is a mass of muscle for digging
- Front claws on a grizzly also enable digging
- Grizzly claws are 5-10cm long and slightly curved



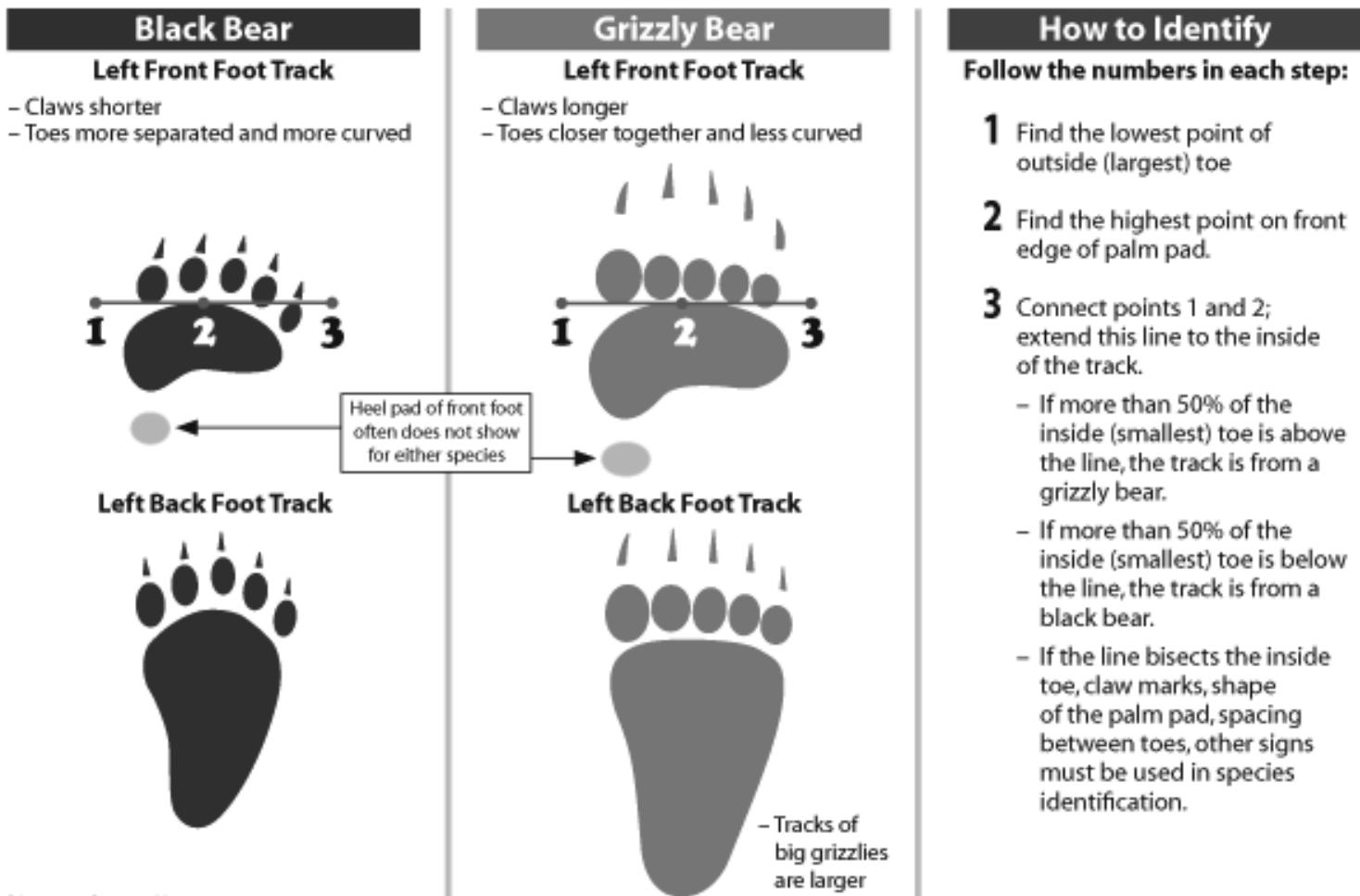
GRIZZLY BEAR BEHAVIOR



- Grizzly bears create day beds to rest and escape the summer heat
- Grizzly bears are mostly active during dusk and dawn
- Grizzly bears have exceptional strength
- Grizzlies are usually more aggressive than black bears
- Females will aggressively protect their cubs

BEAR TRACKS

- Bear tracks can show five toes and may also include claw marks
- The print of the big toe is on the outside of a bear's foot
- In tracks from a bear in a walking pace, the hind foot just overreaches the front
- The difference between a grizzly track and a black bear track
 - Claw marks appear closer to the pads of the foot for a black bear than for a grizzly



MISIDENTIFICATION

- Size is still a reliable indicator
- Characteristics of bears can vary with age and sex
- Body position, behaviour, and light conditions can also affect a bear's appearance
- Knowing the difference between black bears and grizzly bears is important

IDENTIFICATION QUIZ

What type of bear is shown in each picture? Black Bear or Grizzly?

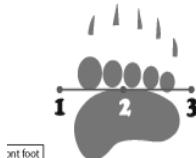
**LET'S REVIEW**

7. Black bears and grizzly bears can both be brown.

- a) True
 - b) False
- Left Front Foot Track
- Claws longer
- Toes closer together and less curved

8. This is a grizzly bear track.

- a) True
- b) False



9. Compared to a black bear, a grizzly bear has a prominent shoulder hump.

- a) True
- b) False

CHAPTER OVERVIEW – BEAR COUNTRY

- Avoiding prime bear habitats
- Bear signs
- Working in bear country



AVOIDING PRIME BEAR HABITATS



- Avoiding areas that bears frequent helps to reduce your chance of an encounter
- Bears like to travel on saddles, ridges, game trails, and along the water's edge
- Bears often rest in cool, dark, thick forests
- Bears' locations change by the season

BEAR SIGNS

- a) Tracks
- b) Droppings (Bear droppings have different shapes and consistencies depending upon the food eaten.)
- c) Claw marks or stripped bark on trees
- d) Torn up rotten logs or stumps
- e) Upturned earth



WORKING IN BEAR COUNTRY

- Tell someone where you are going and when you expect to return
- Travel in groups
 - Ensure at least one person is always on the lookout
- Do not bring an untrained dog
 - An untrained dog could provoke a bear attack
- Avoid carrying food with strong smells
 - Carry food in airtight or bear-proof containers
- Do not carry articles that have strong, artificial smells and avoid wearing cosmetics

- Bears can smell blood from a great distance
 - Open cuts should be bandaged well
 - Menstruating women need not be extra cautious
 - It was an urban myth and has been debunked
- Bring a means of two-way communication
- Be alert and aware of your surroundings
- Use binoculars to look ahead for bears
- Watch for bear signs such as tracks and droppings



- Make noise, especially when visibility is limited
- If the wind is at your back, a bear might smell you and leave you before you reach it (downwind)
- If the wind is in your face, a bear might not smell you coming (upwind)
- In places with strong winds, a bear might not hear you coming
- If you come across a dead animal never approach it
- Be cautious of loose piles of dirt, branches, and vegetation as it may be hiding a carcass a bear has cached
 - A resting bear may be nearby, ready to protect its food source
 - Avoid areas with crows, ravens, or magpies in groups; this could indicate a food source

LET'S REVIEW

10. Bears can smell blood at a great distance.
 - a) True
 - b) False
11. You will never find a bear in an area with a large amount of ravens, crows, or magpies.
 - a) True
 - b) False
12. If it is possible for you to stumble across a bear by accident, it's better if you are walking into the wind.
 - a) True
 - b) False

CHAPTER OVERVIEW – BEAR ENCOUNTERS

- Bear sightings
- Body language
- Types of bear behavior
 - Defensive behavior
 - Non-Defensive behavior
 - Predatory attacks
- Climb a tree?
- Using bear spray



BEAR SIGHTINGS

- If you see a bear from a distance
 - a) Make a wide detour and leave the area
 - b) Wait until the bear moves from your path before moving any closer
 - c) Always leave the bear an escape route
- There is no guaranteed life-saving method to cope with an aggressive bear
- Calm behaviour has proven successful
- If you can come across a bear, keep calm and back away quietly
 - a) If the bear has seen you, speak calmly as you back away
- A scream or sudden movement can trigger a reaction
- Set anything you are carrying to the ground. An inquisitive bear may find this more attractive than you
- A backpack may offer additional protection should a bear attack
- If you are carrying food or anything that is attracting a bear, leave it on the ground
- Don't throw anything at a bear



BODY LANGUAGE



- Understanding bear body language can be helpful when face to face with a bear
- A bear standing on its hind legs is not necessarily in an aggressive posture; they may be just getting a better look
- A bear that swings its head from side to side is usually looking for a way out of the situation
- A very agitated or trapped bear will often charge
- A bear that charges and knocks you down is trying to remove the impending threat
- Charges are often a test of resolve: a situation where the bear stops short, veers off, or runs past you
- Do not turn your back or try to run from a bear. Back away slowly
- Running may trigger a chase response

TYPES OF BEAR BEHAVIOR

- Defensive Behavior
 - Signs
 - Reactions
 - Attack
 - Playing Dead
- Non-Defensive Behavior
 - Signs
 - Reactions
- Predatory Attacks
 - Signs
 - Reactions



DEFENSIVE BEHAVIOR AND ATTACKS



- During 'defensive behavior' the bear is showing signs of stress and feeling threatened:
 - Changes in body posture
 - Vocalization: teeth popping, blowing and huffing
 - Ears going back, swatting the ground, swaying of the head, or even a bluff charge
 - Other signs (causes) of 'Defensive Behavior' may include cubs or a food source

REACTION TO A DEFENSIVE ENCOUNTER

- Stay calm!
- Talk softly to the bear (this will help identify you as human)
- Do not run (this may provoke a chase response)
- If you are with others, group together
- Keep your eye on the bear, but avoid direct eye contact
- Prepare your deterrent (such as bear spray) in case the encounter escalates
- Retreat slowly, but do not turn your back on the bear
- If the bear charges, stand your ground and use your deterrent
 - In a study conducted by the US Fish and Wildlife Service, it was found that people who used a gun instead of bear spray were twice as likely to suffer a serious injury

DEFENSIVE ENCOUNTER ESCALATES TO ATTACK

- A defensive attack is one intended to stop a threat, not to kill it
- Most defensive attacks are short in duration and stop when it no longer sees a threat
- If the bear charges, and it is clear that it is a defensive attack, the target should lie face down on the ground (play dead), but only at the moment just before contact
 - If the person lies down too soon, this may actually encourage the bear to attack

PLAYING DEAD

- a) Lay flat on your stomach or curl up into a ball, lacing your fingers behind your neck to protect it
- b) If you have a backpack on, keep it there for additional protection
- c) Lay still and be silent
- d) If the bear rolls you over, roll back onto your stomach
- e) Bears that attack out of surprise usually stop attacking once you are no longer a threat
- f) Don't get up until you're sure the bear has left the area, even if that means waiting 30 minutes
- g) If the bear starts biting, it's time to fight back



It's important to note that most people survive bear attacks, even though it's terrifying.

There are three main reasons to take this position:

- 1) It helps protect your vital parts (the arteries in your neck) and your soft front access to your internal organs
- 2) It helps prevent you from getting rolled over (your elbows out)
- 3) It's a show of submission to the bear, and if the bear is only looking to frighten you off, this is a good thing.

CASE STUDY OF A DEFENSIVE ATTACK

- September, 2014
 - A lone hunter in the Kananaskis region encountered a mother grizzly, her cub, and a deer carcass
 - The hunter's body was found, and evidence suggests he died from the trauma of a bear attack
 - The bears were not found in the immediate vicinity of the bear attack, and while the hunter died from the wounds, it was likely after the bears had left the area
 - This suggests a defensive attack

NON-DEFENSIVE BEHAVIOR

- Bears that approach with no signs of stress are exhibiting non-defensive behavior
- These bears could be curious, human habituated, food-conditioned, or predatory

REACTIONS TO NON-DEFENSIVE BEHAVIOR

- If a bear approaches within about 10 metres and shows no sign of leaving, it is important not to appear submissive
 - Do not run and remain facing the bear (but still don't try to make eye contact)
 - As the bear gets closer, act more aggressively

- Make yourself appear as large as possible: Open your coat, stand uphill or on something (like a rock or stump)
- Shout at the bear in a loud, determined voice
- Pick up a stick or rock to use as a weapon
- Stomp on the ground and make rapid hand gestures
- In most cases, the bear will back off.
 - If they don't, it may be a predatory attack

PREDATORY ATTACKS

- A predatory attack is an attack in which the bear intends to make you its prey
- Predatory bears are often young bears that can be chased away
- Predatory attacks are not common!
- If a bear is stalking you or is approaching your campsite or worksite, make every effort to avoid contact with the bear
- Do not play dead
- Predatory bears don't give warning signals or use threat displays or vocalize: there is no huffing, blowing, barking, jaw-popping, hop charging, ground slapping, or bluff charging during a predatory attack.
- Predatory bear's ears will be erect and forward (not laid back).
- Predatory bears will be intensely interested in their victim, visually locked on.
- Predatory bears will keep bearing in on you.



If a bear attacks, use all the resources you have to fight back

- Predatory bears rarely kill their victims before beginning to consume them
- Immediate medical attention increases chance of survival
- Rescuers should ensure their own safety before attempting to assist a victim

REACTIONS TO PREDATORY ATTACKS

- Bears are strong: You will likely be knocked down
- Continue to utilize your bear spray, even at close range

- Try to remain on your back, facing the bear, so that you can continue to fight
- Hit the bear with anything you can: A rock, a belt knife, even the empty bear spray can
- Aim for the eyes, face, and nose



CLIMB A TREE?

- Climbing a tree is not advised
 - Black bears are excellent climbers
 - Grizzly bears aren't as good as Black bears, but can still climb trees
- Bears have been known to chase other bears up trees, attack them from below, and kill the other bear by throwing it from the tree
- If climbing a tree is your best option for escape, climb as high and as fast as you can



USING BEAR SPRAY

- Carrying bear spray may offer protection from a bear attack
- Read the instructions and understand how to use bear spray
- A 180 gram container will reach 10 meters
- A 55 gram container will reach approximately 3 meters
- A 30 gram container will reach approximately 2.5 meters
- Always carry bear spray in a way that it is readily available to you, preferably in a holster on your belt or pack (not in your pack!)
- To employ:
 1. Remove safety clip
 2. Steady your arm and depress trigger with thumb
 - Deploy in 2-3 second bursts
 - An average canister contains about 8 seconds of use
 3. Spray directly into the bear's face
 4. Do not use the entire contents in one burst, as several applications may be required



THINGS TO LOOK FOR ON BEAR SPRAY

- Check the expiry date
- Ensure it has a safety clip
- Ensure it says ‘Bear Spray or Bear Repellent’ on it
 - Legally, in Canada, it must say that it is intended for use on animals, and the package volume cannot exceed 500ml*
- Check size and strength
 - A 225ml can is about 8-10 seconds worth
 - 0.75-1% capsaicin (the active ingredient) is recommended by ‘Parks Canada’
 - You are unlikely to find one with greater than 2% capsaicin

WARNINGS WHEN USING BEAR SPRAY

- It is explosive and some are extremely flammable
- If transporting in a vehicle, make sure it is in a fully sealed, enclosed container (e.g. Aerosol safety container)
 - Prohibited on planes and helicopters
 - Don’t store it in a place that becomes ‘too hot or cold’ (like your truck)
- It is not a repellent and should not be sprayed on things like tents or other people
- Be careful about the wind when you use the bear spray, it can drastically affect the effectiveness of the bear spray
- If accidentally exposed:
 - Wash all affected areas with cold water
 - Remove contact lenses
 - Wash contaminated clothing as soon as possible
 - Take short shallow breaths to avoid breathing in the spray
 - Relief from symptoms may take 15-20 minutes

LET'S REVIEW

13. You can probably outrun a bear.
 - a) True
 - b) False
14. If you are attacked by a bear acting defensively, you should play dead.
 - a) True
 - b) False
15. A scream or sudden movement can trigger a bear attack.
 - a) True
 - b) False

CHAPTER OVERVIEW – OTHER WILDLIFE

- Other species of concern
 - Cougar
 - Wolf
 - Coyote
 - Fox
 - Moose



Note, you should be a bit nervous if you ever see these in the wild. Where there are young animals, the parent is usually not far. Parent animals will often become protective of their young and this can provoke an encounter. Ideally, if you see young animals, you want to move away from the area as quickly as safely possible. Just make sure you aren't between the parent and the young.

COUGARS

- Cougars are predators that primarily hunt deer, elk, moose, sheep, and other small mammals
- Sightings are rare. Cougar attacks are very rare.
- Active at all times, but usually wait for the dark to enter human areas
- Most common in the mountain and foothill regions of Alberta
 - Prefer remote, wooded, rocky areas
- Do not have a specific breeding season
- Kittens stay with mother for about a year

COUGAR ENCOUNTERS

- Precautions
 - Carry bear spray and be ready to use it if the cougar comes closer than 12m (40 feet)
- If you see a cougar:
 - Do not turn your back or attempt to run
 - If the cougar doesn't notice you, slowly and cautiously back away and leave the area
- If a cougar attacks:
 - Show it you are not easy prey. Look big and speak loudly.



- Fight back! Do *not* play dead!
- Use your bear spray
- If you get knocked down, get back up
- Hit the cougar with anything at hand: Rocks, sticks, or fists
 - Aim for the face

WOLF

- Wolves are predators that primarily hunt deer, elk, moose, caribou, and other small mammals



- Wolves travel in packs of 2-20
- Active at all times, but usually wait for the dark to enter human areas
- Most common in the mountain, foothill, and boreal regions of Alberta
- Generally restricted to wooded areas
- Mate in February or March and females retire to dens in May
- Pups are fed by the pack until they are about 4 months old, then participate in the hunt

WOLF ENCOUNTERS

- Precautions
 - Carry bear spray and be ready to use it
- If you see a wolf:
 - Do not turn your back or attempt to run
 - If the wolf doesn't notice you, slowly and cautiously back away and leave the area
 - Wolves usually travel in packs, there may be more!
- If a wolf approaches in a threatening manner or attacks:
 - Travel perpendicular to the wolf, it's pack might be behind you
 - Show it you are not easy prey. Look big and speak loudly.
 - Do not make eye contact or show your teeth, that is seen as an act of aggression
 - Try to make yourself as large as possible: Wave your arms, hold up your coat
 - Climb a tree if one is nearby
 - Use your bear spray
 - Protect your face and throat by using your forearm

COYOTE

- Coyotes are opportunistic, but feed on hares, mice, fruit, and occasionally livestock carrion
- Seldom hunt in packs
- Most active between dusk and dawn
- Highly adaptable and can be found in all regions and habitats in Alberta
- Appearance
 - Grey to reddish fur coat
 - Long ears
 - Slender, pointed muzzle



- Bushy tail
- 10-23kg
- Mate in February or March and pups are born in litters of 5-7 in April or May
- Family units usually travel together until Fall and then split up

COYOTE ENCOUNTERS

- Precautions
 - Carry bear spray and be ready to use it
- If you see a coyote:
 - Make the experience unpleasant for the coyote to condition it to avoid humans
- If a coyote approaches in a threatening manner or attacks:
 - Show it you are not easy prey. Look big and speak loudly.
 - Throw rocks, sticks, or other objects
 - Try to make yourself as large as possible: Wave your arms, hold up your coat
 - Shout in a deep voice and maintain eye contact
 - Do not turn your back or attempt to run
 - If you have it, use your bear spray

FOX

- Foxes are omnivores, and feed on small mammals and birds, fruit, insects, and other foods
- Most active in the early hours of dark and in the morning
- Highly adaptable and found in many different areas
- Appearance
 - Slim and graceful
 - Long pointed nose
 - Fluffy tail
 - Usually Red, Cross (red with black), or Silver
 - About 5kg
- Mate in March and pups are born in litters of 4-9 in May
- Family units hunt together until Fall and then split up

FOX ENCOUNTERS

- Precautions
 - Foxes are normally wary and unlikely to approach adults
- If you see a fox:
 - Like any animal, if you see a fox, leave it an escape path
 - Try not to corner the animal
- If a fox approaches in a threatening manner or attacks:
 - This is very unlikely to happen
 - Rabies has not been found in a fox in Alberta since the 1950's
 - Show it you are not easy prey. Look big, speak loudly in a deep voice, and maintain eye contact
 - If you find a fox in an enclosed space, give it an escape route and stand back. It will leave when it feels safe



MOOSE

- Moose are not predators
- Most aggressive during Spring and Fall (Calving and Rutting seasons respectively)
- Most active in the early hours of the morning
- Good sense of smell and hearing, poor vision
- Common in most eco-regions in Alberta, and prefer muskegs, brushy meadows, and small groves of trees near water
- Appearance
 - Bulls (males) have broad, palm-like antlers
 - Average 350-450kg
- Rut in September to October, calves born the following Spring
- Family units usually travel together until Fall and then split up

MOOSE ENCOUNTERS

- Precautions
 - A moose encounter can be just as dangerous as a bear encounter
 - As with other animals, make a lot of noise while traveling to warn the animal you are coming
- If you see a moose:
 - Try to maintain at least 100m between you and the moose
 - If it remains stationary, move away from it cautiously
 - Ears forward and erect means it is alert
 - Ears back and down means it is aggressive
 - Always leave the moose a route of escape
- If a moose approaches in a threatening manner or attacks:
 - A moose may charge if it feels threatened
 - Walking quickly or running away (if safe) will likely prevent a sustained attack
 - Try to put strong, solid barriers between yourself and the moose as you flee
 - Don't stop just because you are behind a tree, a moose is very good at kicking with its front legs



AFTER THE ENCOUNTER

- Make sure you report the encounter as per site-specific rules
 - Report any wildlife encounter!
 - This includes when you find wildlife that is injured, in distress, or dead

LET'S REVIEW

16. If a cougar attacks you, you should play dead.
 - a) True
 - b) False

17. If encounter a wolf, you should bare your teeth to show it you are aggressive.
 - a) True
 - b) False

18. Running can be an option if you encounter a moose.
 - a) True
 - b) False

CASE STUDY EXERCISES

Things to consider:

- What could the workers have done to avoid the encounter
- How would you rate their encounter response?
- What else could they have done during the encounter?

**CASE STUDY 1**

A worker walking through a cut block encountered a bear approximately 10 metres away in some dense brush. The weather was clear and windy at the time of the encounter.

Once the worker noticed the bear he immediately started to talk calmly to it. The bear appeared startled by the workers presence and started to approach the worker quickly (ran but not charged). The bear came within one step of the worker spraying it, before it stopped.

The bear eventually moved downwind of the worker to catch their scent and the worker was able to exit the area without incident.

Notes:

CASE STUDY 2

A layout crew working in the field was charged by a black bear. The bear charged directly at one person as he turned and headed for cover, trying to find his bear spray.

While this was happening, the other person ran in between his partner and the bear with his arms up and bear spray ready, screaming at the bear. The bear stopped less than 5 metres away, stood up first then circled the crew twice, who still had their arms up, yelling at the bear.

The bear slowly left the site. The crew was pretty scared especially the one that the bear charged at. No injuries were reported.

Notes:

CASE STUDY 3

A field worker was painting a boundary of a BCTS block located near Moose Valley, west of 100 Mile House. He had been working for a few hours and noticed that something was following him, although he could only hear it. This continued for about 15 minutes. Suddenly he heard something coming through the bush at a fast pace and quickly reached for his bear spray. A medium to large sized black bear came out of the vegetation at full charge and he sprayed the bear at around 10 feet.

The bear turned back into the brush and began pacing and grunting around the worker. He yelled and hit trees to scare it off but the bear charged him again. The worker sprayed the bear again, and this time the bruin turned and climbed a fir tree. He was 10 feet up the tree staring at the worker.

When the worker began to retreat, the bear came down and began following the worker for another kilometer until he was outside of the block. The worker guessed this bear to be a 4 – 5 year old male. He also believes this bear to have been hunting him.

NOTES:

CASE STUDY 4

Sometime between July 27 and August 7 while a pickup truck was not in use, a large can of bear spray exploded inside the cab.

During this period of time the outside temperatures reached upwards of 39 degrees. It was probably a combination of extreme heat inside the truck and the fact that the bear spray was past the expiry date.

The explosion left a thin oily layer of extremely hot Capsaicin throughout the cab of the truck. The truck remained unusable until cleaned by a professional cleaning company.

NOTES:

CONCLUSION

- Thank you for completing this Awareness course
- The information and strategies in this course are to protect both you and the wildlife you may encounter
- Wildlife is important to the ecosystem
- With understanding and due diligence, wildlife and people can co-exist

EXAM AND PRACTICAL

- Exam is closed book and requires 80% to pass
- Practical will go over bear spray and basic usage



WILDLIFE AWARENESS

Includes Practical Bear Spray Training

REG # TP WLA 16-2411



 @isafety

 @isafety

 @isafety

www.isafety.ca 780 756-9191 info@isafety.ca

iSAFETY

iSAFETY TRAINING AND STAFFING LTD.

Industrial Park, Site One, Lot 143,

Fort McKay, Alberta T0P-1C0

Phone: (780) 756-9191 Fax: (855) 667-2339

iSAFETY