

Field Work Safety

How to protect yourself from bears, cougars and
wolves

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Chapter 1: Be Bear Aware!



Much of our field work is conducted in bear country, it is therefore essential to have some knowledge of how to act in the event of a bear attack or sighting. In order to avoid bear encounters, it is important to follow certain safety measures. **Making loud noises and being alert and aware of your surroundings is imperative.**



Avoiding Bear Encounters:

- Do not go into the field alone, **travel in groups**.
- **Never approach or feed bears** or other wildlife.
- Look for **signs of recent bear activity**. These include droppings, tracks, evidence of digging, and claw or bite marks on trees.
- Make your presence known by **talking loudly, clapping, singing, or occasionally calling out**. Some people prefer to wear bells. Whatever you do, be heard! It doesn't pay to surprise a bear.
- **Photographing bears** can be dangerous.
- There is **no guaranteed minimum safe distance** from a bear - the further, the better.
- Stay away from **dead animals**. Bears may attack to defend such food.
- Reduce/eliminate odours that may attract bears; store food in airtight containers in vehicle (not in your sleeping tent!), or stash in a bear cache and pack out garbage.

- Toothpaste, cosmetics and bug spray may attract bears; store these with your food away from your tent.
- Cook and eat well away from sleeping area and clean up thoroughly and immediately; do NOT sleep in the same clothes that you cook in.

About bears:

- **Bears can run as fast** as horses, uphill or downhill. 66% faster than humans
- **Bears can climb trees**, although black bears are better tree-climbers than grizzly bears.
- Bears are strong **swimmers**.
- Bears have excellent senses of smell and hearing, and better sight than many people believe.
- **Bears are strong**. They can tear cars apart looking for food.
- Bears aggressively defend their food.
- All female bears defend their cubs. If a female with cubs is surprised at close range or is separated from her cubs, she may attack. An aggressive response is the mother grizzly's natural defense against danger to her young.
- A female black bear's natural defense is to chase her cubs up a tree and defend them from the base. However, she is still dangerous and may become aggressive if provoked.

The most dangerous bears are:

- Bears habituated to human food.
- **Females defending cubs**.
- Bears defending a fresh kill.
- Cute, friendly, and apparently not interested in YOU.



In the event of a bear sighting:

- Identify species; black bear (most common) or grizzly bear.
- Both species can be black, brown, or even blonde.
- Black bear features; often have white patch on chest or throat, height of 90cm at shoulder, weigh from 57kg to 270kg (females smaller than males), straight face profile, short and curved claws.
- Grizzly bear features; fur is often white-tipped, lighter fur patches around neck, shoulder and flanks, height of about 1m (2m when erect), weigh from 200kg to more than 450kg (females smaller than males). Concave face, large shoulder hump, long curved claws.



If It Does Not Approach

- If spotted in the distance, do not approach the bear. **Make a wide detour or leave the area immediately.** Report your sighting to Park Staff at the first opportunity.
- If you are at close range, do not approach the bear. **Remain calm, keep it in view. Avoid direct eye contact. Move away without running.** Report the sighting to Park Staff.

If the Bear Approaches

- If the bear is standing up, it is usually trying to identify you. Talk softly so it knows what you are. If it is snapping its jaws, lowering its head, flattening its ears, growling or making 'woofing' signs, it is displaying aggression.
- Do not run unless you are very close to a secure place. Move away, keeping it in view. Avoid direct eye contact. Dropping your pack or an object may distract it to give you more time.

What to do if a Bear Attacks

Your response depends on the species and whether the bear is being defensive or offensive. Bears sometimes bluff their way out of a confrontation by charging then turning away at the

last moment. **Generally, the response is to do nothing to threaten or further arouse the bear. While fighting back usually increases the intensity of an attack, it may cause the bear to leave.**

Every encounter is unique and the following are offered as guidelines only to deal with an unpredictable animal and potentially complex situations.

Grizzly Attacks From Surprise (defensive)

- Do nothing to threaten or further arouse the bear.
- Play dead. Assume the 'cannonball position' with hands clasped behind neck and face buried in knees.
- Do not move until the bear leaves the area. Such attacks seldom last beyond a few minutes.

Black Bear Attacks From Surprise (defensive)

- Playing dead is not appropriate. Try to retreat from the attack.

Grizzly or Black Bear Attacks Offensively (including stalking you or when you are sleeping)

- Do not play dead. Try to escape to a secure place (car or building). **If you have no other option**, try to intimidate the bear with **bear spray or weapons** such as tree branches or rocks.

Our lab has one can of Frontiersman 225g bear spray, to use the spray to deter the bear:

- Always have the spray available (eg: do NOT put it in your bag pack.)
- remove safety clip
- Use the spray when the bear is within the effective range of the spray (18 ft/ 5.5 m)
- steady your arm and depress trigger with thumb
- deploy in 2 - 3 second bursts
- spray directly in the bear's face
- **do not use the entire contents** as more than one application may be needed
- **Watch this video: "How to Use Bear Spray"**
(<http://www.youtube.com/watch?v=alvpLzHiCrg>)



Resources:

<http://www.bearsmart.com>
<http://www.env.gov.bc.ca/bcparks/explore/misc/bears/bearsaf.html>
<http://www.for.gov.bc.ca/hfd/library/documents/bib22777.htm>
http://www.mnr.gov.on.ca/en/Business/Bearwise/2ColumnSubPage/STEL02_167718.html
<http://www.env.gov.bc.ca/wld/documents/bearwld.htm>
<http://www.centerforwildlifeinformation.org/BeBearAware/bebearaware.html>

Chapter 2: Safety Guide to Cougars



Although cougars are very powerful predator, capable of killing a 270 kg (600 lb) moose, conflict between cougars and humans is extremely rare. In the past 100 years, 29 non-fatal attacks occurred in British Columbia and a total of five people have been killed by cougar. Although a cougar attack is highly unlikely, **it always pays to be prepared**. Information and awareness are your best defenses. (Ministry of Environment, 1996)

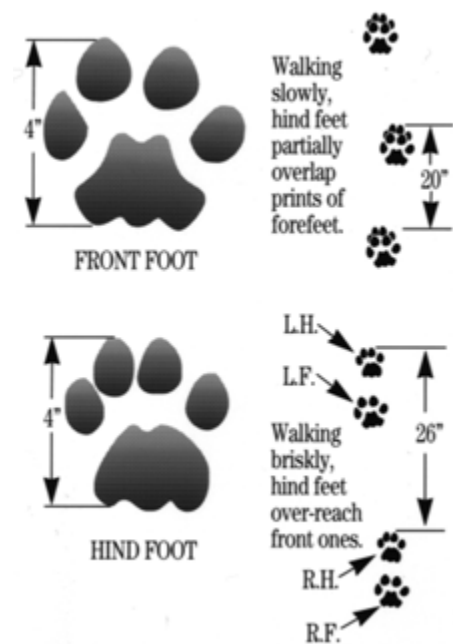
About cougars:

- The cougar, also called mountain lion or panther, is Canada's largest cat. Cougars have long tails which may be one-third of their total body length.
- An adult male cougar weighs between 63 and 90 kg (140-200 lbs), and a female cougar, between 40 and 50 kg (90-120 lbs). The biggest cougars are found in the interior and the Kootenays.
- The cougar's primary prey is deer. It will also feed on wild sheep, elk, rabbits, beaver, raccoons, grouse, and occasionally livestock.
- **Cougars are most active at dusk and dawn.** However, they will roam and hunt at any time of the day or night and in all seasons.
- **During late spring and summer**, one to two-year old cougars become independent of their mothers. While attempting to find a home range, these **young cougars may roam widely in search of unoccupied territory. This is when cougars are most likely to conflict with humans.**

Avoid cougars:

Cougars are predators - the top of the food chain - and their actions are often unpredictable. We have little understanding about what might trigger an attack, but following these general guidelines will reduce the risk of cougar conflict and prepare you in the unlikely event of an attack.

- **Hike in groups of two or more. Make enough noise** to prevent surprising a cougar.
- Carry a sturdy walking stick to be used as a weapon if necessary.
- **Watch for cougar tracks and signs.** Cougars cover unconsumed portions of their kills with soil and leaf litter. **Avoid these food caches.**
- Cougar kittens are usually well-hidden. However, if you do stumble upon cougar kittens, do not approach or attempt to pick them up. Leave the area immediately, as a female will defend her young.



Cougar encounter:

- **Never approach a cougar.** Although cougars will normally avoid a confrontation, all cougars are unpredictable. Cougars feeding on a kill may be dangerous.
- Always give a cougar an avenue of escape.
- **Stay calm.** Talk to the cougar in a confident voice.
- **Do not run.** Try to back away from the cougar slowly. Sudden movement or flight may trigger an instinctive attack.
- **Do not turn your back on the cougar.** Face the cougar and remain upright.
- **Do all you can to enlarge your image.** Don't crouch down or try to hide. Pick up sticks or branches and wave them about.

If a cougar behaves aggressively:

- **Arm yourself with a large stick, throw rocks, speak loudly and firmly.** Convince the cougar that you are a threat not prey.
- If a cougar attacks, **fight back!** Many people have survived cougar attacks by fighting back with anything, including rocks, sticks, bare fists, and fishing poles.
- Use bear spray if needed.

Resources:

<http://www.env.gov.bc.ca/wld/documents/cougsf.htm>

Chapter 3: Wolf Safety



Normally wolves are secretive and will run away when they encounter people, but they can become habituated and may approach camping areas and hikers.

Avoiding Encounters with Wolves

- Do not go into the field alone, **travel in groups**.
- Keep a clean and orderly camp. Cook and store food away from sleeping areas. Suspend food, toiletries, garbage and other loose objects on a rope between trees, or in secured kayak hatches, out of reach of wildlife.
- Do not bury garbage.
- Wash dishes in a container and dispose of grey water at sea.
- Use areas below high tide mark, away from camp, in an area of high tidal exchange for toilets - do not use the upland areas, wolves will feed on human excrement.

If a wolf appears and acts unafraid or aggressive

- **Do not allow the wolf to approach any closer than 100 metres.**
- Raise your arms and wave them in the air to make yourself appear larger.
- When in a group, act in unison to send a clear message to the wolves they are not welcome.
- Back away slowly, do not turn your back on the wolf.
- Make noise, throw sticks, rocks and sand at the wolf.

Resources:

<http://www.env.gov.bc.ca/bcparks/explore/misc/wolves/wolfsaf.html>