



A PRACTICAL GUIDE TO

BEAR AWARE

IN ALBERTA

Identification, behaviour, avoidance & encounter response

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|----|--|
| 01 | Know Your Bears — Species Identification |
| 02 | Bear Behaviour & Reading the Signs |
| 03 | Avoiding Encounters |
| 04 | If You Meet a Bear |
| 05 | Bear Spray & Other Deterrents |
| 06 | Home, Camp & Hunt Attractant Management |

01 Know Your Bears — Species Identification

Alberta is home to two bear species: the **black bear** (*Ursus americanus*) and the **grizzly bear** (*Ursus arctos horribilis*). Correct identification matters — the right response to a bear attack depends on the species. Colour is the *worst* way to tell them apart. Black bears range from jet black through cinnamon, brown, and blonde; grizzlies range from blonde to nearly black. Focus on **shape**, not colour.

Key Identification Features

Feature	Black Bear	Grizzly Bear
Shoulder hump	No hump — highest point is the rump	Prominent muscular hump over shoulders — highest point of the body
Face profile	Long, straight "Roman" snout	Short snout with a distinctly dished (concave) face
Ears	Tall, pointed, prominent	Short, round, set wide apart
Claws	Short (under 5 cm), dark, curved — for climbing	Long (5–10 cm), light-coloured, straighter — for digging
Tracks	Toes arc steeply; claw marks close to toes if present	Toes nearly in a straight line; claw marks well in front of toes (2"+)
Size (adult)	55–270 kg; shoulder ~90 cm on all fours	130–360 kg (males to 450+); shoulder ~105 cm
Climbing	Excellent climbers at all ages	Adults climb poorly; cubs can climb

■ THE SHAPE TEST

If you can only check one thing, check the shoulders. A pronounced muscular hump above the front legs means **grizzly**. A smooth sloping back with the rump higher than the shoulders means **black bear**. Memorize this — it works at a distance when claws and faces aren't visible.

Range & Population in Alberta

Black bears are widespread across forested Alberta — boreal, foothills, parkland, and mountain zones. Estimated population is 40,000+. They are not a species at risk and are legally hunted in most Wildlife Management Units.

Grizzly bears are restricted to the Rocky Mountains, foothills, and some northern boreal areas. Alberta's population is approximately 850 animals. The grizzly is **designated Threatened** under Alberta's Wildlife Act — the prairie population is already locally extinct. Grizzly hunting has been closed since 2006.

02 Bear Behaviour & Reading the Signs

Most bears want nothing to do with humans. Understanding bear behaviour — seasonal patterns, the signs they leave, and what their body language means — lets you avoid most encounters before they start.

The Bear Year in Alberta

Season	Bear Activity
Spring (Apr–May)	Bears emerge from dens lean and hungry. Low-elevation green-up areas and winter-killed carrion attract bears. Males emerge first, then females with cubs. Very defensive around carcasses.
Early summer (Jun–Jul)	Breeding season. Males travel widely and can be unpredictable. Females separate from yearlings — dispersing young bears often end up in human-use areas.
Late summer to fall (Aug–Oct)	Hyperphagia — bears feed up to 20 hours a day to pack on fat for hibernation. Most food-driven and most likely to seek human food sources. Peak conflict season.
Winter (Nov–Mar)	Most bears are denned by mid-November. Pregnant females den earliest, males latest. Warm spells or disturbance can rouse denned bears briefly.

Signs of Bear Activity

- **Tracks** — use the claw distance rule from the ID table. Fresh tracks in soft mud or snow mean a bear is nearby.
- **Scat** — dark, tubular, often full of berry seeds, hair, or plant fibre. Large scat = large bear. Fresh scat is dark, moist, and strongly scented.
- **Diggings** — torn-up ground, overturned logs and rocks, excavated ground squirrel burrows. Grizzlies in particular are prolific diggers.
- **Day beds** — matted-down vegetation, often in dense cover near food sources. A fresh bed with any warmth means leave *now*.
- **Claw-marked, rubbed, or bitten trees** — scent marking and sign posts. Height of marks roughly indicates bear size.
- **Cached carcasses** — any animal carcass partially covered with dirt, leaves, or branches is a bear cache. The bear is almost certainly nearby and will defend it ferociously. **Leave immediately.**
- **Ripe-berry patches, oat and grain fields, beehives, and garbage** — these are the bear's groceries. Expect bears where their food is.

Bear Body Language

Relaxed or unaware: feeding quietly, walking casually, ignoring you. Usually you can simply back away unseen.

Aware and curious: standing on hind legs, sniffing the air, head turning side to side. Standing is *not* aggression — the bear is gathering information. This is your cue to identify yourself calmly.

Stressed / defensive: huffing, jaw-popping, teeth clacking, moaning, swatting the ground, ears pinned back, head lowered, drooling, bluff-charging. The bear feels threatened and wants you gone. Back away slowly.

Predatory (rare but serious): silent, focused, following or circling you, no stress signals, head up and ears forward, closing distance deliberately. This bear sees you as prey. Stand your ground, prepare spray, fight if contact is made.

03 Avoiding Encounters

The best bear encounter is the one that never happens. Avoidance is your most effective safety tool — more than bear spray, firearms, or anything else.

On the Trail

- **Make noise.** Talk, call out, sing. Bear bells are largely ineffective — the human voice is what bears recognize as human. Make more noise in dense cover, near running water, into the wind, and on blind corners.

- **Travel in groups.** Groups of four or more have almost never been attacked by a grizzly. The noise and visual profile of a group puts most bears off.
- **Travel in daylight.** Dawn and dusk are peak bear movement times. Plan to be off trail before last light.
- **Watch for sign constantly.** Fresh tracks, scat, diggings, or carrion mean turn around. Do not continue through active sign.
- **Keep dogs leashed or leave them home.** An off-leash dog that encounters a bear will often bring the bear straight back to you.
- **No earbuds.** You need your ears. Bears that hear you coming almost always leave before you see them.
- **Stay on trails.** Bushwhacking dramatically increases surprise encounters. Bears use trails too — be loud on them.
- **Carry bear spray on your belt or chest** — not in your pack. If you can't draw it in two seconds, you don't have it.

Mountain Biking & Trail Running

Mountain bikers and trail runners are disproportionately represented in serious bear incidents. Speed plus quiet equals surprise. If you ride or run in bear country:

- Slow down in dense cover and blind corners.
- Ride or run in groups.
- Call out often — yes, it feels silly.
- Carry spray on your body, not on the bike or in a pack.

Hunters & Anglers

Hunters face a special set of bear risks — quiet stalking, blood trails, gut piles, and packed-out meat are all powerful bear attractants. Anglers dragging stringers of fish are attractive to bears too.

- Field-dress game promptly and move the carcass away from the gut pile before leaving it overnight.
- Hang meat well off the ground (4+ m) and well away (100+ m) from sleeping areas.
- Approach downed game loudly and from upwind — a bear may have already claimed it.
- Returning to a kill the next day? Assume a bear is on it. Glass from a distance before approaching.
- Clean fish away from camp. Dispose of entrails in fast-moving deep water, not at the shoreline.
- Bear spray belongs on your belt even with a rifle on your back. In a surprise charge, spray is faster.

■ ALBERTA'S HOT SPOTS

Bear densities are highest in the Bow Valley corridor, Kananaskis, the Castle region, Willmore Wilderness, Swan Hills, and the foothills from Nordegg north to Grande Cache. The Banff–Canmore corridor alone sees dozens of bear incidents per year. If you're in these areas, treat every outing as a bear-country outing.

04 If You Meet a Bear

What you do in the first few seconds matters more than almost anything else. Your response depends on **distance**, **bear behaviour**, and — if attacked — whether the attack is **defensive or predatory**.

At a Distance — Bear Hasn't Noticed You

- Stop. Don't get closer for a photo. Never.
- Back away quietly the way you came.
- Detour widely — give the bear several hundred metres if terrain allows.
- Warn others coming behind you.

Bear Has Noticed You — Not Approaching

- Stay calm. Do not run. Running can trigger chase instinct.
- Speak in a low, calm voice: "Hey bear, hey bear." Identify yourself as human.

- Back away slowly and diagonally. Keep the bear in view without staring directly at it.
- Make yourself look larger — stand tall, raise arms slowly, group up with others.
- Ready your bear spray. Safety off. Finger on trigger.

Bear Is Approaching

Determine if the approach is **defensive** or **predatory** — your response differs.

DEFENSIVE APPROACH (STRESSED BODY LANGUAGE)

Signs: huffing, jaw-popping, ears back, head low, swatting ground, bluff charges stopping short. The bear feels threatened — by you, its cubs, or a food source.

- **Appear passive.** Do not yell or wave arms aggressively.
- Stand your ground. Speak calmly.
- Ready spray. Deploy when bear is within 9 m (30 ft) and still coming.
- If contact is made: **play dead.** Drop face-down, legs spread, fingers laced behind neck. Keep pack on. Stay still until you are certain the bear has left — wait several minutes at minimum.

PREDATORY APPROACH (FOCUSED, SILENT, DELIBERATE)

Signs: no stress behaviour, head up, ears forward, following or circling, testing approaches, may be stalking. The bear is assessing you as prey. This is rare but deadly.

- **Act aggressive.** Yell, stand tall, look big, wave arms, throw rocks or branches.
- Stand your ground — do not turn your back, do not run.
- Use bear spray as soon as the bear is in range.
- If contact is made: **fight back with everything you have.** Target eyes, nose, and face. Use fists, knife, trekking poles, rocks, anything. Do not give up.

▲ PLAY DEAD vs FIGHT BACK

The rule most people get wrong: species is not the deciding factor — **behaviour** is. A defensive grizzly? Play dead. A predatory grizzly? Fight. A predatory black bear? Fight — always. Any bear that enters your tent at night? Fight, immediately and violently; that bear is hunting you. When unsure and a bear is on top of you, play dead first; if the attack continues or the bear starts feeding, switch to fighting.

Special Situations

Sow with cubs. Never, ever get between a mother and her cubs. If you find yourself there, back out the way you came and give her every exit option. Do not linger for photos. Most defensive grizzly attacks involve cubs.

Bear at your campsite at night. Stay in the tent. Turn on lights, make noise, bang pots. If the bear enters or attempts to enter the tent, treat it as predatory and fight immediately.

Bear on a carcass. You have surprised it on its food. Back away immediately, quietly, and keep going. Do not try to observe, and do not approach the carcass later — the bear owns it.

In a vehicle. Stay in the vehicle. Drive slowly away. Do not roll windows down. Never feed.

05 Bear Spray & Other Deterrents

Bear spray is the single most effective tool you can carry. Studies by Smith and Herrero (*Journal of Wildlife Management*) found it stopped undesirable bear behaviour in **92% of grizzly and 90% of black bear encounters**, with **98% of users uninjured**. Defensive firearm use shows substantially higher human injury and bear mortality rates.

Choosing Bear Spray

- **Buy a true bear spray**, not personal-defence pepper spray. Look for Health Canada or EPA-registered bear deterrent, minimum 225 g (8 oz) canister, 1–2% capsaicin and related capsaicinoids.

- **Range:** 7–10 m (25–35 ft) typical, depending on brand and conditions.
- **Spray duration:** 6–9 seconds total in a full can. Use short bursts.
- **Trusted brands in Canada:** Counter Assault, Frontiersman, UDAP, Sabre Frontiersman.
- **Check the expiry date.** Propellant loses pressure over time — expired cans may spray weakly or not at all. Replace every 3–4 years.

How to Carry

- **On your body, not in your pack.** Belt holster, chest holster, or waist strap — somewhere you can draw in under 2 seconds.
- Everyone in the group carries their own can.
- Keep the safety clip on until deployment — but practice flicking it off.
- Don't leave cans in hot vehicles — they can rupture above roughly 50 °C.
- Don't fly with it in carry-on baggage. Check airline rules for checked baggage; most allow one can in checked if declared.

How to Deploy

1. **Draw.** Pull from holster, grip firmly with dominant hand, thumb on the safety clip, index or middle finger on the trigger.
2. **Remove the safety clip.** Flip or pull it off.
3. **Aim slightly down and in front of the bear** — the cloud will rise and spread. Don't aim at the bear's head; aim at the ground in front so the bear runs into the cloud.
4. **Spray short bursts of 1–2 seconds** when the bear is within 9 m (30 ft) and still coming. If the bear keeps closing, spray directly into its face.
5. **Leave the area** immediately once the bear turns or retreats. The capsaicin cloud can affect you too — move crosswind.
6. **Report the incident** to the local land manager. A bear that has been sprayed is a bear other users need to know about.

Wind, Cold & Rain

Bear spray works in cold (tested effective down to about –20 °C) and in rain, though range drops. Wind matters most: a strong headwind can push spray back at you and cut effective range by half. In a headwind, let the bear close further before spraying, and be ready to step aside. A tailwind extends your reach.

Other Deterrents

- **Air horns / marine whistles** — useful for scaring off bears at distance or approaching. Not a substitute for spray at close range.
- **Bear bangers / screamers** — pyrotechnic deterrents. Effective for deterring a bear at distance, but they can *drive* a bear toward you if fired incorrectly. Train before relying on them.
- **Firearms** — legal for defence of life in Alberta, but they require skill, speed, and the right cartridge (minimum 12-gauge slug or .30-06/.300 class for grizzly). In a surprise charge, most people cannot deploy a long gun faster than spray. Firearms and spray are complementary, not substitutes.
- **Electric fences** — highly effective for protecting camps, beehives, chicken coops, and hunting kill-site meat caches. A properly set 7,000+ volt fence will turn a grizzly.

▲ BEAR SPRAY IS NOT A REPELLENT

Do not spray bear spray on tents, gear, clothing, or your skin as a repellent. The dried residue actually *attracts* bears. Bear spray is an airborne deterrent — it works as a cloud sprayed at an aggressive bear, nothing else.

06 Home, Camp & Hunt Attractant Management

A fed bear is a dead bear. Once a bear associates humans with food, it loses its wariness and almost always ends up relocated or destroyed. Keeping food and garbage away from bears is the single most important thing you can do for bears — and for your own safety.

■ THE ONE-LINE SUMMARY

Carry bear spray on your body. Make noise. Travel in groups. Keep a clean camp. Read the bear's behaviour — defensive gets passive, predatory gets aggressive. Play dead for a defensive attack, fight for a predatory attack or any black bear attack. When in doubt, back out.

At Home (Rural & Urban Alberta)

- **Garbage:** store in a bear-resistant container or inside a locked building. Put it out on collection morning, not the night before.
- **Bird feeders:** take them down April to November. Spilled seed is a major bear attractant.
- **BBQ grills:** clean after every use. Burn off the grease tray. A greasy BBQ is a bear magnet.
- **Fruit trees:** pick fruit promptly. Collect fallen fruit daily. Consider electric fencing or removing problem trees.
- **Compost:** no meat, fish, grease, or dairy. Bury food scraps under brown material. Consider bear-resistant compost bins.
- **Pet food:** feed pets indoors. Never leave bowls outside.
- **Beehives and chicken coops:** electric fence them. This is the only reliable protection in bear country.
- **Freezers in outbuildings:** lock the outbuilding. A grizzly can open an unlocked door.

At Camp (Frontcountry & Backcountry)

The **triangle rule** organizes a bear-safe camp: three separate areas, each at least 100 m apart — sleep, cook, and food storage — arranged as a triangle. The wind should blow smells from sleep area *away* from cook and storage areas, not toward them.

- **Sleep clean:** never eat, cook, or store food in your tent. No toothpaste, no deodorant, no gum. The clothes you cooked in do not go to bed with you.
- **Store all attractants** in a bear-resistant canister, a bear hang (4+ m off the ground, 2+ m from the trunk, 2+ m below the branch), or a locked vehicle well away from the tent. This includes sunscreen, bug dope, toothpaste, and used feminine hygiene products.
- **Cook and wash dishes** at the cook site. Strain and pack out dishwater; don't pour it around camp.
- **Bear-resistant canisters** (IGBC-certified) are required in some Alberta provincial and national parks — check before you go.
- **Keep the site clean.** Food scraps, crumbs, grease drippings, open coolers — pack out everything. Don't bury food waste; bears will dig it up.

Hunting & Field Dressing

- Dress game quickly and move meat well away from the gut pile before you leave it overnight.
- **Hang meat** at least 4 m off the ground and 100 m from any sleeping area.
- If you must leave a carcass overnight, mark GPS, approach in daylight from upwind, and glass carefully before closing — a bear may have claimed it. If a bear is on it, it's the bear's now. Do not contest.
- Consider a portable electric fence around field-dressed meat if you'll be gone more than a few hours.
- Transport meat in sealed coolers. Clean truck beds after hauling game.

Reporting

- **Aggressive bear near people/homes:** Alberta Report a Poacher **1-800-642-3800** (24/7).
- **Provincial parks:** contact the park office or call 310-0000 for Fish & Wildlife.
- **National parks** (Banff, Jasper, Waterton): **1-888-WARDENS (1-888-927-3367)**.
- Report *every* close encounter, spray deployment, and unusual behaviour — officers use this data to manage problem bears.