

PURPOSE/APPLICATION

To educate workers on the precautions to be taken when working in areas where wildlife may be present.

PPE

- Canadian Plains Energy Services (CPES) minimum requirements

TRAINING

- As per pre-job hazard assessment or SSSP
- Enform Bear Awareness - online
- Enform Wildlife Awareness (includes Bear Awareness) – online

HAZARDS & CONCERNS

- Animal Attacks
- Infections
- Disease



General Practices

- Complete wildlife awareness training prior to beginning work in areas where dangerous wildlife may be present
- Avoid working alone where risk is high; follow working alone protocol (SWP 21 – Working Alone)
- Do not approach wildlife
- Do not run. Try to back away from the animal slowly. Sudden movement or flight may trigger an attack
- Never feed or leave food, garbage or other attractants (Avoiding pouring coffee/drinks on ground, sunflower seeds, etc.)
- Keep food and garbage securely contained
- Watch for general signs such as tracks, digging, scat, etc.
- Announce your presence by making noise using your voice, bells, air horns or whistles
- When planning for travel or work in bear country, include considerations of group size, avoid working alone, plan travel routes and work sites
- Carry pepper spray
- If possible, avoid very dense vegetation; keep on known pathways and trails
- If you see an animal, keep your distance, give it time to leave or detour around it
- Always leave an animal an escape route
- Before beginning work in a rural area check for wildlife alerts regarding the presence of problem animals
- Keep pets leashed at all times, if they are allowed to run free, they may attract an animal and lead it back to you (CPES policy is no pets on work sites)

BEARS

Encounters with bears are not uncommon in Western Canada. Black bears are more commonly encountered as they are more adaptable to human settlements than grizzlies. Black bears live throughout forests of Alberta and often reside at the forest edge near towns or farms. These bears frequently wander into populated areas drawn by human food and/or garbage.

Bears are generally solitary except during the brief mating period (May to July) and when females have young cubs. Males are most the most dangerous to humans, followed by females with young cubs. Females without young cubs present the lowest risk, where confrontations are generally resolved by body language (e.g. an aggressive stance), facial expression or growling leading to a fight or flight response depending on the interaction.

If the bear can smell a human, it usually leaves quickly, however it may stand to get a better view, sniff the air or circle downwind. An aggressive bear may display the same kind of threatening behaviour it would towards another bear, such as huffing, panting, growling, or jaw popping. The bear will stare directly at you with head lowered and ears laid-back. It may walk stiff legged and slap vegetation on the ground with its front feet or make one or more bluff charges. The purpose of such behavior is to establish dominance without fighting, thus avoiding injury.

If you encounter a bear

If you come upon a bear and it is **unaware of your presence**:

- Ready pepper spray if available
- Discreetly leave the way you came
- Keep your eyes on the bear
- Give a wide berth
- Choose route with no other bears
- Make your presence known once you have backed 300 meters away (talk loudly, sing, etc.)
- Keep moving

If you come upon a bear and it is **aware of your presence**:

- Ready bear spray if available
- Stop, stay calm, assess situation and surroundings
- Do not run or turn around
- Use soft, low voice
- Avoid rapid movements
- Appear non-threatening
- Keep eyes on bear without direct eye contact
- Leave escape route for the bear
- Determine what the bear is doing (food nearby? Young nearby?)
- If the bear bluff charges: **STAND YOUR GROUND**

If a bear shows stress signs, including yawning, salivating, huffing, hair up on neck, bluff charging, stomping the ground and swatting trees, be ready for a defensive attack. It means that your presence is stressful for the bear, and it is protecting something, either young, a food source, or its territory.

If you are the target of a **defensive attack**:

- Ready bear spray if available
- Recognize stress signs
- Do not shout or escalate the situation
- Attack will occur quickly and end when the bear sees threat as gone
- Do not move until bear leaves
- If the attack escalates, fight back

If you come across a bear and notice predatory behaviour, it may be targeting you for a predatory attack. Predatory behaviour is characterized by stalking you, watching you intently and approaching with no sign of fear or stress.

If you are the target of a **predatory attack**:

- Ready bear spray if available
- Do not run or be submissive
- Face the bear
- Act aggressively
- Scan for cover and move there
- Make yourself large
- Raise arms and stomp feet
- Stand on something
- Use rapid arm/leg movements
- Fight back – Do not play dead
- Attack eyes, nose & face

Bear Deterrent (Pepper) Spray

Pepper spray is a last line of defense against a bear attack. In areas where bear activity is known or suspected, spray can be carried by one or all workers. Consider placement of spray in strategic locations (trailer exits, vehicles, etc.).

Transporting, Handling, and Using Bear Spray:

- Inspect canister and trigger assembly before use, with safety clip in place
- Transport in appropriate container, protected from accidental puncture or discharge
- Follow manufacturer's instructions and ensure product is not expired
- Store product in a cool, dry place, and avoid heating canister (i.e. do not place on vehicle dash)
- Do not deploy spray on a field site for any reason other than to ward off an attack. The discharged spray can act as an attractant to bears

- Consider wind speed and direction if you intend to use your spray; ensure you are upwind of the bear to avoid accidental contact with the spray
- Use two hands when operating the spray can (dominant hand using the trigger like a gun and non-dominant hand near the bottom of the can to help steady and aim the stream of deterrent)
- Create a “wall” when deploying the spray, moving upward from the ground to the bear’s eyes

ELK/MOOSE/DEER

Elk/Moose/Deer are not normally aggressive, however, during the fall mating season, bucks may be aggressive toward humans. In late spring and summer, cows with young calves are very protective and will attack humans who come too close. If you see a calf and not a cow, you may have walked between them; slowly leave the area, as the cow might be nearby and aggressive.

Many charges are “bluff” charges, warning you to get back; take them all seriously. When an animal charges, it often kicks forward with its front hooves. In this case, it is a good idea to run from an animal because it is unlikely they will chase you. Take shelter behind something solid. If it knocks you down, an animal may continue running or start stomping and kicking with all four feet. Curl up in a ball, protect your head with your hands, and hold still. Don't move or try to get up until the animal moves a safe distance away or it may renew its attack.

RATTLESNAKES

Rattlesnakes commonly find shelter among high grass and rocks. In the evening, when the weather cools, they often venture out onto dirt roads and rocks to absorb the warmth into their bodies. Rattlesnakes are well camouflaged. Most often, the first sign of a nearby rattlesnake is the rasping sound of its rattle. The rattle is the snake’s way of warning you that it’s there and giving you a chance to avoid it. Do not step over large logs or rocks without checking what is on the other side (a walking stick is helpful for this). Rattlesnakes cannot hear, but they may feel vibrations from your footsteps.

An adult prairie rattlesnake is usually 80-120 cm in length. They are the colour of dry grasses, which helps them to hide from predators and prey. Rattlesnakes have a very well-defined, triangular-shaped head.

Rattlesnakes are not aggressive and given a choice will retreat rather than strike. If surprised, stepped on or cornered, rattlesnakes can strike up to a distance equal to half their length. It is estimated that up to 20% of rattlesnake bites are dry (no venom injected). Prairie rattlesnake venom is not particularly potent and no one is known to have died from a prairie rattlesnake bite in Alberta.

If you see a rattlesnake, walk slowly away from it. Give the snake plenty of room to escape.

If you or a coworker are bitten by a rattlesnake:

1. Stay calm
2. Wash bite area gently with soap and water
3. Remove watch, rings, etc. that may constrict swelling
4. Immobilize the affected area
5. Transport to nearest medical facility

Remember that a rattlesnake bite can be potentially fatal, so always seek medical attention following a rattlesnake bite.

COUGARS

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

Working in cougar country:

- Watch for cougar tracks and signs. Cougars cover unconsumed portions of their kills with soil and leaf litter. Avoid these food caches, as cougars will come back to feed for up to 5 days. Cougar tracks are 8-10 cm long, asymmetrical and round. Unlike the tracks of dogs or wolves, cougar tracks lack claw imprints.
- Contrary to popular belief cougars do not attack from trees; rather they tend to stalk their prey from the ground and will attack suddenly from behind.
- Cougar kittens are usually well hidden. If found, do not approach, leave the area immediately as a female will defend her young.
- Where possible, avoid working in peak cougar activity periods including dusk and dawn. Avoid working in poorly lit conditions where it may be difficult to identify your surroundings.

If you encounter a cougar:

- Do not turn your back on the cougar. Face the cougar and remain upright.
- Do all that you can to make yourself look larger. Pick up sticks or branches and wave them about, raise your coat above your head, and make as much noise as possible.

If a cougar behaves aggressively:

- Arm yourself with a large stick or tool, throw objects, and yell loudly and firmly. Show the cougar that you are a threat and not prey.
- If a cougar attacks, **fight back!** Many people have survived cougar attacks by fighting back.
- Stay on your feet and do not play dead.
- Once you have fought off the cougar continue to watch for it. Cougars will often stalk, waiting for an opportunity to attack again.

TICKS

Ticks are insects which feed on blood. While most ticks are harmless, some bites can cause Lyme disease.

Ticks live in tall grass and wooded areas. When they have been feeding they will be blue-grey in colour and much larger in size. This is an engorged tick.

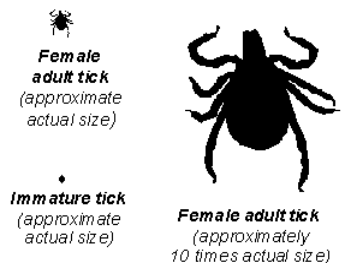
If you find a tick on your skin, remove it as soon as possible.

If you cannot reach the tick or see it clearly have someone else remove the tick.

A doctor should remove a tick if it has buried itself deep into your skin or may have been on you for several hours. When a tick has burrowed deep into your skin, it is very difficult to remove the entire tick. Failure to remove the entire body may lead to an infection.

Removing a tick

If you can remove the tick yourself, follow these instructions.



1. Use tweezers to gently get a hold of the tick as close to its mouth as possible. Wear latex gloves.
2. Steadily lift the tick straight off the skin. Do not squeeze the tick as this can force its stomach contents into the wound and increase the chance of an infection. Do not jerk, unscrew or twist the tick as this may separate the head from the body. It is very important to make sure that all of the tick is removed.
3. Once the tick has been removed, clean the bite area with soap and water. You may also want to put a small amount of antibiotic ointment on the area. Wash your hands with soap and water.

Do not attempt to remove a tick by covering it with grease or gasoline, or by holding a match or cigarette against the tick. This does not work and only increases the chance of you getting an infection.

What to do with the tick once it is removed

- Put the live tick in a small container with a tight-fitting lid, and with a cotton ball dampened with water to keep it alive. Only live ticks can be tested for infection. Put the container in the fridge. It can remain there for up to 8 days. Speak with a doctor or public health official to see if the tick should be submitted for testing.

To protect against tick and insect bites:

- Walk on cleared trails wherever possible.
- Wear light coloured clothing, tuck your shirt into your pants, and tuck your pants into your boots or socks.
- Use an insect repellent containing DEET on your clothes and on all uncovered skin. Reapply as directed on the container.
- Check clothing and scalp (covered or not) when leaving an area where ticks may live. Check in folds of skin.

BEES/WASPS

Treatment

- Remove stinger, using credit card sweeping away
- Wash with soap and water
- Use ice pack to reduce swelling and pain
- Anti-itch medication can be applied

In case of anaphylaxis seek medical attention as soon as possible:

- EpiPen (to be carried by workers with severe allergies, notify supervisor/medic)
- Oral antihistamine to slow symptoms

Table 1. Fact sheets

Animal	Habitat	Characteristics	Behavior
Moose	<ul style="list-style-type: none"> - Rocky wooded hillsides - Lakes, muskeg - Tundra - Aspen parkland 	<ul style="list-style-type: none"> - Dark brown to blackish coat - Long legs - 2.5 m at the shoulder - Bulls: antlers - 350 – 500 kg 	<ul style="list-style-type: none"> - Grazers - Solitary - Rut: September to November - Bulls aggressive during rut - Cows very protective of calves - Calves born in May – June
Elk	<ul style="list-style-type: none"> - Mountainous areas - Coastal old growth rainforests - Grassy interior valleys 	<ul style="list-style-type: none"> - 1.5 m at the shoulder - 300 – 350 kg - Bulls: antlers - Dark brown head and neck with mane 	<ul style="list-style-type: none"> - Grazers - Migratory - Travel in herds - Rut: September to mid-October - "Bugle" in rutting season - Cows very protective of calves - Calves born in May – June
Caribou	<ul style="list-style-type: none"> - Three subspecies - Peary Caribou: Northern Canada only - Barren-ground Caribou: 50% of caribou population in Canada, tundra - Woodland Caribou: northern forests from BC to NL 	<ul style="list-style-type: none"> - Both males and females carry antlers - Peary: small (70 kg), light (almost white) coat - Barren-ground: larger, darker coat - Woodland: largest and darkest 	<ul style="list-style-type: none"> - Grazers - Migratory (up to 4 migrations each year) - Travel in herds - Rut: fall - Calves born May – June - Unlikely to attack humans unless cornered
Wood Bison	<ul style="list-style-type: none"> - North West Territories - Sedge meadows - Lakeshores 	<ul style="list-style-type: none"> - North America's largest land mammal - 500 – 1000 kg - 2 m at the shoulder - Shoulder hump - Shaggy dark brown coat 	<ul style="list-style-type: none"> - Grazers - Travel in herds - Migratory - Bulls aggressive during rut - May protect or abandon calf in face of danger
Deer	<ul style="list-style-type: none"> - Two most common species: - Mule Deer - White-Tailed Deer - Widespread in all of Canada 	<ul style="list-style-type: none"> - White-Tailed: all over Canada, most numerous, white tail underside - Mule: Western Canada only, tail is black tipped - 110 – 200 kg 	<ul style="list-style-type: none"> - Grazers - Travel in herds - Rut: fall until November - Does very protective of fawns - Fawns born May – June

Type	Habitat	Symptoms	Treatment	PPE/Avoiding Contact
Noxious Plants (Poison Ivy / Stinging Nettle)	<ul style="list-style-type: none"> - Western Canada - Thickets in borders of forests - Edges of beaches - Can be trailing or climbing vine (poison ivy) - In ditches (stinging nettle) 	<ul style="list-style-type: none"> - Severe itching - Sap causes rash - Red and inflamed - May blister - Oozing sores - Watch for infection - Rash lasts 24 – 48 hours 	<ul style="list-style-type: none"> - Wash with soap and cold water - Calamine lotion - If severe, see First Aid attendant 	<ul style="list-style-type: none"> - Pants and long sleeves - Gloves - Sap transfers easily from clothing to skin - Be careful when taking off clothes that contacted poison ivy - Let coworkers know where you saw it
Insects (Bees, Wasps and Hornets)	<ul style="list-style-type: none"> - Widespread - June – July 	<ul style="list-style-type: none"> - Sting: pain, burning, red ring/bump, localized swelling - Some people are allergic - Anaphylaxis: hives, wheezing, swelling, abdominal cramps, low blood pressure 	<ul style="list-style-type: none"> - Remove stinger - Wash with soap and water - Ice pack - Can apply a wet tea bag, anti-itch medication - In case of anaphylaxis: <ul style="list-style-type: none"> - EpiPen - Oral antihistamine to slow symptoms 	<ul style="list-style-type: none"> - Insect spray with DEET - Light colored, loose clothing, maybe netting - Long sleeves and pants - Avoid nesting sites - Report nest locations to supervisor - Avoid scented products
Ticks	<ul style="list-style-type: none"> - Tall grass - March – June - May carry Lyme disease - Live on blood 	<ul style="list-style-type: none"> - Tick attaches to skin and stays there (for days to weeks) - Bite may be red and ringed at site 	<ul style="list-style-type: none"> - Remove tick carefully - Use tweezers to grasp the tick as close to the skin's surface as possible - Pull up with steady pressure (don't twist or jerk) - Clean bite area with alcohol/iodine - Dispose of tick: submerge in alcohol, wrap in tape 	<ul style="list-style-type: none"> - Long pants (tucked in) and long sleeves - Walk in pairs, check each other for ticks as you walk
Black Widow	<ul style="list-style-type: none"> - SW Canada - Only bites if web disturbed - Sheltered, dimly lit areas - Stumps, woodpiles, burrows - April – October 	<ul style="list-style-type: none"> - Venomous - Pain at site of bite - Muscle cramps - Pain, chills, fever, nausea, vomiting 	<ul style="list-style-type: none"> - Seek medical attention immediately - Identify the spider, note its location - Collect sample of spider and bring to hospital 	<ul style="list-style-type: none"> - Gloves - Pants and long sleeves - Tuck sleeves in, pants into socks - Brush spider away if it's on clothes - Be prepared and know habitat

<p>Wolf Spider</p>	<ul style="list-style-type: none"> - BC and SW Alberta - Light to mid brown - Live at ground level - Wood or debris - Air vents - Funnel-shaped web 	<ul style="list-style-type: none"> - Hard red bump - Blister, may open to ulcer - Risk of infection - Risk of necrosis - Numb, tingling headache - Dry mouth - Nausea, weakness, dizziness - Joint pain - Hallucinations 	<ul style="list-style-type: none"> - Seek medical attention immediately - Identify the spider, note its location - Collect sample of spider and bring to hospital 	<ul style="list-style-type: none"> - Gloves - Pants and long sleeves - Tuck sleeves in, pants into socks - Brush spider away if it's on clothes - Be prepared and know habitat
<p>Northern Scorpion</p>	<ul style="list-style-type: none"> - Small and shy, delicate - Dry eroded riverbanks - Southern AB (Dinosaur Provincial Park, Lethbridge, Medicine Hat) - Okanagan - Nocturnal 	<ul style="list-style-type: none"> - Intense immediate pain - Swelling and itching - Change in skin color - Nausea and vomiting - Anxiety, drowsiness - Tongue numbness - Increased blood pressure 	<ul style="list-style-type: none"> - Seek medical attention immediately - Remove jewelry (e.g. wedding band) - Ice sting site - Take Tylenol (acetaminophen) - DO NOT take Advil (ibuprofen) 	<ul style="list-style-type: none"> - Wear work boots and pants tucked in - Leave scorpions alone - Be aware when in their territory
<p>Snakes: Prairie Rattlesnake (AB), Northern Pacific Rattlesnake (BC)</p>	<ul style="list-style-type: none"> - Alberta and BC - Brown/tan/olive/grey - Diamond pattern, broad head - Dry, rocky, rugged land - March – May (hibernate) - Dens in rocky outcrops, old dens of other animals - AT RISK: protected species with shrinking habitat - Do not destroy dens 	<ul style="list-style-type: none"> - Severe burning pain at site - Swelling at site (spreads) - Fang can break off and remain in tissue 	<ul style="list-style-type: none"> - Seek medical attention immediately - Report bite to your supervisor - Lie down and stay quiet - Do not cut the bite site - Call Poison Control to ID the snake - Take off jewelry <p>If a doctor is over an hour away:</p> <ul style="list-style-type: none"> - Tie a band/cloth 5 – 10 cm above bite - Fit 2 fingers under band - Make sure band not too tight 	<ul style="list-style-type: none"> - Listen for the rattle - Don't provoke - Give snakes a wide berth - Boots to mid-calf - Be cautious and alert when climbing rocks - Look before putting hands in crevices, holes - Be aware of foot placement (logs and rocks)

REFERENCES / ADDITIONAL INFORMATION

www.albertaparks.ca
www.env.gov.bc.ca/bcparks/conservation/bearsandcougars.pdf
www.westernwildlife.org
www.env.gov.bc.ca/wld/documents/cougsf.htm

Enform Wildlife Awareness A Program Development Guide

WILDLIFE POSTINGS/ WARNINGS

Parks Canada Important Bulletins: www.pc.gc.ca/apps/scond/indexe.asp

W.A.R.P – Wildlife Alert Reporting Program: www.wildsafebc.com/warp/

Alberta wildlife public concern hotline: 1-800-642-3800

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