

FIELD RESEARCH SAFETY HAZARD GUIDELINE

ANIMALS-LARGE PREDATOR

Hazards	Potential Hazards	Large predators pose a hazard to researchers working in remote areas. This guideline will cover North American predators: <i>black bear, grizzly bear, polar bear, mountain lion and wolves</i> . If you are traveling to international areas, review local predator defense guidance.
Hazard Controls	Personal Protective Equipment	<ul style="list-style-type: none"> Bear spray (Real bear spray has EPA registration number on label). Required in bear country. Bear bells-Optional
	Preparation and Training	<ul style="list-style-type: none"> Research animals of concern and be able to identify them in the field. Familiarize yourself with behavior and tracks of the predators you may encounter. It is recommended you take courses in: <ul style="list-style-type: none"> <u>Wilderness First Aid</u>
	General Work Practice Procedures	<ul style="list-style-type: none"> In areas with large predators, do not travel alone. Make noise as you walk to avoid startling animals. Do not solely rely on bear bells to make noise. Do not approach, feed, or harass the animals. Do not approach kills, dens, or baby animals. Avoid travel near landfills, dumps, or areas where animals may have been habituated to human contact. Keep bear spray on your person, do not store in pack. Be especially cautious during breeding seasons and when young animals may be present. Avoid setting up tents in a way that presents an enclosed area. If an animal wanders into your campsite/ work area, it may panic if it feels trapped. Avoid strong smelling foods. Do not keep food, used cooking supplies, or personal hygiene products (toothpaste, scented lotions, etc.) inside tents. If your campsite does not have a designated animal resistant food storage area, then you need to elevate it using rope and tress such that the food container is at least 4 feet away from the trunk or heavy branches and at least 10 feet from the ground. The campsite cooking and eating area should be 200-300 feet from the tents. Keep a clean campsite. Wash your dishes thoroughly. Keep clothes that were used in cooking food outside of your tent in a secured area.
Other	Waste	Containerize, remove, and properly dispose all generated waste when you leave the area.
	Emergencies	<ul style="list-style-type: none"> Never run from, or turn your back on, large predators. If the animal has not detected you, back away slowly, keeping your eye on the animal. If you must use bear spray, be sure to be upwind of the spray. If you wound or kill an animal in self-defense, you must report the incident to the appropriate local authority. <p>Grizzly Bears and Defensive -Acting Polar Bears</p> <ul style="list-style-type: none"> Bears may attack if startled, if you get between a mother and cubs, or if it is defending a

kill. Attacks from grizzly and other brown bears are usually defensive in nature. Defensive behavior includes vocalization, huffing, snapping of jaws, slapping the ground, lunging, and charging.

- Face the bear, stand your ground, and talk calmly to the bear.
- If the bear is not interested, back away slowly. If it regains interest/follows, stop, and stand your ground again.
- If the bear approaches, make loud noises and make yourself appear larger. Use bear spray, if available.
- Do not lunge at, or try to move, a grizzly bear.
- If a defensive-acting bear attacks, the best course of action is to play dead. Lie flat on your stomach, legs spread apart so the bear cannot flip you over, with your hands protecting the back of your neck. If the bear rolls you over, try to roll back onto your stomach.
- If the attack is prolonged, or becomes predatory, fight back with whatever means are available.

Black Bears and Predatory -Acting Polar Bears

- Rarely, bears will attack humans as a potential food source. Black bear attacks are usually predatory rather than defensive in nature. Bears acting in this manner may be calmly focused on you, moving in a straight line at constant speed, or appear to be stalking or following you. Bears acting in a predatory manner are often silent. Polar bears may try to sneak up or crawl towards its intended target.
- You may be able to scare off a black bear by making loud noises and by making yourself appear larger.
- Use bear spray or other deterrents.
- If you are attacked by an aggressive/predatory bear, fight back with whatever means are available.

Mountain Lion

- Mountain lions generally will avoid human contact. Most mountain lions attack as a predatory response as opposed to a defensive response. Aggressive mountain lion behavior can include stalking, crouching, intense staring, and attempting to hide. An attack may be imminent of behavior includes tail twitching, body, and head low to ground, and rear legs pumping up and down. Mountain lions tend to attack from the back, focusing on the head and neck.
- Stare directly at the animal, make loud noises, and act aggressively.
- Use bear spray or other deterrents, if available.
- Retreat slowly while facing the animal.
- If the mountain lion attacks, do not play dead. Fight back with whatever means are available.
- Protect your neck/throat area and try to remain standing.

Wolves

		<ul style="list-style-type: none"> • Wolves generally do not directly attack threats, although they may run toward an intruder and veer off suddenly while barking/snorting. They may also hide or retreat to a den and howl. Wolves act aggressively if they are cornered, pursued, or injured/sick. Wolf attacks are rare, but more common with animals habituated to humans. • If you have a close encounter stare directly at the wolf, make loud noises, and act aggressively. Retreat slowly while facing the animal. Use bear spray, if available. • If a wolf attacks, stand your ground and fight with whatever means are available.
	Reference and Additional Resources	<ul style="list-style-type: none"> • Alaska Department of Fish and Game- Living with Wildlife Bears, Wolves • Washington Department of Fish and Wildlife- Living with Wildlife-Cougars
	Questions	Contact Environmental Health and Radiation Safety (EHRS) at (215) 707-2520