

[\[Avoidance\]](#) [\[Deterrence\]](#) [\[Destruction\]](#)

---

## Useful Documents

- Protecting Your Camp From Bears: Electric Fencing - [ [HTML version](#) | [\(Word document - 237kb\)](#) ]
- Bear Deterrent and Repellent Product Sources - [ [HTML version](#) | [\(Word document - 23kb\)](#) ]

## Three Tools for Safety in Bear Country

There are three important tools which you can use to avoid serious conflict and injury in bear country: avoidance, deterrence, and destruction of bears. This approach is similar to that we all take towards automobile safety: if you drive defensively and responsibly, you don't need to worry about whether or not the seat belt or air bag will save your life. However, just as the seat-belt and air bag are important safety systems in automobiles, you also need to be prepared for the very rare situation where you may find yourself having to deal with an aggressive bear.; Fortunately, if emphasis is placed heavily on avoidance of sudden/close encounters with bears in the first place, you will not have to worry about how to respond to a stubbornly curious bear or worse, destroy an aggressive one.

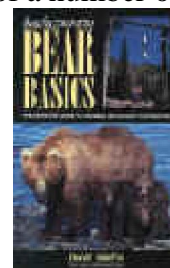
### Avoidance: Your most important tool

Avoidance - maintaining a safe distance between yourself and bears as well as doing

those things which does not attract them nor surprise them - is the most pro-active and important aspect of bear safety because it focuses on minimizing the chances of an encounter. People in bear country can do many things which will minimize the probability of bear encounters. Conversely, you can also inadvertently do things which will increase the chances of an encounter so it is important that those actions be identified and the chances of a bear encounter minimized. Successful avoidance of bear encounters can be enhanced through 1) self-education, 2) effective camp layout and design, and 3) appropriate conduct in bear country.

## Self Education

- Attend one of the free bear safety seminars sponsored around town.; These lectures, frequently offered by Alaska Department of Fish and Game biologists, present the basics of bear biology and behavior, how to avoid chance meetings with bears, how to minimize attracting bears to field camps, how to defuse bear encounters, and how to respond to a variety of bear-human encounter situations.
- Consider making a trip to the library and checking out any one of a number of good videos or books specifically geared towards promoting safe conduct in bear country.; For example, National Geographic Society's video "The Grizzlies" can be rented at video rental outlets and excellent "how to" guidebooks (e.g., *Bear Attacks - Their Causes and Avoidance* by S.; Herrero, *Backcountry Bear Basics* by D.; Smith, *Bear Encounter Survival Guide* by J. G. Shelton, etc) can be checked out from the library or purchased at outdoor stores.; Ultimately, your personal safety is **your** responsibility and you can do much on your own.
- Consider contacting the agency which manages the area into which you plan to travel and asking them what the history of bear-human interactions has been for there.; Most parks and refuges maintain a database of incidents on an annual basis and this information may provide guidance you can use.
- **Talk to others** who have been to the area and see if they have any background information which may prove useful.
- Check out web-based resources. Myself and others post lots of helpful information regarding bear safety. For example, author of popular bear safety handbook *Bear Aware*, Bill Schneider was interviewed by GORP and the results posted on the web for your review ([http://www.gorp.com/gorp/publishers/FALCON/HIK\\_BEAR.HTM](http://www.gorp.com/gorp/publishers/FALCON/HIK_BEAR.HTM)). Other well known bear safety experts, such as Dave Smith, author of *Backcountry Bear Basics*, also have interviews posted. Using a web search tool, have at it! You'll find a treasure-trove of useful information in many places.



---

Let's now consider aspects of bear avoidance as they relate to the **Camp Setting**. How to set up and maintain a safe camp is an important first step in avoiding unwanted bear encounters.

## The Camp Setting

### Campsite location

There are many things to consider when selecting a location for your camp which minimizes the chances of an unwanted bear encounter. Not only do you want to avoid seasonal high-use areas but also avoid doing those things which may elicit bears' attentions and subsequent curiosity. Consider these site selection criteria:

### *Issues of Previous Use*

- Ask the land managers prior to striking out on your trip if there have been bear sightings, and certainly bear problems, in the area into which you plan to hike and camp. This could be very valuable information and at the very least will assuage unfounded fears.
- If you are using a site which has obviously had prior use, check the area for signs of obvious bear activity: diggings, scats, and the like. I'd check the firepit to see if any old garbage remained from previous campers. If it appears that people before you have been messy and slack in their food handling, I would pack up and go elsewhere. Similarly, let's say you find bear scat in the area with the debris of ingested trash. Pack up and leave. The last thing you want is a food-conditioned bear in your camp at 2 am.

### *Sensory Issues* (sight-scent-sound)

- **avoid areas with poor visibility** which may diminish the bear's ability to see you ( and you them) at a safe distance (not only vegetation, but also topographic concerns)
- **avoid areas which are naturally noisy** such as those near heavy wave action, rushing streams or roaring waterfalls. Such areas will deprive both you and bears the chance of hearing each other until very close... too close
- **avoid windy areas if possible** - areas which will whisk your scent away from the bear

### *Bear Habitat Quality*

- **avoid bear seasonal foraging areas** (streams - berries - horsetail - sedges)

### *Bear Movement Corridors & Restrictions*

- **avoiding areas which concentrate bear movements** (e.g., ridge lines, narrow valley constrictions, shortcuts from river to lake, etc.)
- **use terrain and natural features to your advantage when possible:** cliffs limit approach paths; knoll tops provide good view sheds but may well advertise your presence to bears which would otherwise pay no heed...consider that too; very thick brush can passively route bears around camp; water is not necessarily a deterrent to bear approaches.

### *Avoid Piquing Bear Curiosity*

- consider earth tone colors - use camouflage tarping when feasible so that your camp doesn't broadcast its presence to the greater surrounding area with its

loud colors and novel shapes

- manage the information you send out into the environment: sight/sound/smell; one of the hallmark traits of bears is curiosity and an insatiable urge to investigate the novel therefore don't advertise your location with bright colors, oddly shaped 'novel' tent outlines; keep the noise down; keep smells under control.

**Camp Layout** - the physical layout of campsites should be with bear safety in mind:

- **place sleeping tents in the most secure areas** - space them out linearly (not in a circular pattern) which not only provides the bear more options for leaving but is also safest with regard to hazing away curious bears.
- **consider putting the most experienced people on each end of a line of tents** so that someone with experience can deal with bears which may approach either end
- **keep the cooking area, food and any scented objects at least 100 m downwind from your sleeping area**
- **when laying camp out, use the vegetation and topography to your advantage:** extremely thick brush limits the possible approach routes for bears and focuses your attentions in the most likely directions just as a camp backed up to a cliff has 180 degrees less concern than one in an open meadow.
- **brush in bear trails that come to camp** so as to deflect their movements away from, rather than into, your camp

### *Food Storage & Preparation*

- **use bear resistant food containers (BRFC) for food storage when possible.** If you do not have a BRFC, then attempt to hang the food at least 10 feet above the ground and 10 feet from the nearest tree trunk. If not trees are available, hang the food from a cliff. If no cliffs are available, secret the food at least 100 m from your camping area but be aware that it may be gone by morning. A word to the wise: if bears get your food, please do what you can to report this to the proper authorities. Your accidental loss can become someone else's tragic loss. As Steve Herrero's book "Bear Attacks: Their Causes and Avoidance" clearly points out, common to the lion's share of National Park bear mauling fatalities was that the bears responsible had been conditioned to human food.
- **handle wastewater appropriately:** all washing/cooking liquids should never be drained in or around camp (water from boiled pasta, etc) - bears will key in on it
- **manage stove fuel carefully!** Fuel spills are strong bear attractants, especially diesel and kerosene - refill Coleman stoves and lanterns with funnels and over spill containment
- **all excess food should be zip-locked and placed in BRFC's when not in**





use

## Management of Other Bear Attractants

- make certain that personal tents are entirely devoid of all scented products: toothpastes, lip balms, snacks, etc.
- odiferous objects in any tent should be stored safely so as to minimize scent (e.g., pepper sprays should be secured - especially in unfenced camps)
- loud noises may work for/against you: bears find novelty in any form of interest so loud noises may not only alert them to your presence but may also attract them - this is also counter to a wilderness, low impact, ethic
- human excrement/urine attracts bears and should not be near your campsite. If your camp is near the ocean, one of the most effective means of handling human waste is to discard the waste into the surf; keep a “pee bottle” (mark it well: NOT FOR DRINKING!) in your tent and discard later distantly from camp. Remember: when you are relieving yourself (particularly defecation) you are sending a potentially attractive scent signal downwind - be wary and beware of wind direction and approach!

## Other Bear Safety Considerations For Camp

- as a group, determine where your camp perimeter is and agree that when a bear comes within that perimeter that it will be hazed away; discuss a hazing strategy (begin with low level hazing and increase it until the desired effect is achieved) and agree to it
- as a group, discuss what you will do should a bear come to camp in the night: who will respond with deterrents and who will back them up; what if a bear is near a tent? How do you respond as a camp?
- discuss what to do should someone be attacked - these things should be discussed in camp and everyone clear on the action plan.
- as a group, discuss the use of bear hazing options and the need to carry them at all times; what is required/what is not; leaving camp unattended - who is responsible for what?
- what about headphones/walkman use? These seem inappropriate for outdoor use...but if someone must have them then make sure that someone else is listening.
- *make certain that bear deterrents are available while cooking* - don't get caught with nothing available or in its case... deterrents in packs are useless
- make certain that your tent is set up well at night before retiring: have a flashlight handy, as well as pepper spray and a flare gun or other scare device. Be prepared for the worst case scenario and you will sleep better
- If you are camping in particularly high use bear country, as we often find here in Alaska, you may opt to never leave camp unattended... if the probability of a bear entering your camp is high then I would seriously consider not leaving it unattended... or camp somewhere else.

---

## Bear Safety Beyond Camp

### *Be A Defensive Hiker in Bear Country*

- How close do you approach a bear? (Katmai NP has the 50-100 yd rule; Denali NP has a 1/4 mile; it is location specific but you should be aware of specific guidance for the area into which you are venturing). As a general rule *never approach a bear!* It's been said that God made telephoto lenses so you would never have to closely approach one. Don't do it. There are several deaths and maulings on the books of people who chose to do otherwise.
- Minimize the chances for a surprise encounter (be terrain smart) - avoid brushy areas, salmon streams in late summer/fall; bears rest about anywhere and you should be aware of them whenever visibility is poor; bears like "lookout" locations so be prepared to encounter day beds on promontories, hillsides, etc. Pick your paths carefully - ***NOTE THE WIND DIRECTION!***
- Make noise *appropriately* - alert bears to one's presence
- Be aware of bear activity as a function of time of day
- Be aware of bear activity as a function of season>

### ***Bear Safety Gear***

- Prudence suggests that you carry at least 2 bear deterrents at all times - these must be accessible if they are to be of any use to you; you also must consider which may be of use on any given day (high winds reduce the utility of red pepper spray, etc).
- In many areas leaving a pack on a river bank is unwise and against Park unit policy (e.g., Katmai) - bears are very curious and have torn up many packs in this manner - Do not leave gear unattended OR out of your safe keeping while conducting field work.
- Consider carrying the following on yourself when hiking in bear country:
  - (a) a roomy day pack which can shift up to cover the neck and head
  - (b) pepper spray in holster on belt or on pack strap - very convenient location
  - (c) flare gun in holster in convenient location
  - (d) sheath knife on belt
  - (e) small first aid kit
  - (f) flashlight if anticipated that I may be hiking at night
  - (h) cell phone or ham radio
  - (i) binoculars will help you spot bears from a safe distance

### ***Be Aware of Bears & Bear Behaviors***

- when you encounter a bear, size up its behavior immediately: is it aware of your presence? is it showing interest in you? is it acting abnormally?

(e.g., stumbling, running in circles, attacking inanimate objects - all signs of rabies disease) does it track your movements and reorient its movement so that it will intercept you? Is it treating you as a potential prey item? (e.g., positioning so that it is at an advantage, quartering around you as if calculating an attack strategy).

### *Group Size and Bear Safety*

- the larger the group, the safer it is so hike together when possible. Hiking spaced widely is *dangerous* and should be discouraged. Walk as a group, talk and pay attention, particularly in low visibility areas.
- never split up and never run when approached by a bear - group together and do not let a pushy bear split you up

---

## **Aversive Conditioning - Active Bear Deterrence**

### *The Camp Setting - Topics That Should Be Discussed Among Camp Participants*

- Establishment of a hazing perimeter: its defense and use of deterrents (~ 10 m)
- Which deterrent options can be used when and where (particularly focusing on the issue of appropriate distance and effectiveness)
- Armed backup - its necessity and use (second person position); emphasize that hazing is an aggressive act and may precipitate a charge
- Ready availability of aversive conditioning equipment (e.g., guns, spray, etc.)
- Establishing a hazing strategy for day and night - run through some mock scenarios
- Making sure that night time tent arrangement provides for ready access to bear deterrents and their use (i.e., that in each tent at least 2 deterrents are on hand plus powerful flashlights so that you can see the bear)



---

## **Destruction - A Last Resort**

- Killing a bear may be the only alternative if it is damaging property such that the property loss threatens your survival OR if the bear has injured someone and is an ongoing threat
- A short-barreled, pump-action, 12 gauge shotgun is extremely effective at close range - use slugs! 00 Buck and Sabot Rounds are not recommended as your best choice for cartridges. Again - do not mix rounds in your guns! Nothing but lethal loads should be in the gun, with deterrent rounds carried in either the 'side-saddle' type of attachment or elastic cartridge holder which flexes onto your stock

- **Your first shot must be your best - shoot for the ‘center of mass’**
- **Aim for the shoulder for your second shot - keep shooting until the bear stops moving. Chest shots guarantee death and a good blood trail to the carcass**
- **Immediately report the kill to a Conservation Officer and the proper authorities**
- **State of Alaska DLP laws require you to salvage the hide, skull and claws. Don’t make this even more of a loss - carefully salvage the hide so that it can be sold for conservation purposes...careless (needless) knife cuts through the hide make is considerably less valuable.**
- **If a bear is killed near camp the bear’s carcass must be adequately disposed of, including entrails and blood if possible. Failure to move the carcass will result in it attracting other bears and further exacerbating a bad situation. You may have to move camp if you cannot deal with the carcass effectively...**

**You can download a text version of this file (WordPerfect Format - 98 KB)** [Download File](#)



[Back to Top](#)

---

[\[Home | Research | About ASC-BSO | Highlights | Publications| Data Products| Staff | Jobs| Search \]](#)

---

Last Reviewed: May 17, 2004