

a field guide to
YUKON BEARS
for the exploration
and placer industries



WHY A FIELD GUIDE?

Few people spend as much time outside the settled areas of the Yukon as those of you involved in the mineral exploration and placer industries. This guide has been prepared by the Yukon Fish and Wildlife Branch so you can:

- avoid bears
- prevent damage to your camp
- prevent injuries, and
- avoid having to kill bears.



Other references

1. Bear Attacks - Their causes and avoidance. S. Herrero, Nick Lyons Books. New York, 1985.
2. Safety in Bear Country - A reference manual. 1985. Available from Wildlife Service, Government of the Northwest Territories, Yellowknife.
3. The Northern Interior Grizzly. A. Pearson, Canadian Wildlife Service Technical Report, Ottawa 1975.

WHY THINK ABOUT BEARS?

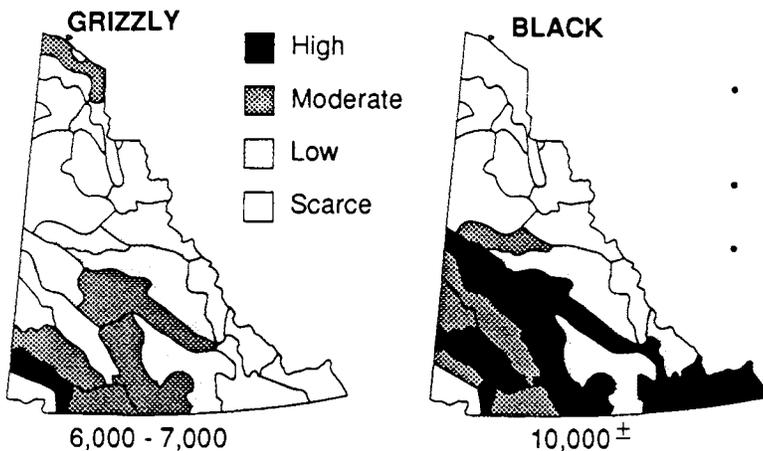
- **Your property could be damaged by a bear.** One bear did \$10,000 worth of damage to a trailer camp in the Dawson area.
- **You, your family or your staff could be injured by a bear.** Although bear attacks are rare, injuries are very traumatic for victims and result in the death of many bears. There have been no bear-caused human deaths in the past ten years, but seven people have been injured. At least 100 problem bears are killed each year.
- **Your operation could suffer expensive delays.** On the Trans-Alaska Pipeline project, delays were extensive. One female grizzly with three young cubs stopped 200 workers from repairing the pipeline and another popped sixteen windshields to get at paper-bag lunches.



- **You could be sued.** Poorly designed and equipped camps, inadequate garbage disposal, lack of training and inadequate firearms could be cited as negligence on your part by your bear-injured employee. In the most recent U.S. case, the relatives of a bear attack victim were awarded \$35,000.
- **You could be charged.** You may only kill a bear out of season if it is damaging property or threatening human safety. You must report such kills.
- **Bears are valuable.** To an outfitter the value of a bear hunt is \$7,000. To those who view wildlife, the value is priceless.
- **Bears are susceptible.** Bears quickly learn where to find improperly stored food and garbage. Populations are susceptible to declines if more than three percent are killed each year.
- **Most bear problems are preventable.** Just as your operation is designed for safety, so can your camp be designed to prevent bear problems.

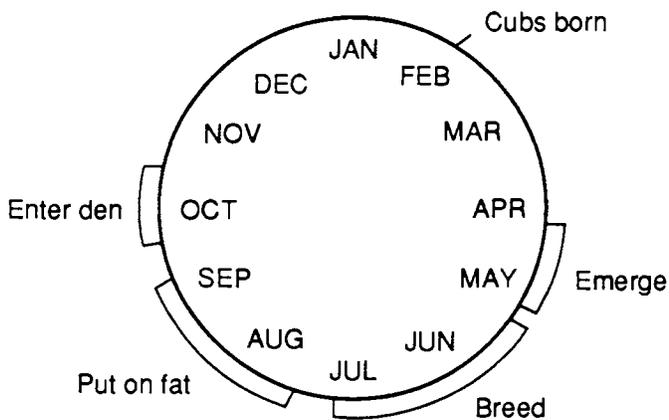
BEARS - A LITTLE BACKGROUND

Abundance



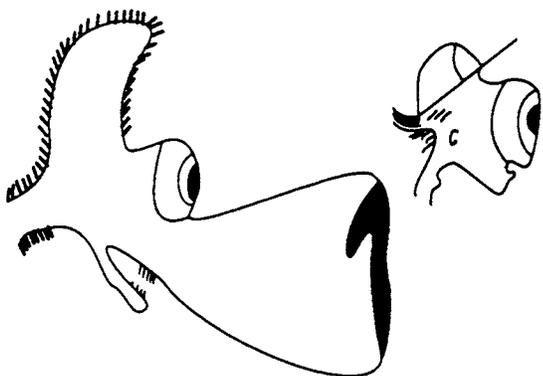
- Expect to see few bears each summer. Productive regions average only one grizzly per 20 - 50 km².
- Bears generally avoid people. You won't even know about most 'encounters'.
- A male grizzly may travel over an area of 2000 km², and females 400 km². These movements overlap with those of other bears.

Annual cycle



- Females with small cubs are the last to emerge from winter dens. As dens are frequently on southerly slopes above treeline, stay alert when in these areas in May.
- Bears preoccupied with courting may be easy to approach, but they don't like to be disturbed.

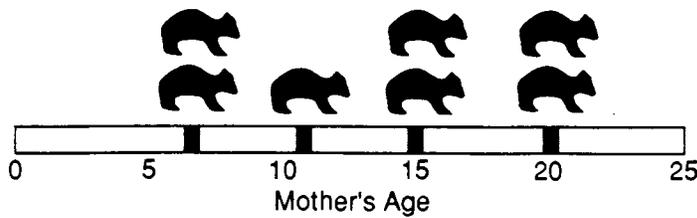
Sensory world



(face sizes scaled to sensory importance)

- Bears move in a rich world of smells, sounds and colours using tremendously acute senses to help them locate food resources. When it is cool, they travel between seasonal feeding areas, ever alert for unusual foods.
- Bears have good colour vision but rely upon their acute senses of smell and hearing. Expect a bear that sees you to confirm your identity by smell.

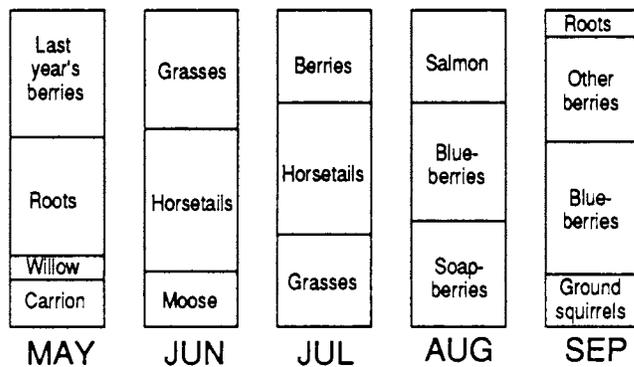
Productivity



Litters average 1.7 cubs and are produced at 3-5 year intervals

- Grizzlies reproduce very slowly. Only two of the seven young produced by a female will live to age seven.
- Females produce few young. For this reason hunting is precisely managed. Grizzly kills by miners are deducted from quotas allocated to hunters. Every kill must be reported.

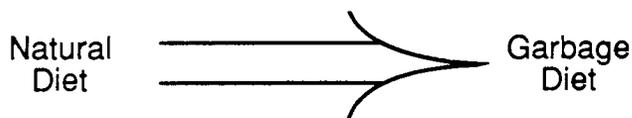
Diet



- Bear diets vary a lot. They vary in different regions, they change over the summer, and they differ between individuals.
- Learning what bears eat can help you avoid the habitats where bears concentrate.
- Kick open fresh bear scats. The diet items are easy to identify. Be extra careful where you find fresh bear scats, and in habitats where their foods are most abundant.

Behaviour

Two shifts in bear behaviour can occur:



This may happen if garbage is available



Through repeated contact with non-aggressive humans

- 'Wild' bears avoid people and eat natural foods.
- 'Spoiled' bears tolerate people and look to developed areas for easy food.
- Spoiled bears are involved in 2/3 of all bear attacks.
- Females aggressively defend their young.

DESIGN YOUR CAMP WITH BEARS IN MIND

Pick good sites. Avoid:

- Sites with a history of bear problems - check with your local Conservation Officer.
- Sites where roaring streams drown out sounds.
- Bear feeding sites - alluvial floodplains, berry patches, burns and patches of horsetail or eskimo potato.
- Places well-travelled by animals.
- Salmon spawning areas - check with the Department of Fisheries and Oceans. 667-2235

Fats and oils need special care

- Rancid fats attract bears. Incinerate old cooking grease and oils.
- Ventilate well and cover frying foods. This helps to keep cooktents from acquiring strong, attractive odours.

Foodscraps in dishwasher

- Pour dishwater into a pit and cover with disinfectant, lye or ashes to stop odours and decomposition.

Electric Fences are effective

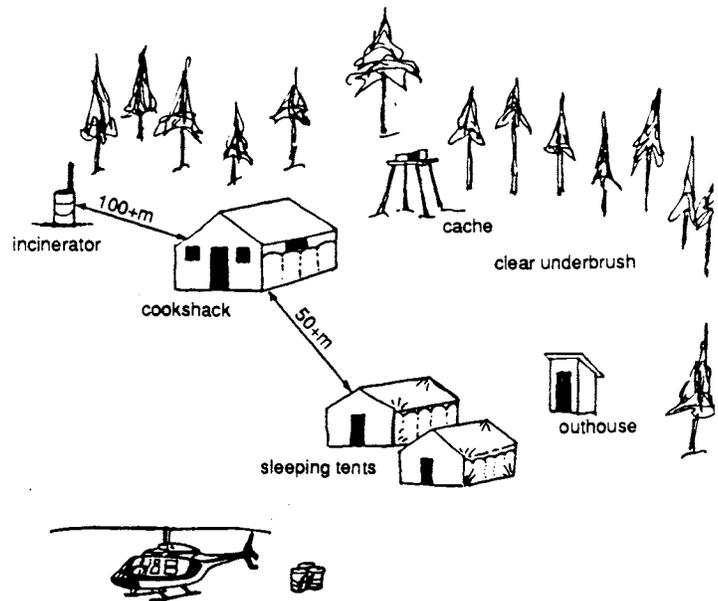
- Solar powered, high voltage, low amperage fences can be effective and inexpensive.
- Warning signs must be posted to ensure personnel safety.

Other attractants

- Perfumes and soaps - leave at home.
- Tampons and sanitary napkins - incinerate.
- Strong smelling plastics and lubricants - store up high, away from camp.
- Clothes with cooking smells - keep in the kitchen.
- Food leftovers in daypack - incinerate.

Plan your camp

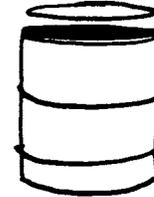
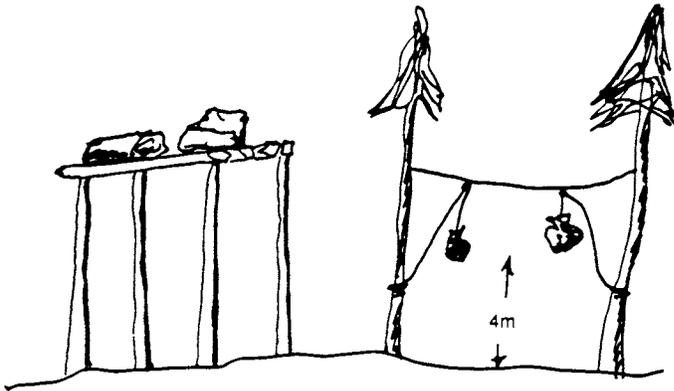
- Keep sleeping tents together. Separate from the kitchen, food storage, and garbage incineration areas.
- Garbage should be incinerated - downwind from camp in an open gravel area.
- Sleeping quarters should be upwind of cooking and burning areas. Evening winds are usually down valley.
- Clear all underbrush and branches from the camp to a height of 3 metres for better visibility.
- Put windows in all four walls of the cooktent for ventilation and view.



Well trained dogs are an asset

- Noisy, aggressive, well-trained dogs make good deterrents and warning systems.
- Keep dogs that wander on a chain.
- Camp dogs can reduce food leftovers.

Food handling and storage systems



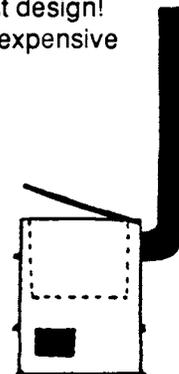
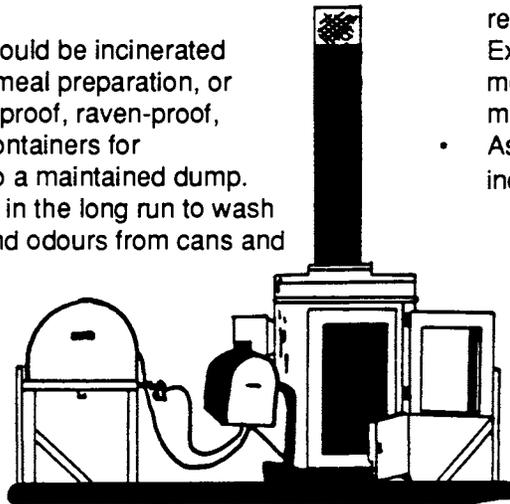
Make most of your food storage bear proof by making it inaccessible.

Make your frequently used foods bear resistant by using metal drums with removable lids (10,15,30 and 30 45 gallons)

- 'Bear wise' food storage involves minimizing odours wherever possible. Store all strong smelling foods (eg. garlic sausage) in plastic bags.
- Keep food preparation and storage areas as clean as possible.
- Use canned or dried foods as much as possible.
- Try to make use of your leftovers.

Garbage incineration

- Only a small fraction of your garbage is of interest to bears. That portion, however, is extremely attractive.
- A nocturnal visit to your garbage disposal site may be your first bear encounter. If the bear finds something to eat, he will return.
- Burial is futile.
- Food wastes should be incinerated within hours of meal preparation, or stored in odour-proof, raven-proof, squirrel-proof containers for transportation to a maintained dump.
- It is less trouble in the long run to wash food remains and odours from cans and bottles.
- Incineration requires a slow-burning fuel, such as diesel fuel, and plenty of air. Other quick burning fuels only scorch garbage rather than totally burn it. Such fuels are hazardous as well.
- There are some inexpensive commercial incinerators available that may be cost-recoverable under the Mineral Exploration Incentives Program. For more information call 667-5378. You may also opt for a homebuilt design!
- Ask us for information on inexpensive incinerators.



ALTERNATIVES FOR THE BEAR IN CAMP

Killing bears in the vicinity of your camp is a poor strategy for avoiding bear problems. There are better long-term alternatives because:

- A dominant bear will help keep other bears away. The old grizzly in your valley is keeping black bear numbers in check.
- Dead bears are soon “replaced”. Since many bears share an area you should remove attractants rather than go on killing bears.
- Bears and people can generally share the same valley if camps are clean.
- Bears can be taught to avoid clean camps.

Hazing

Use a vehicle (helicopter, truck) to chase a bear out of camp. It should not be used to chase the bear over great distances (2 km) because it may overheat and die.

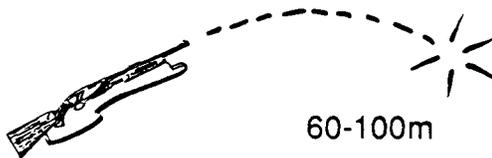


40+m



Noisemakers

Warning shots, pencil flares, or cracker shells may be used to scare off a bear, but usually effectiveness decreases over time. Someone with a firearm should back you up.

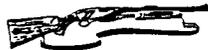


60-100m



Bruising

A plastic slug from a twelve gauge shotgun can deliver a painful message. Contact us for training in their use. Someone with a firearm should back you up.

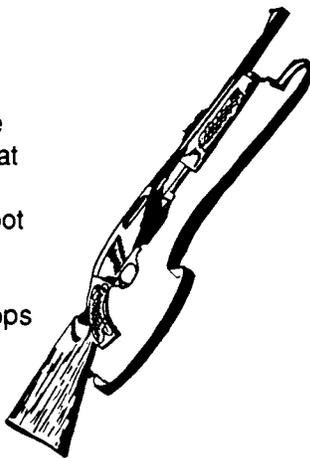


40-60m

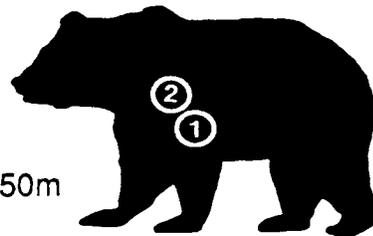


A last resort

- Killing a bear may be the only alternative if a bear is damaging property or threatening safety.
- A short-barrelled, pump action, twelve gauge shotgun is extremely effective at close range. Use slugs.
- Your first shot must be your best. Shoot in the chest.
- 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.



0-50m



PLAN A SAFE TRAVERSE

Think ahead

- Delegate one person to watch ahead for bears.
- Select a route that is open and away from loud creeks.
- Leave a map of your intended route in camp.

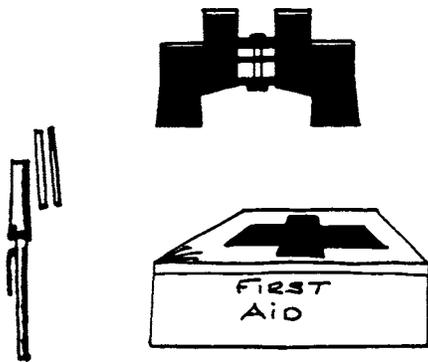
Wind is critical

- Always be aware of the wind direction.
- Walk with the wind whenever you can. Daywinds are usually upvalley, while nightwinds are usually downvalley.
- Don't investigate bad smells. Bears are attracted to these smells.

Firearm - Asset or liability?

- Use of firearms for self-defence at short range requires considerable training.
- Don't carry a gun if you lack the training. The false confidence a gun provides may get you into a bad situation with a wounded bear.

Be prepared - essential items



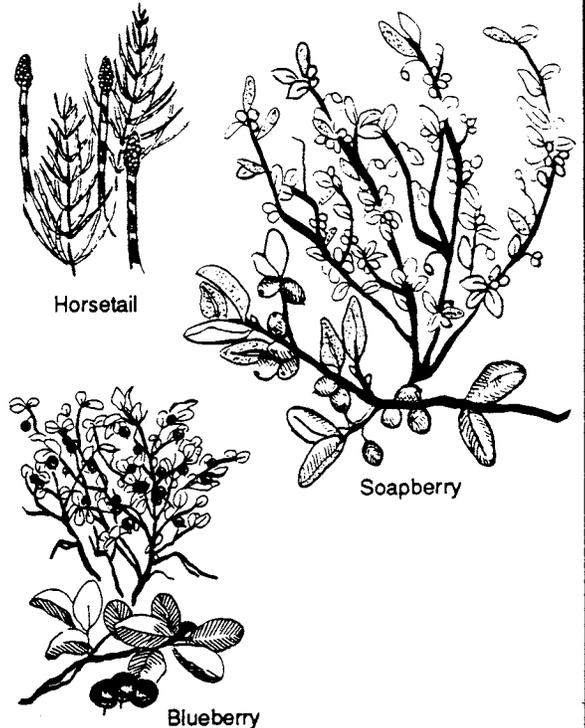
- Binoculars will help you spot bears from a safe distance.
- A small first aid kit will help you arrest bleeding.
- Matches, a pencil flare, an orange poncho, bright clothes, and a radio will help an aircraft locate you.

Make noise

- Yell every few minutes to alert bears, especially when travelling upwind in noisy areas or when stationary in thick brush.
- Bells are often too quiet.

Avoid bear feeding areas

- Know and be alert when you see bear foods, fresh tracks, scats, and droppings.
- Emerald green habitats are rich in summer bear foods.
- If you have to work in a site and bears are numerous, rearrange your schedule and return in two weeks after the bears leave.



Be alert

- Rest often when you are tired.
- Carry binoculars and scan ahead frequently.
- Fleeing wildlife may be an indication of bears.
- Ravens in trees may be a sign of bears on carcasses.

BEAR ENCOUNTERS

Why do bears attack?

A bear may attack if it considers you to be a threat. Whether or not a bear charges depends on:

- how close you are
- if it has cubs
- if it can smell you
- if it can escape to thick brush
- if it is guarding a carcass
- how familiar it is with people

Your key to safety is helping the bear identify that you are not a threat.

If you see a distant bear

- Keep out of sight and detour as far away as possible, behind the path of the bear and downwind of the bear if you can. You are better off working in a different area than risking a close encounter.
- If the bear sees you, expect it to either run away, circle downwind to get your scent, or come closer for a better look. You should climb a tree or slowly walk away, upwind, if possible, so the bear can get your scent.
- Don't even think about taking photographs.



If you see or hear a bear nearby

- Stop
- If the bear hasn't seen you, back up slowly when the bear's head is down.



- If the bear sees you it may be 'nervous' and unsure of what you are. Expect it to stand to look at you and to get your scent, to raise the hair on its back, to growl or "huff", or to pretend to eat while watching you out of the corner of its eye.
- Talk reassuringly "Hello old bear, I'm not going to hurt you." Keep talking. This helps the bear to identify you, and may calm it.
- Move your arms slowly at your side. Slowly remove your hat or daypack and put it on the ground. This may distract an approaching bear.
- Back up slowly - don't run. Keep talking so the bear knows where you are.
- Look for cubs. Be prepared for a charge if you see any.
- Move towards an open area where you can see.

AGGRESSIVE BEARS - WHAT TO DO

The charging bear

- Bears charge on all fours at a fast walk or run.
- A bouncing, noisy, hair-raised, head-up charge is likely a short bluff charge. Most charges are bluffs. Keep talking soothingly and back-up. The bear is nervous too.
- An ears-back, head-low charge is likely a contact charge. Get down in a fetal position, hands behind your neck. This tells the bear that you are not a threat. Stay there until you are sure the bear is gone, otherwise it may charge again.
- Report all charges.

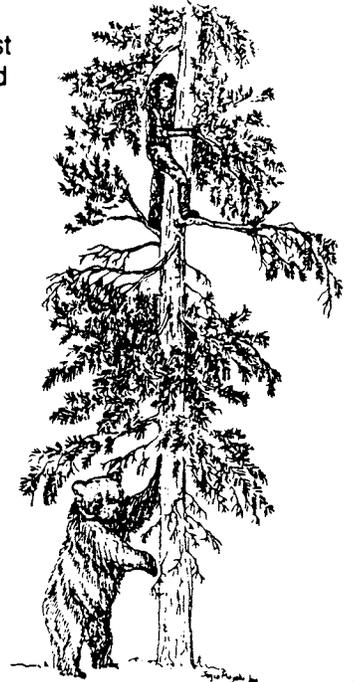


The following bear

- Occasionally a curious young grizzly will follow at a distance. Keep walking and stay in open terrain. Climb a tree if one is nearby.
- Very occasionally, aggressive black bears may follow and circle you. These bears are extremely dangerous since they may have predatory intent. Yell, throw stones, and wave your arms aggressively. Drop your pack to distract the bear.
- Report these incidents.

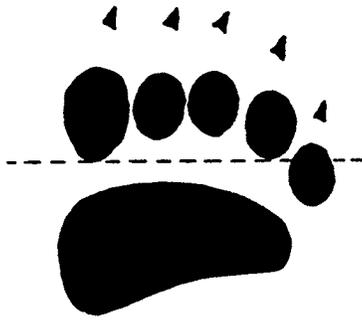
Climb a tree

- Tree climbing to avoid bears is popular advice, but often not practical in many settings.
- All black bears, all grizzly cubs and some adult grizzlies can climb trees if the spacing of the branches is right.
- Running to a tree may provoke an otherwise uncertain bear to chase you. As bears run at ten metres per second, trees need to be close, and you need to be a fast climber to escape a bear. Tree climbing is good means of escape if the bear is distant (eg. 300 m) and threatening.
- Climb at least 4 metres and keep climbing.

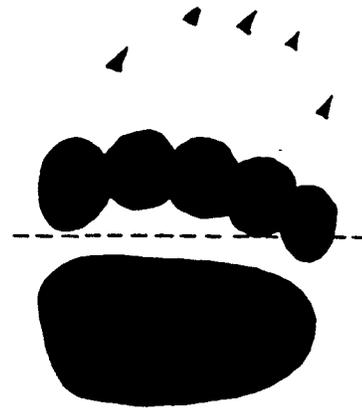


If your buddy is hurt

- Do not approach the area until the bear has left the site - you do not want to provoke the bear to attack again.
- When you feel it is safe to proceed, determine the extent of injuries to your buddy. Your partner may be bleeding but wounds are rarely fatal if medical attention is available. Apply firm pressure to any wounds and wrap with dressings.
- Leave the area immediately. If the injuries are not serious, you may be able to walk to help.
- If travel is not possible, find an open area, set out an emergency aircraft signal, and start a fire.
- Radio for help and stay by your radio to direct the aircraft.
- Conservation Officers investigate all bear attacks and will return all your equipment.



Black bear
left front



Grizzly bear
left front

YUKON FISH AND WILDLIFE BRANCH

Contact us for:

- **Advice on camp location and design**

We can help you contact outfitters and trappers, and can point out previous problem areas.

- **Bear safety courses**

On request, we offer free courses tailored to fit your needs and can come into your camp, if required.

We have videos, movies, booklets, and displays.

- **Problem bear handling**

Contact us if you are concerned about particular bears and if any property is damaged. Early notice can prevent serious problems.

- **Reporting bear kills**

Contact the nearest Conservation Officer for instructions if you've had to kill a bear. Expect reasonable responses.

Contact us by telephone:

Dawson	993-5492
Mayo	996-2202
Old Crow	966-3040
Ross River	969-2202
Faro	994-2862
Haines Junction	634-2247
Teslin	390-2685
Watson Lake	536-7363
Whitehorse	667-5221 or
Toll free	1-800-661-0408
Turn In Poachers (T.I.P.) hotline	1-800-661-0525
R.C.M.P.	667-5555 or Zenith 50000

Contact us by radio:

HF Radios
Channel 4441 - Request message be relayed
Channel 4950 - Operator CFY82; then telephone

Air Radio
Pilots can request a message be relayed