

QUESTIONNAIRE SUMMARY

TRADITIONAL USE OF
GRIZZLY BEAR IN THE
RICHARDSON MOUNTAINS
N.W.T.

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INTRODUCTION

Native hunters in Aklavik and Fort MacPherson were interviewed from October 6 to 10, 1987. As part of the continuing research on grizzly bears (Ursus arctos) by the Department of Renewable Resources (Inuvik Region).

I attempted to record historical data on traditional use, behaviour and habitat use by bears. Hunters best suited to answer the questionnaire ranged from 40 to 60 years of age. Information gathered was grouped into five categories:

- a) The traditional of bear hunting (Q: 1, 4, 5, 6, 7, 8, 9).
- b) Habitat use observations (Q: 10 to 18).
- c) Bear/People conflicts (Q: 2, 3).
- d) Folklore (Q: 20), and e) Hunter comments (Q: 19)

(Appendix I).

QUESTIONNAIRE SUMMARY

Results of settlement questionnaires are summarized in each category. There were six hunters from Aklavik and two hunters from Fort MacPherson. Six of the hunters interviewed invited my presence, the other two responded with favour. In no instance was my approach met by refusal to participate in the survey.

A) The Tradition of Bear Hunting

Native people in the Mackenzie Delta were never known to specifically hunt grizzly bears. If other desired game animals were scarce (moose Alces alces, caribou Rangifer tarandus spp., wolf Canus lupus, wolverine Gulo gulo), then bears would be hunted for meat and fur. The bear parts used include meat for consumption and the hide for clothing or bedding. When hunting bears only single large animals were taken in late fall. Bears with cubs are generally avoided, as most hunters agree they would be destroying future opportunities.

In the last ten years hunters have shown an increasing interest in shooting grizzly bears, primarily for the resale of tanned hides. Denning bears are not hunted as is tradition with some native groups in central Alaska. As a result there are no specialized bear hunters. However, the hunters interviewed agree that there are only good hunters, so the ability to hunt bears is present but not well developed.

B) Habitat Use and Behaviourial Observations

All the hunters agree that prime bear habitat included, the foothills and inner-mountain (Richardson Range) valleys where an abundance of ground squirrel (Spermophilus parryii), eskimo potato (Hedysarum spp.), and berries (Vaccinium spp., Arctostaphylos spp., Rubus spp., Ribes spp.) occur (Nagy et al. 1983). Also in ravine sites bears wait in ambush for caribou (Rangifer tarandus spp.) and their young. Hunters mention that often caribou carcasses are dragged to caves to be eaten. Seasonally, both single and family bear groups congregate at river or streams where whitefish (Coregonus spp.), smelt (Hypomesus spp.), inconnu (Stenodus leucichthys) and arctic grayling (Thymallus arcticus) spawn. In addition bears supplement their diet by scavenging in coastal areas where whales (Delphinapterus leucus, Orcinus orca, Balaena mysticetus) or seal (Phoca spp., Erignathus barbatus) carrion may be found. No hunters are aware of grizzlies in late fall or early spring, venturing on to the Beaufort Sea to hunt marine mammals.

There is no specific areas favoured by bears. Family groups remain in the foothill or mountainous areas. Hunters believe the reasons include easier walking for young and abundance of both ground squirrel and flora. In summer, single adults occasionally venture into the delta maze to feed. Visual sightings of complete family groups, include the adult male, occur. Attacks by a male on a female with cubs have never been seen or heard of by the hunters interviewed.

Bears follow caribou movements into the late fall when den sites are chosen. They are known to start construction of the site, then continue rummaging for food (weather permitting). Upon returning, a bear may make several circular passes, to ensure no animal or man has discovered the den.

On an average fall season, bears may be seen until mid-November and in a late fall until mid-December. There have never been any tracks or animal sightings during winter associated with warm chinook winds.

C) Bear/People Conflicts

Before the vast influx of trade goods, when people relied on dog teams as a means of transportation and protection, camp bear attacks were more frequent. This may be attributed to more food cached in camp for consumption and winter feed. However, bears which killed and ate dogs were common. People at campsites bordering the foothills, complain of bears raiding near by rabbit snares.

Incidences of bear damaged camps are more frequent in the Aklavik area. People believe this results from unclean campsites. There are certain bears that destroy cabins or shelters for no apparent reason. In combating bear problems, some hunters will remove windows and doors upon leaving, to minimize damage as animals enter and leave. None of the hunters had ever set baited leg-hold traps for bears.

During the fall caribou hunt in the mountains, many hunters cache the butchered carcasses. Some caches, which contained as many as eighteen caribou, have been completely destroyed by a single bear. It is their belief that grizzlies seek only meat (leaving the bones) at this time of year.

D) Folklore

All hunters I spoke with have great respect for the grizzly bear. However, it was the older people of Fort MacPherson that remember spiritual stories and practise such beliefs to this day.

A hunter counsels, when out on the land never curse or repeat insulting words about the grizzly bear because he hears you. Even after there has been camp damage. He told of specific cases where hunters recklessly sought the animal, openly condemning it, only to fall victim to an attack.

Another belief involves hunting in the late fall. If you (or the hunting group) have located an occupied den, say nothing to anyone about it. If silence is broken the bear will become sick overnight losing all summer fat and when you return the next day for the kill, it will be in poor shape.

An elder tells of hunting game in the mountains. If by accident you make too much noise (shooting or camping) close to an occupied den, the bear will awaken later, furious and raging mad. In this condition, it will storm off covering

its trail, searching for another den site. He tells another story about bears entering a new den. When the animal is satisfied nothing has visited or disturbed the site, it will walk backward (up to 2 km) toward it, then settle into the den. This behaviour ensures other animals and hunters the den is empty.

Finally hunters speak of needlessly shooting bears in late fall. Oblivious to being shot many times in the upper neck and shoulder area, a bear will not go down unless hit in the head. The bullets that hit stop in the fatty layer without harming the bear but destroying the hide. Thus the hunter does not benefit, because he doesn't need the meat.

Hunters state that when bears are caught in fall snow storms they will sleep under logs and when disturbed, relocate to another site.

E) Hunter Comments

The average number of bears the eight hunter has taken in his lifetime was 7.0. However most hunters testify that their lifetime take, would be much higher had they taken an animal at every opportunity.

A suggestion was put forth that a Camp-Aid Program be set up for unfortunate families who were victims of bear damage. Aid would be provided pending an investigation of the extent of damage and deterrence effort.

Aklavik hunters having camps on Hershel Island and Firth River, Yukon region, are bewildered as to why in the past

bear problems were non-existent, but now they are more bothersome. Hunters based in the Mackenzie Delta observed that frequency of grizzly bear sightings were greater before the arrival of ski-doo's and float planes.

When questioned on the food requirements of the grizzly bear, all interviewees believe caribou is the preferred food before ground squirrels and berries. A Fort MacPherson hunter recalls finding the carcass of an adult grizzly. Upon inspection of the jaws, the canines were worn down to the gum line and most of the incisor and molars abscessed. When bears are taken in the spring, some hunters observe a substantial amount of body fat (up to 12 cm).

In Aklavik a hunter mentioned the practice of carving fish hooks from the canine teeth of brown bear. such traditional knowledge from the era prior to trade goods, came from the elders.

DISCUSSION

Overall, hunters in Aklavik and Fort MacPherson welcomed the opportunity to participate in this survey. All hunters supported the idea of sport hunting, but also had concern that the bears are not over hunted. Most agree the quota system used for Polar Bears would serve as a good model in dealing with grizzly bears.

A similar survey conducted in the settlements of Tuktoyaktuk, Paulatuk and Coppermine is needed. Hunter knowledge of grizzly bears occupying surrounding habitat would enhance existing data.

My only regret is that more time was not allocated to reaching people in the Fort MacPherson area. This resulted from poor timing as my arrival was on the Thanksgiving weekend. My enquiry revealed most hunters were hunting caribou or gone for the long weekend.

I agree with Cournoyea and Bromley, 1986, that community consultation is an important resource in gaining public confidence, as well as insight into long term management of large game species. I wish to express gratitude for the opportunity to participate in this Grizzly Bear research project.

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APPENDIX I

RICHARDSON MOUNTAIN BROWN BEARS

Interview No.:

Location:

Date:

Name:

Age:

Occupation:

1. Did people traditionally hunt brown bears or were bears taken in passing? (Example: traveling between camps or out hunting.)
2. When living on the land are bears a problem? (Example: raided food caches or wrecked camps.)
3. If so, is it more frequent now than before the white man came. (More garbage to dispose of?)
4. What are the traditional uses of brown bear? (Example: hide, meat, claws or teeth.)
5. Did some hunters specialize in hunting brown bears? (What made them good at getting bears?)
6. Do hunters choose the age and sex of bears to kill? Can hunters tell which is male/female bears and how?
7. Is there a best time of year to hunt bears?
8. Liking hunting moose, would success in some areas be better? Is this because of richer feeding areas?
9. Would people avoid taking certain types of bears? (Example: young bears or females with cubs.)
10. In this area what do bears eat? (Does this change with season?)
11. In this area what months do bears go into and come out of their dens?
12. Are some areas better for denning than others?
13. Has anyone ever seen or heard of larger male bears killing other bears (female with cubs)?
14. Have brown bears or their tracks ever been seen during winter? If so what time? Where?
15. Have brown bears ever been seen out on the sea ice, feeding on seals in the spring time? If so, how far out?

16. Since you have been hunting, how many bears have you taken? What age? (Adult, subadult (3-5 years.), two year old cubs, yearling cub, cub of the year.) What sex and where?
17. Do certain areas seem to have alot of females with cubs or areas with alot of male bears? (Locate on map)
18. In your years as a hunter; on the average how many cubs have you seen with female bears?
19. Do you feel the need to limit the number of bears taken per year. If so, how would you set a limit?
20. Hunter comments.

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