### AN INVENTORY AND ASSESSMENT

OF WILDLIFE USE ALONG THE

- WADAHERE COAL MINERY AND KETZA RIVER ROADS

- ON SMARON SON 15/86

Fish and Wildlife Branch

Department of Renewable Resources

Government of Yukon



## BACKGROUND:

a comment

Recently two active mining companies in the Ross River area applied for funding under the Regional Resource Roads program. Both companies wish to upgrade their respective roads which access mine sites. A portion of the funding allocated is passed on to Renewable Resource personnel at the Yukon Fish and Wildlife Branch to inventory and assess wildlife use within the area of each road corridor and mine site. The wildlife use assessment is necessary to make recommendations on how to least negatively impact wildlife as well as determine what species are using which areas for possible future reference or trend monitoring.

### METHODS:

The assessment of wildlife use along these roads was conducted using the following methods: 1) two aerial surveys from helicopter of wildlife populations (specifically sheep) around the areas concerned; 2) groundwork, involving hiking and driving in the area concerned; and, 3) interviewing persons with knowledge of wildlife populations in these areas. These methods help identify the species of wildlife in these areas, the habitats used by these species, and hopefully any critical areas for wildlife species.

Ketza River Road - The road leaves the Robert Campbell highway 50 km southeast of Ross River and travels 49 km south into the Pelly Mountains. Mature spruce forest overshadows an old burn along the first 10 km of the road. Occasionally the road enters small, riparian cottonwood stands. Between km 10 and 15 the road travels below a convoluted hillside to the east. Mature spruce and small riparian communities remain on the west. At km 15 the hills fade away and are overgrown with willow. Both sides of the road enter the mature spruce, cottonwood type mentioned previously until the road climbs to the transition between willow and spruce on the east valley wall. At km 21 open hillsides return briefly until the road descends into larger riparian communities adjacent to the Ketza River. The valley narrows at km 31 and the road proceeds through mature spruce forest. At km 42 the road crosses the Ketza River and proceeds out of the forest into the shrub zone along Cache Creek. This vegetation type persists all the way to camp.

## KETZA RIVER ROAD WILDLIFE USE:

Historically, mining activity in the Ketza River watershed extends back at least to the late 1940's and a road of some form has existed the majority of the distance to the Canamax Resource property for at least two decades. Hence wildlife use patterns may already be significantly altered. The area was recently active 5-10 years ago when Iona Silver Mines Ltd. was exploring 5 km east of the Canamax property.

During the time Iona Silver was active the consulting firm of B.C. Research was employed to conduct an environmental evaluation in the Ketza River watershed

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and surrounding area. Contact with B.C. Research by a variety of persons has failed to produce a final report on wildlife use in the region. In addition some of their brief, preliminary reports are missing and essentially the most informative wildlife reports have not been recovered. It appears from preliminary reports that B.C. Research documented similar species of wildlife that I report on; however, we deviate considerably in our assessment of abundance and use.

# Thinhorn Sheep:

This is a species of great concern and could be influenced considerably by development in the Ketza River area. The aerial surveys conducted by B.C. Research and ourselves specifically focussed on this species. Of the two reports recovered from B.C. Research the June, 1981 survey report is the only reference to Dall sheep sightings. Two groups of nursery sheep were sighted on Silver Ridge (see map and cross referenced table for documentation of composition and numbers).

During 1986 two helicopter flights were completed by Yukon Fish and Wildlife Branch personnel. The first, in March was designed to locate sheep on winter range. Since winter range is often lambing range the first flight would benefit the second flight scheduled for late May during lambing. Both flights did not employ the standard contour method for inventorying sheep populations. Rather, because of heavy snow cover on some aspects and restricted funding for surveys we stratified or "high graded" based on the respected and extensive knowledge of John Witham, local Trans North Air helicopter pilot. Heavy snow cover areas were not surveyed and the flight consisted of proceeding to aeras where Mr. Witham frequently sees sheep wintering. In between each of these

locations high speed, contouring was conducted. Wildlife personnel feel confident that effective sureys were completed and compared to B.C. Research findings these were very worthwhile since approximately 100 sheep were sighted on each flight. (See maps for each survey and cross referenced documentation of composition and number). Also included are other sightings of wildlife.

The mountains in the Ketza River area differ significantly from ranges in the southwest Yukon. Typical winter range and lambing areas consist of very precipitous terrain, often cliffs. However observations from both the March and June flights left observers wondering what exactly winter and lambing range is for the Ketza River sheep. Certainly we observed sheep where they winter and ewes with and without lambs but to identify small, critical habitats which are specific winter and lambing areas is difficult. The difficulty arises because there is a lack of steep terrain where cliffs are common and ewes and lambs seemed to be located in similar gentle terrain as ewes without lambs. Perhaps winter range and lambing terrain is lacking and limits the populations size of the Ketza River herd. The migratory nature of some of the sheep population and their comparative lower density to counterparts in southwest Yukon might suggest this.

Our flight on May 31 normally would be at the tail end of lambing according to knowledgeable wildlife personnel and J. Witham. Whitham stated he usually sees many lambs by May 25 in most years. However, we encountered very few lambs during our flight ( lambs/100 f). If this is the extent of the lamb crop for 1986 it would rate as very poor. What the reason is for such poor productivity is unknown and one can only speculate.

The Ketza River Road is surrounded by active sheep range hence it is not

surprising that 5 sheep licks were identified through surveys and interviews. Two of these licks may be eliminated by Canamax Resource camp and tailings containment facilities. Only one person identified these two threatened licks, however, several interviews revealed that people have seen sheep at low elevations in the area, a feature or behaviour often associated with sheep licks. Pilot John Witham knew nothing about these purported licks although he flies the area extensively. Heavy snow and road blockage prohibited me from investigating these sites on foot: Further investigation is required regarding these licks.

Persons interviewed were aware that some of the Ketza River sheep are migratory, having exclusive winter and summer ranges while other groups of sheep appear to be year round residents of the same mountain blocks or ridges.

One population of sheep (Pop. A) winters above the head-waters of the McConnell River and migrates to summer range on Mt. Green and further north on the "front ranges".

The sheep population (Pop. B) between the headwaters of the McConnell River and Cloutier Creek are believed to be year round residents and is most often inhabited by rams.

Sheep (Pop. C) migrate from Silver Ridge winter range to "favourite spot" summer range.

White Creek (Pop. D) have a heavy summer concentration of sheep that are believed to winter on Mt. Hogg or somewhere south.

East of the Ketza River road sheep populations are relatively sedentery. However directly east of the Iona Silve Mine on the first ridge is an area where sheep (Pop. E) summer but exact location of their winter range is unknown. Sheep (Pop. F and Pop. G) although separate are found year round on the ridges above Starr Creek and its tributaries.

No person interviewed stated that sheep cross the Ketza River Road although they are seen along the road at times. Maps and references to each "Pop" migratory pattern and licks are shown below.

## Moose:

Moose inhabit the Ketza River watershed year round. During January - June moose inhabit spruce forest, along the Ketza River. Cows appear to calf along the river and at higher elevations. During summer months moose are dispersed and may be found at any elevation or in any habitat within the watershed. The rut occurs at lower elevations but once complete moose move to high elevations until Christmas. Cloutier Creek was described as having the most abundant moose population.

# Caribou:

Few caribou are seen in the Ketza River watershed and vicinity. B.C. Research documented sighting a cow and calf at the Iona Silver Mine Al portal and another person recalled seeing 8 caribou, 4 miles northwest of the Canamax property.

### Black Bear:

There is a dense population of black bears along the Tintina Trench or wherever open sidehills with abundant <u>Arctostaphylos uva-ursi</u> growing there. As mentioned, this type of sidehill is found up until the 21 km point along the east side of the road and most persons interviewed stated that was the extent of black bear range along the road. Bears are seen on the sidehills all year round but especially in spring and fall when they key on overwintered and ripe berries respectively.

# Grizzly Bear:

Although residents felt the Lapie River/South Canol corridor harbored higher densities of grizzly bears they felt the Ketza River watershed was an important area for grizzly bears. A female with two cubs of the year was sighted during the June aerial survey and one lone, adult grizzly was seen along the road in early June. B.C. Research also documented grizzly bear sightings of both family groups and lone bears. According to the Canamax project management, Canamax rock sampling crews encountered many grizzlies during work in the surrounding mountains.

Grizzly bears are sighted along the entire road; however, significantly more sightings have occurred beyond the 21 km point in the road. Apparently the transition between black and grizzly bear habitat is complete there and is in agreement with my crude habitat assessment.

After emerging from high altitude dens, grizzly bears occupy the lowlands of

the Ketza River valley where moist riparian communities yield an abundance of horsetail and legumes. The Ketza river appears to alter course and fluctuate water levels enough to regenerate riparian communities regularly. Grizzly bears are found at higher elevations, frequently above 4000' during summer. When berries ripen bears key into these areas which could be a variety of altitudes within the drainage. Before denning bears return to high elevations. The Ketza watershed has all the requirements for year round grizzly bear use. Their travel and use of habitats at a variety of elevations makes them difficult to avoid. However Canamax personnel have had only one grizzly bear in camp in 3 years. This is very good considering camp location and bear populations nearby. Only paper is burned at the camp site and all garbage is hauled out regularly by vehicle. This is a commendable act and should be compulsory in future given the fragile nature of bear population dynamics.

### Furbearers:

Wolves are rarely seen or heard within this valley and lynx are also not common. The principal furbearers appear to be marten and wolverine which are trapped in mature spruce during winter. Fox, coyote, beaver, muskrat, red squirrel and hares are common. Wolverine have been seen in the mountains during summer and coyote frequent the same hillsides in winter which black bears use in spring.

### Birds:

A variety of passerine birds, waterfowl and upland game birds are found during summer. In addition raptors are found in the area. Many golden eagles were seen during the June aerial survey and falcons are believed to nest in the Ketza watershed also. A raptor survey was completed in 19\_\_ by Fish and Wildlife personnel and is included within.

## SUMMARY:

Contrary to preliminary B.C. Research findings there are moderate densities of some wildlife species within the Ketza River area. Dall sheep, grizzly bear and certain raptors should receive special attention.

There are a variety of areas where burns might be appropriate since trees and shrubs extend to high altitudes. If the two threatened licks actually exist perhaps the remaining licks should be artifically enhanced with minerals or other artificial sites constructed to compensate. Areas suitable for grass seeding are difficult to identify and further work is required to identify such sites.

Canamax Resources personnel are cooperative, interested and show sincere concern for wildlife in the area. This is evidenced by regular visits to wildlife offices in Whitehrose, their sensible and sanitary garbage disposal method and their open communication about wildlife sightings in the area, including the hiring of a watchman who is required to document wildlife sightings. I believe they are open to reasonable wildlife recommendations.

I feel this report is a very good reflection of wildlife patterns and use in the areas studied. Rarely did residents have conflicting opinions of patterns of use by wildlife in the areas concerned. Each interviewee supported others statements with no prior knowledge of what others' had stated.