

## Wernecke Mountain Sheep Survey - 1987

### File Report

#### Introduction

Sheep surveys in the Wernecke Mountains were initiated in response to accelerated mineral exploration and development in this area. These mountains constitute not only the last region of the Yukon for which no inventory data is available but also the last area without major road access. They also make up some of the largest silver, iron and uranium deposits in the world. Surveys done before roads are constructed and mines are developed provide valuable baseline information. Such information can be used to make intelligent responses to land use concerns and assess the impact of development on the wildlife populations.

This series of surveys will also complete the territory-wide inventories begun in 1974. The focus for this survey was Rusty Mountain and adjacent areas (see attached map).

### Methods

Surveys were carried out from June 10 - 16, 1987. Each mountain block was contoured in a counter-clockwise fashion at approximately 4000-4500 feet-a.s.l. Sheep were counted and classified according to age (lambs, yearlings, adults), and the adults further classified by sex and horn class (half, three-quarter or full curl rams).

The timing of the survey was chosen to:

- determine lambing cliffs
- distinguish yearlings from the rest of the nursery groups
- concentrate the survey effort on the snow-free areas  
(where the sheep are)

### Results and Discussion

A summary of all sheep observations is given in Table 1.

Table 1. Summary of 1987 Sheep observations, Wernecke Mountains

Game Management Subzone	Ewes/ Yearlings	Lambs	Rams			Total Sheep
			1/2	3/4	4/4	
2-61	-----	0	-----			
2-63	-----	0	-----			
2-64	29	5	12	13	6	65
2-65	42/10		2	2	1	57
2-82	-----	0	-----			
2-83	3/2	2	1	3	1	12
2-88	-----	0	-----			
2-89	-----	0	-----			
2-90	-----	0	-----			

Despite much favourable-looking habitat, the portion of the Wernecke Mountains covered in this survey does not support a large sheep population. Sheep were found only in small isolated groups. Local opinion was that sheep would not be found south of the Beaver River largely due to the amount of snow in the area. No winds were apparent throughout the survey period, and if this is indicative of weather patterns in the region, little winter range would be available. Despite the promising habitat viewed, sheep could not live in the area if it is too far from winter range.

Much of the country appears highly mineralized, and most of it is very rugged. There were very few alpine meadows as such, with most of the alpine habitat occurring in a narrow band between bare rock and willows. Nursery sheep were found in the lush green benches of small side valleys which were relatively flat compared with the rest of the terrain.

2-61 area looked to be very suitable for sheep, but no trails were  
2-63 evident.

2-64 (Castle Mountain) - very rugged; any suitable terrain was  
quite low down.

- where the sheep were found was very green and quite low  
down.

2-65 (Grey Copper Hill) - very little vegetation and not a lot of  
escape terrain.

- sheep found only in the Carpenter Lake area.

2-88 (Kathleen Lake area) - looked like it should be good sheep habitat.

(Rusty Mountain) - very little vegetation, no game trails.

2-89 - a few spots of excellent-looking sheep habitat, with long  
2-90 stretches of so-so habitat.

- no sign of any game trails at all in the alpine.

- quite a high snow zone.

- (Nadaleen Range) - lower country than other areas, with mostly isolated knobs.

2-82 - (Rackla Range) - far too rugged and too much snow over much of the area.

- quite a bit of suitable looking habitat, but no trails were evident.

### Notes

- some slopes looked like they would be excellent goat ranges.

- there was less snow to the north of the surveyed area, more so than just the progression of spring melt would account for.

- the valley bottoms were very wide and generally heavily treed. This, in conjunction with deep snow, could limit the sheep distribution.

Caribou (Bonnet Plume herd) migrations trails were evident over a large portion of the survey area, and there appeared to be some very well worn moose trails along the valley bottoms. A noticeable exception was the Nadaleen range, where there were no obvious trails and no animals of any sort were seen.

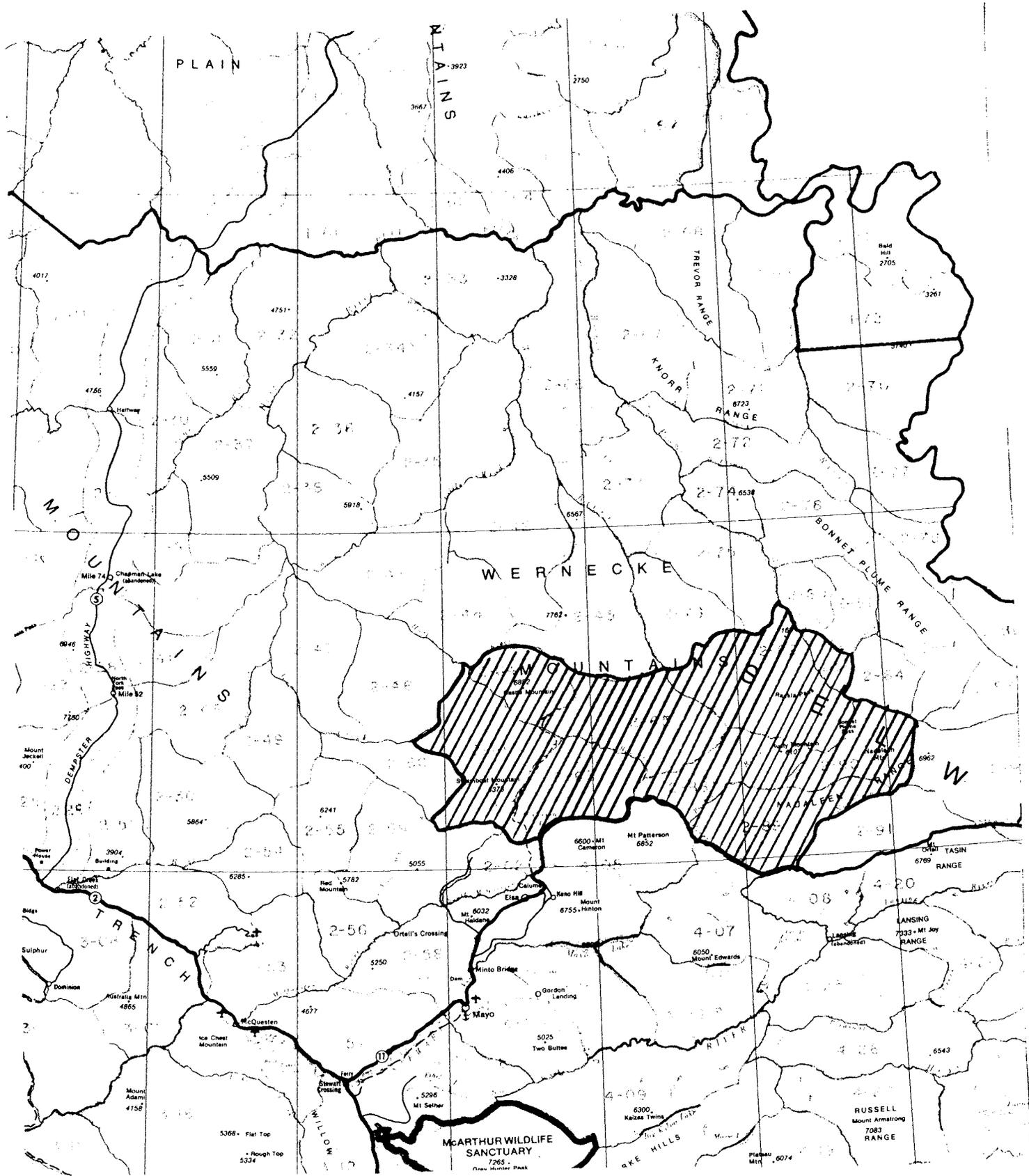
Except for the Nadaleen Mountains, bear diggings were evident on all but the north-facing slopes. Five grizzlies (including a sow with two, two-year old cubs) and two black bears were noted.

The wealth of this country is definitely in its valley bottoms.

#### Acknowledgments

I would like to acknowledge Mayo Conservation Officer, Torrie Hunter, for his invaluable help in expediting the surveys and acting as an observer. Philip Merchant, as usual, did an excellent job as observer and navigator. Finally, Will Thomson's excellent flying skills made the job safe and easy. His local knowledge and good humor were also very much appreciated.

Jean Carey  
A/Sheep/Goat Biologist  
Fish & Wildlife Branch



Area covered during 1987 surveys,