

STATUS OF THE MOUNTAIN GOAT
(*Oreamnos americanus*)
OF THE SIMILKAMEEN RIVER
BRITISH COLUMBIA

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INTRODUCTION

Distribution

The mountain goat of the Similkameen River, British Columbia, inhabit the area: 1. north of the Similkameen River from Keremeos to Hedley, 2. south of the Similkameen River from the confluence of the Ashnola River east to Keremeos and south to the Canada/United States border, 3. the Cathedrals west of Ewart Creek and east of the upper Ashnola River and 4. west of the upper Ashnola River south of Young Creek (Figure 1.). These populations are more or less discrete but it is believed there is some inter-population movement.

In addition to these populations, individuals or small groups are occasionally seen on both sides of the Similkameen River as far west as Princeton.

History

The history of this mountain goat population parallels that of other goat populations in an area of proliferating access.

Access to the area was initiated with the presence of large numbers of gold miners in the Similkameen Valley during the mid-nineteenth century. Charles Wilson, in his August, 1860 diary (Stanley, 1970) mentioned 150 miners in the lower Similkameen. Wilson also mentioned goat sign on the

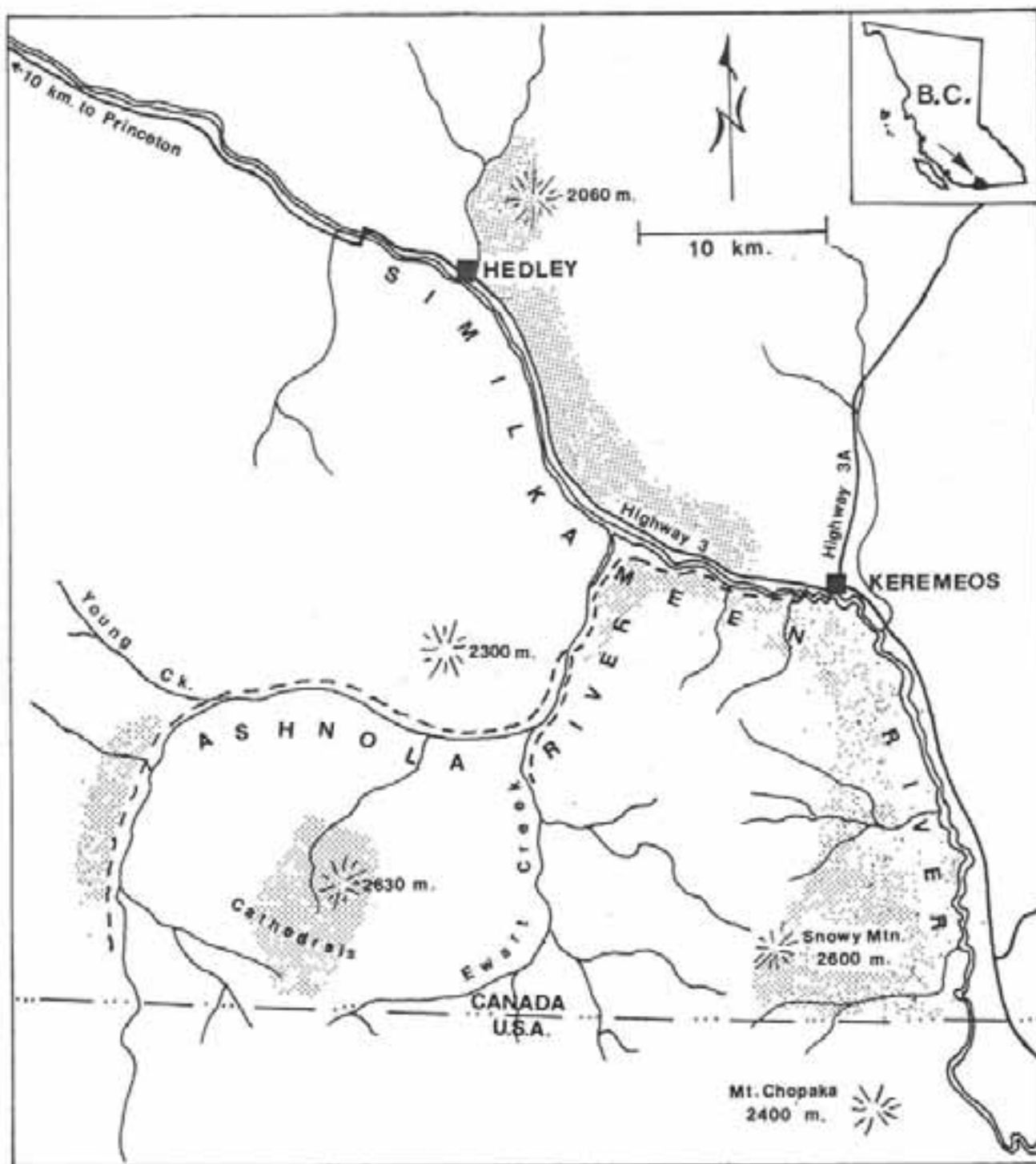


Fig. 1. Distribution of the Similkameen River Mountain goat (*Oreamnos americanus*) population in British Columbia, Canada.

west fork (upper Ashnola) of the Ashtnolen (sic) River. Gold fever in the interior resulted in the 1860/61 construction of the Mule road to the Similkameen (Dewdney Trail) over the Cascade Mountains from Fort Hope on the Fraser River. Mining in the Similkameen continues but the burgeoning permanent white population is primarily agricultural.

Access to the Similkameen and Ashnola became easier as the human population grew. By 1900, wagon roads from the east (Okanagan Valley) and the west (Princeton) were well used and the Ashnola Wagon Road was built beyond Ewart Creek. The area became famous for hunting (esp. Bighorn sheep and Mountain goat). Turn-of-the-century reporters in describing goat numbers used such words as "teeming" and "abounding" (Vernon News, 1891). By 1938, Game Warden Wilson, whose earlier annual reports described "plentiful" numbers of goats, began to warn, "the season should be closed as they are very easy prey to the hunters as they can be located from the town of Keremeos". Again in 1939 "there was a number killed on the Ashnola Range where the season should have been closed and unless the season is closed there will be no goat left to hunt" (Fish and Wildlife Branch files).

The season was closed until 1956 when short hunting seasons were instituted until 1967.

Habitat and seasonal migration

The Similkameen mountain goat seasonally occupy four biogeoclimatic zones: - Ponderosa pine-bunchgrass, Interior Douglas-fir, Englemann spruce-Subalpine fir and Alpine tundra (Krajina 1965). Their habitat is precipitous with many tallus slopes and is deeply cut with gorges.

North of the Similkameen River seasonal migration is minimal and

and mainly vertical (ca. 700 m. to 200 m.). The aspect here is south and the topography precipitous. Solar insolation plus nearly continuous winds contrive to maintain a nearly snow-free habitat in winter.

Part of the population south of the Similkameen River (much of the population south of Keremeos to the border) seasonally migrate horizontally up to 10 km. and 1900 m. vertically. The band of goats west of the upper Ashnola are seen at all seasons and do not appear to migrate. Little is known of the seasonal movements of the Cathedrals group but some do winter in that area (pers. obs.).

RESULTS

Management

In 1956, a Similkameen mountain goat hunting season was again instituted (Table 1). The season length was conservative (3 days), hunter participation was low (20 hunters) and the hunter success ratio high (45 per cent).

In the years following, up to and including the 1962 hunting season, during which time the season was lengthened to 9 days and the area open to hunting reduced to the areas east of the Ashnola and south of the Similkameen, hunter participation remained low and hunter success generally high. Increased hunter participation in 1963 to 1965 reflected the increased ease of access provided by the construction of the Ashnola River Access Road (completed in 1964) and the lengthened season. Now, however, hunter success dropped severely and despite a season shortened once again in 1966 and 1967 to 3 days (which did curtail hunter participation) continued to drop. Following the 1967 season, hunting for Similkameen mountain goat was again discontinued.

Table 1. Season length, hunter participation and hunter kill from 1956 to 1967 for the Similkameen River population of Mountain goats.

Year	Season length (days)	Hunters (numbers)	Kill (numbers)	Areas open
1956	3	20	9	west and east of Ashnola and north of Similkameen.
1957	3	40	18	"
1958	3	35	8	east of Ashnola and south of Similkameen.
1959	3	27	4	"
1960	3	30	10	"
1961	8	41	3	"
1962	9	27	14	east of Ashnola and south of Similkameen plus west of Ashnola
1963	10	56	13	"
1964	9	156	27	"
1965	9	138	31	"
1966	3	67	4	"
1967	3	32	2	"

In 1958, an annual spring census (by helicopter) was instigated (Table 2). Initially only total animals censused were recorded but from 1970 to the present adults and juveniles were classified. Two transects are flown on this census. The north side of the Similkameen census includes the area from Hedley Creek canyon (at Hedley) to Keremeos. South of the river the census begins at the mouth of the Ashnola River valley, and continues easterly and southerly along the Similkameen River to Mt. Chopaka south of the Canada/United States border. The area covered by these transects is precipitous, broken and deeply dissected by gorges

making censusing difficult. Timing of the census is critical. It must occur after the snow is gone, but while most of the goats are still using "greenup" plants. Despite the difficulty a large enough sample was obtained during most years to indicate a clearly declining population in the area east of the Ashnola and south of the Similkameen until about 1970. This area has been continuously open to hunting from 1956 to 1967. The 1978 census, after several years of poorly timed counts and one year in which the census was not taken (1977) indicates a population recovery at least exceeding 1958 numbers. Of equal significant management implications are the recruitment figures shown by the juvenile:adult ratio. The 1978 census shows a ratio of 30:100 on the south transect and 28:100 on the north transect. This compares with the East Kootenay recruitment of 9.5:100 and the coastal 5.4:100 (Hebert, D.M. and W.G. Turnbull, 1977)

Table 2. Annual spring census of the Similkammen Mountain goat population from 1958 to 1978.

Year	Asnola-Chopaka Transect					Hedley-Keremeos Transect				
	Tot.	Ad.	Juv.	U/C	Ratio Juv:Ad.	Tot.	Ad.	Juv.	U/C	Ratio Juv:Ad.
1958	107									
1959	104									
1964	94					46				
1965	64					24				
1966	68					37				
1967	74					55				
1968	45					62				
1969	32					50				
1970	19	11	2	5	18:100	50	38	3	9	8:100
1971	26	18	5	3	28:100	59	43	6	10	14:100
1972	34	23	6	5	26:100	57	34	7	16	21:100
1973	24	19	4	1	21:100	51	37	5	9	14:100
1974	11	7	4	-	57:100	15	13	2	-	15:100
1975	8	5	3	-	60:100	31	18	4	9	22:100
1976	28	20	8	0	40:100	41	37	4	-	11:100
1977	No census									
1978	102	60	18	24	30:100	49	25	7	17	28:100

Discussion and management proposals

Obviously we require more detailed population parameters and habitat characteristics that, with present manpower and fiscal restraints, must be relegated to low priority. Equally obviously the mountain goat of the Similkameen River have a satisfactory recruitment rate and appear to be increasing in numbers in the absence of hunting pressure. This indicates, at least, satisfactory quality of forage and herd productivity and a natural mortality below recruitment.

The Proposed Wildlife Management Plan for British Columbia (in draft) with respect to management of mountain goats (province wide) states as objectives; 1. to increase mountain goat populations on traditional ranges 2. to provide the opportunity to view goats in their natural habitat and 3. to provide 18,000 sport-hunting days of recreation and an annual sustained hunter kill of 1,500 animals. As a matter of policy the hunter kill is to be maintained at less than 5%.

Presently, the Similkameen mountain goat population appears to be increasing. With respect to objective 2. the British Columbia Ministry of Highways are rebuilding Highway 3 between Hedley and Keremeos and are providing for pullouts at several locations where travellers can often view mountain goat. Objective 3 is not presently being fulfilled by the Similkameen mountain goat population.

Hunter demand for goat hunting is high in British Columbia. In the 1977 season 2,185 resident and 838 non-resident licenses were sold (last figures available). Application for Limited Entry Hunts totaled 1071 in 1978 for only 224 licenses available.

Since British Columbia has introduced the enabling legislation to provide for Limited Entry Hunting (L.E.H.) and, with our present know-

ledge of the herd, I think the population can sustain a low level hunter harvest. I now estimate the total Similkameen goat population to be in excess of 270 animals. Conservatively 10 animals can be harvested. Regulations common to L.E.H. must be observed. Since it is proposed to be an L.E.H. area it is restricted to resident hunters. Individual hunters must be restricted spatially and in time. Only adult mountain goats should be harvested and hunters must be encouraged to take lone animals. In the special case of the animals north of the Similkameen hunters must be restricted to an area away from the highway.

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