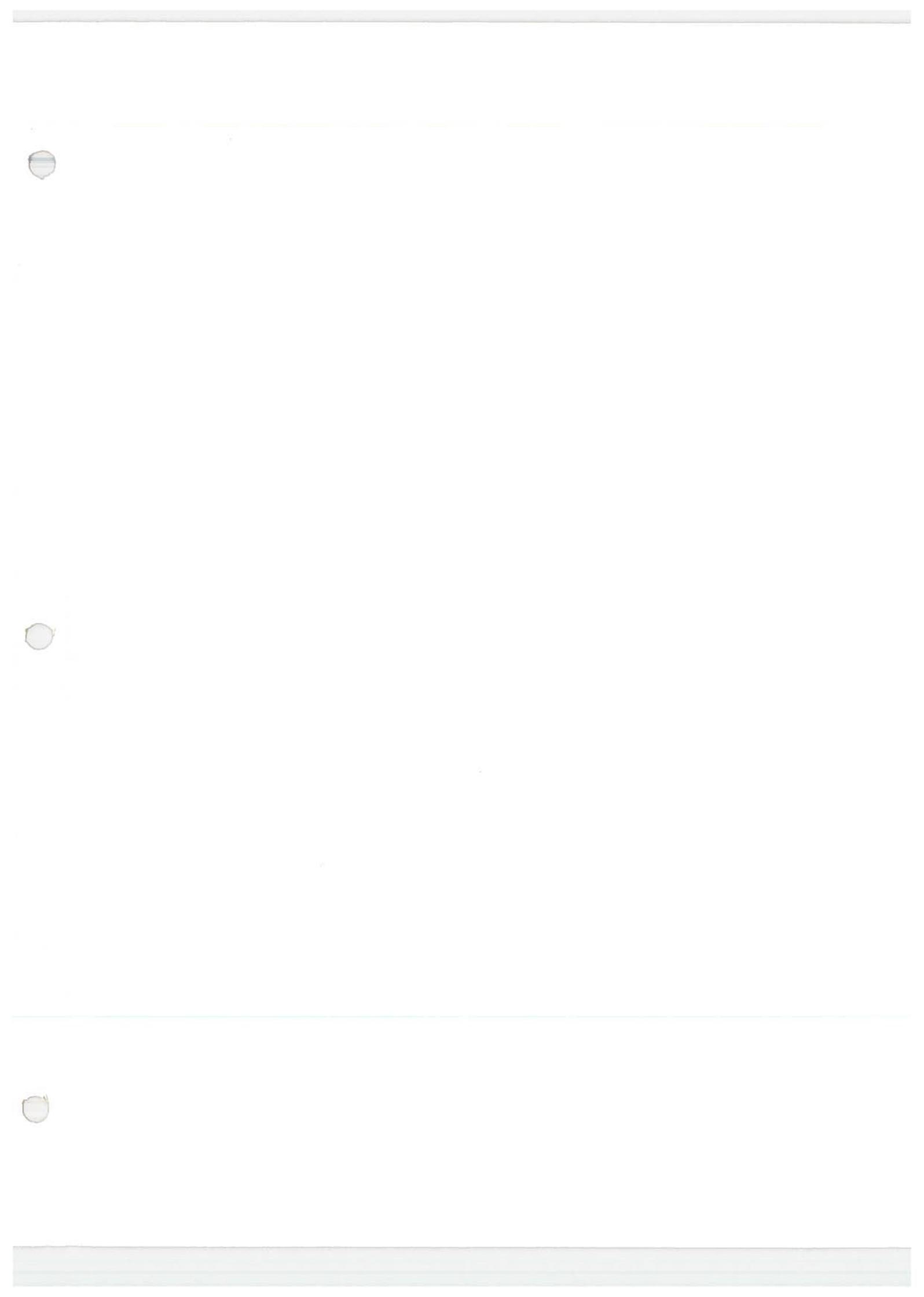


PROVINCIAL PARKS AND STONE SHEEP:

"AFFINITY THROUGH DEFAULT"

W. G. Hazelwood
April, 1978



Abstract: Seven Provincial Parks in British Columbia contain populations of Stone Sheep and their habitat. Of the 3½ million acres in these Parks, 870,000 acres is considered to be sheep habitat. Management policy of the Parks Branch is slowly evolving from people priorities to a more balanced attitude including wilderness and wildlife habitat needs as well. Wildlife management responsibilities are a dual role between two Branches of Government. The seven parks discussed are Stone Mountain, Muncho Lake, Kwadacha, Tatlatui, Spatsizi Wilderness, Atlin and Mount Edziza Provincial Parks. Short comments on boundaries, hunting harvest, population estimates and general character of each Park are included.

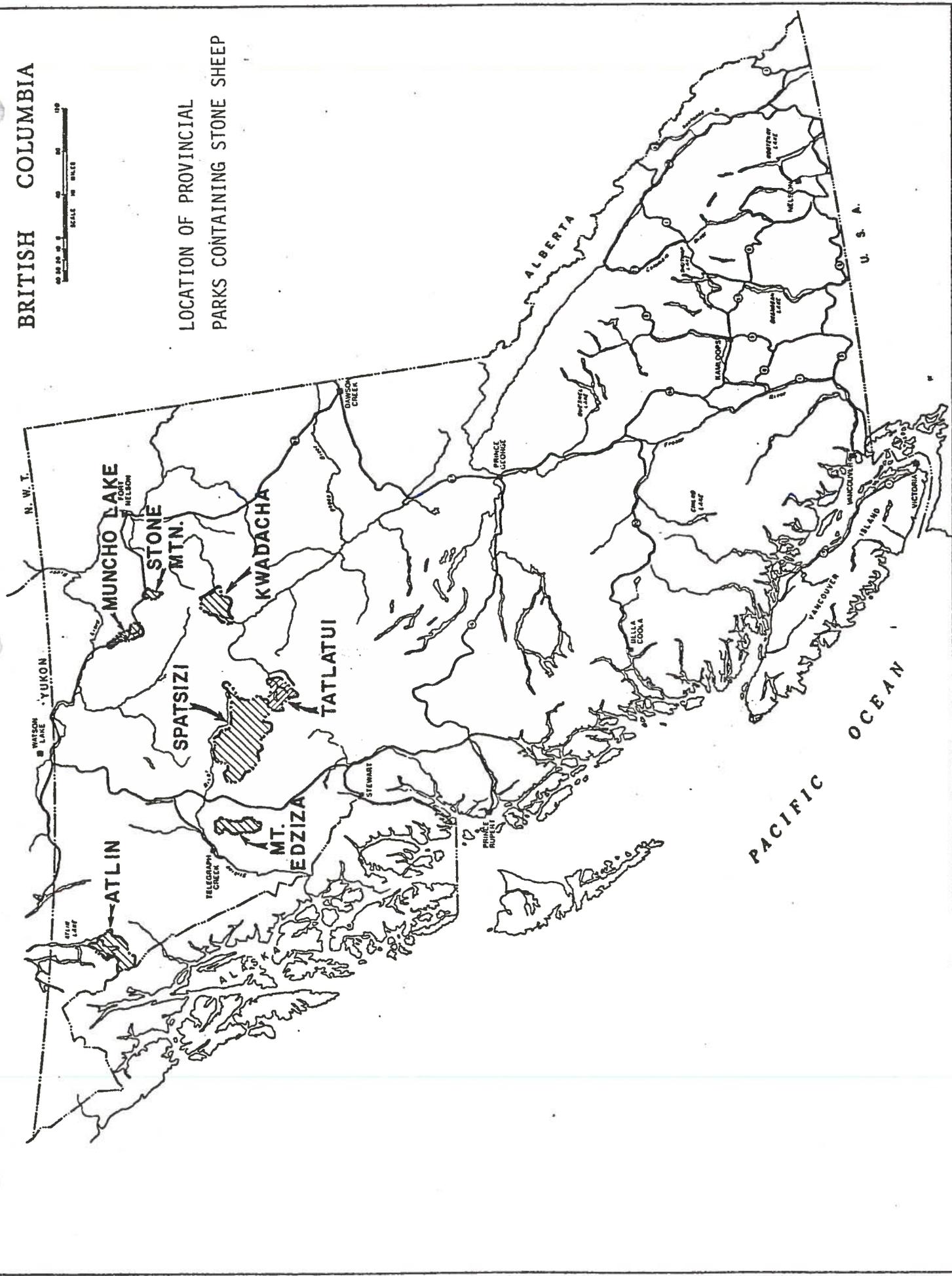
CONTENTS

INTRODUCTION	1
POLICY	1
RESPONSIBILITY	3
NORTHERN PARKS	3
STONE MOUNTAIN PROVINCIAL PARK	6
MUNCHO LAKE PROVINCIAL PARK	6
KWADACHA PROVINCIAL PARK	7
TATLATUI PROVINCIAL PARK	7
SPATSIZI WILDERNESS PROVINCIAL PARK	8
ATLIN PROVINCIAL PARK	8
MOUNT EDZIZA PROVINCIAL PARK	9

BRITISH COLUMBIA



LOCATION OF PROVINCIAL
PARKS CONTAINING STONE SHEEP



PROVINCIAL PARKS AND STONE SHEEP: "AFFINITY THROUGH DEFAULT"

W.G. HAZELWOOD, Provincial Parks Biologist, Environmental Management Division

INTRODUCTION

In the Province of British Columbia we have approximately 11½ million acres of recreational parklands. The working pattern for establishment of new Parks is laid down by park planners and basically constitutes high scenic terrain providing vistas of majestic inspiring mountains, or conversely, are oriented around lowland water bodies and aquatic or shoreline recreations. Other reasons for establishing parks include geological or vegetationally significant parts of the Province. These concepts are not only aesthetically appealing to the public but are also based on avoidance of valley bottom alienations and the conflicts so often associated with these areas of high value to developers or other resource users. As you can plainly see, given the above mandates; mountain sheep ranges in Parks are there by accident rather than design. Hence the title of my talk: "Affinity through Default" is not entirely a spurious phrase.

Exceptions to the above concepts are White Pelican Park in the Chilcotin, created to preserve the only known breeding colony of these birds in B.C.; Ballingall Islets and Mitlenatch Islands Parks also created for preservation of bird colonies and Spatsizi Wilderness Park created for wilderness and wildlife values in northern B.C.

POLICY

A slogan that has stood the test of time and strife in Park management is that "Parks are for People" first and foremost. This concept is now changing slowly in the light of better knowledge about the wildlife habitat role in the preservation of natural places. A public desire to

POLICY (Cont'd.)

retain these natural areas in the face of modern technology has led Parks Branch into placing an equal mandate on restraint of human use and abuse in some of our more congested Parks. A new concept of restricted use in some of our more fragile ecosystems has also evolved as a natural extension in our planning concepts.

Our policy is to manage all species and their habitats within Parks under the total Provincial wildlife management program. Provincial Parks are dedicated to the provision of a variety of outdoor recreational experiences including the provision of a range of wildlife-related opportunities in both the consumptive and non-consumptive categories.

Specific wildlife policies are as follows:

1. Hunting may be allowed in a Provincial Park where this activity is consistent with Park objectives and where species populations will support a harvest.
2. Endangered wildlife and their habitat will be afforded full protection under the Park Act.
3. Conditioning or taming of wildlife will be discouraged.
4. Scientific studies will be encouraged under Letter of Authority.
5. Mineral licks and other special wildlife areas will be fully protected.
6. Non-resident species introductions will not be encouraged in Provincial Parks.

RESPONSIBILITY

Management of wildlife resources within Provincial Parks is the joint responsibility of the Parks Branch and the Fish and Wildlife Branch. By legislative mandate Parks Branch is responsible for establishing policy for wildlife management practices in Parks.

Here the system runs into technical and bureaucratic difficulties. Parks Branch wants more intensive management and Fish and Wildlife Branch is often unable to provide this service. The Fish and Wildlife Branch collectively must prioritize their limited funds and manpower to deal with constant crises of new dams, new open pit mines, new logging impacts and new access roads everywhere.

Parks Branch through limited funding can and does enlist extra input to crucial management situations involving wildlife in Parks but only sporadically. The system simply does not allow for funding preventive measures to avoid wildlife crises but only to react after the situation has often deteriorated to the point of habitat salvage.

This then is the background against which we manage wildlife including Stone Sheep in our northern Provincial Parks.

NORTHERN PARKS

We have 7 major parks in northern B.C. that contain Stone Sheep habitat. They contain approximately three and a half million acres, of which 870,000 acres or 25% are Stone Sheep range. For the purposes of this paper I am including the Gladys Lake Ecoreserve (82,000 acres) in the above figures. Of course some of these ranges are contiguous with

NORTHERN PARKS (Cont'd.)

more habitat adjacent to the park boundaries when heights-of-land are followed by the boundary.

Table 1.

Park	Total Area (Acres)	Sheep Range (Acres)	Population Estimate Stone Sheep	Harvest/Rams 1977
Stone Mountain	64,000	36,970	80	5
Muncho Lake	218,460	97,590	110	3
Kwadacha	414,000	46,080	40	3
Atlin	575,000	22,940	70	0
Tatlatui	261,500	60,820	80	1
Spatsizi	1,740,000 (includes Ecoreserve)	412,470	500	3
Mount Edziza	326,000	193,220	220	15
Total	3,526,960	870,000	1,100	30

There are estimated to be about 12,000 Stone Sheep in B.C., 1,100 or roughly 9% of which are ranging on Provincial Parklands. These Parks are Stone Mountain, Muncho Lake, and Kwadacha in the Rocky Mountains, Tatlatui and Spatsizi in the Cassiar-Omineca Mountains, Atlin and Mount Edziza in the Coast Range.

Individually the Parks are well separated except for Spatsizi and Tatlatui which share 15 miles of common boundary.

Table 2. Classified counts.

	Ewes/ Class I Rams	Lambs	Rams Class II, Unclassified III, IV	Total	
<u>Mount Edziza</u>					
1972 (January)	40	25	34	53	152
1973 (March)	-	-	14	102	116
1975 (August)	78	13	48	-	139
1976 (March)	56	8	36	10	110
<u>Atlin</u>					
1975 (August)	4	1	4	-	9
<u>Spatsizi</u>					
1972 (January)	23	15	50	67	155
1976 (Summer)	110	36	18	22	186
1976 (September)	2	2	-	40	44
<u>Tatlatui</u>					
1976 (Summer)	7	4	-	-	11
Total Observations	320	104	204	294	922

Table 3. 1977 Stone sheep harvest in Provincial Parks.

Park	Resident Hunter	Guided Hunter	Park Total
Atlin	0	0	0
Kwadacha	0	3	3
Mount Edziza	9	6	15
Muncho Lake	0	3	3
Spatsizi	1	2	3
Stone Mountain	5	0	5
Tatlatui	0	1	1
	15	15	30

STONE MOUNTAIN PARK

The smallest of our parks containing stone sheep range at 64,000 acres. Over 37,000 acres or half of the entire park, is utilized by stone sheep sometime during the year. Most of the range is seasonal summer habitat. The Park boundaries follow heights-of-land in most cases and thus cut across habitat occupied by local bands of sheep.

Several mineral licks are found within the Park where these animals often concentrate. There is a "one kilometre no shooting zone" along the Alaska Highway which bisects the Park. In 1977 five full curl rams were harvested within the Park from a population estimated at 80 animals. All of these hunters were unguided residents of B.C.

MUNCHO LAKE PARK

This park is a lake-oriented subalpine setting in the northern Rocky Mountains. It is 218,460 acres in size and 97,590 acres are alpine sheep habitat. The boundaries tend to follow heights-of-land wherever possible. This park is famous for its mineral licks where stone sheep are often photographed by tourists on the Alaska Highway. The licks along Trout Creek are heavily utilized by sheep during the summer and a band of sheep crossing or on the road is always a traffic stopper.

A "one kilometre no shooting" area extends along the highway through the Park. Three rams out of an estimated sheep population of 110 were harvested by guided hunters in 1977 within the Park boundaries.

KWADACHA PARK

This Park is one of the most remote in our entire Park system. It is 414,000 acres of which 46,080 acres are considered to be stone sheep range. The terrain is high precipitous country dominated by icefields and glaciers. The bulk of the park is on the wetter west side of the Rocky Mountains which precludes good sheep habitat through climatic extremes. Summer and early fall ranges on the headwaters of the Gataga and Tuchodi rivers are the main sheep areas.

Access to the park is only by float plane, helicopter or horseback. No mineral licks for sheep are known to be in the Park. Three rams were harvested by guided hunters in 1977. The estimated population of sheep utilizing Kwadacha Park is 40 animals.

TATLATUI PARK

The park is 261,500 acres in size with only 60,820 acres considered to be stone sheep range. It is located on the extreme southern edge of the Stone Sheep range. Like Kwadacha Park it is located in the heart of the Cassiar-Omineca Mountains and harsh climatic extremes limit the resident population of sheep. The marginal habitat along the northwest boundary are mostly maternity ranges and several important mineral licks are found here as well. Heights-of-land boundaries also constitute much of this lake-oriented Park on the headwaters of Findlay River.

Guided fishing parties can also become keen sheep photographers in "lick valley". One ram was harvested by a guided hunter in 1977. The resident sheep population is estimated to be 80 animals.

SPATSIZI WILDERNESS PARK

Immediately adjacent to the northern boundary of Tatlatui lies Spatsizi Park, our second largest Park at 1,740,000 acres. This area includes the 82,000 acre Gladys Lake Ecoreserve created for the preservation of Stone Sheep and Mountain Goat ranges on the study area of Dr. Val Geist during his classic Stone Sheep studies in the early 60's.

The Park contains 412,470 acres of prime sheep range. It was created along with the ecoreserve in 1975 with wildlife conservation as one of its prime mandates. Its rainshadow location creates ideal winter conditions with shallow fluffy snow and windswept plateau habitats. The park contains many entire distinct sheep ranges geographically separated. The Eaglenest Range of mountains contains excellent sheep habitat and many mineral licks are found here.

Spatsizi is now under special management for sheep hunting and currently is the only Park thus far controlled by quota and limited entry regulations. An intensive inventory of sheep populations and their range is an essential future project for this Park. Two guided hunters and one resident hunter harvested rams out of a population estimated to be 500 animals in 1977. A total of 10 sheep permits were issued for the Park in 1977.

ATLIN PARK

Atlin Park in the northwest corner of B.C. is mainly ice and water. The Llewellyn glacier and Atlin lake dominate the Park's 575,000 acres. Only 22,940 acres are suitable for supporting Stone Sheep populations on a year-round basis. The rounded mountains east of the lake in the Sloko

ATLIN PARK (Cont'd.)

Range form a rainshadow area that supports a small population of sheep.

One major mineral lick is located above Sloko Lake and is utilized by sheep. Historically Teresa Island supported Stone Sheep but the influx of gold seekers at Atlin terminated any sheep presence on the alpine areas of the island. Apparently Indian meat hunters utilized rock barricades to drive sheep and goats past hidden marksmen near escape terrain. Restoration of this range through local transplant is a project for the future consideration of Parks Branch. Hunting closures along the Atlin Lake shoreline and the islands in 1978 would serve to protect any restored sheep population.

No rams were harvested out of the population of 70 sheep in 1977.

MOUNT EDZIZA PARK

This park is a biological "island" of 326,000 acres of which 193,220 acres is alpine and subalpine sheep range. Again the bunchgrass-oriented habitat is a product of rainshadow conditions east of the Coast Range. The volcanic origins of this unique area are among the most recent in B.C. It is a classic alpine study area being isolated from all other mountainous alpine areas by deep timbered valleys and turbulent rivers.

The steep escarpments on the west side provide most of the winter escape terrain being adjacent to the windswept bunchgrass plateau where access to winter food is easy. Summer and early fall sheep ranges on the east side of the Park combined with lake access result in a high harvest within the Park.

MOUNT EDZIZA PARK (Cont'd.)

Quota and limited entry hunting regulations should be instituted as soon as possible. The 1977 harvest of 9 rams to resident hunters and 6 rams to guided hunters from an estimated population of 220 sheep is too high to be maintained in an "island" population with no outside recruitment. One interesting mineral lick currently utilized by sheep is a hot springs seep area.

The foregoing has been a quick survey of our seven Stone Sheep Parks in northern B.C. Closer management of our natural resources within Provincial Parks, in the face of ever-increasing and often excessive exploitation elsewhere, only serves to make our mandate of protection more binding. This is applicable whether the Park user be *Ovis dalli stonei* or *Homo sapiens asphaltei*!

Thank you.

REFERENCES

- DOOLING, P.J. 1974. Golden Circle Report. Part I. B.C. Parks Branch. 129 pages.
- GEIST, V. 1971. Mountain Sheep, A Study in Behavior and Evolution. Univ. of Chicago Press. 383 pages.
- HARPER, F.E. 1972. Wildlife Values in the Southern Watershed of the Stikine River in Northwestern British Columbia. B.C. Fish and Wildlife Branch Report. 18 pages.
- HATLER, D.F. 1976. Helicopter and Fixed Wing Spatsizi Park Survey Reports. Fish and Wildlife Branch files. 6 pages.
- HAZELWOOD, W.G. 1975. Mount Edziza Park Wildlife Report. B.C. Parks Branch Files. 11 pages.
- _____. 1975. Atlin Park Wildlife Report. B.C. Parks Branch Files. 9 pages.
- _____. 1976. Mt. Edziza March Field Trip Report. B.C. Parks Branch Files. 3 pages.
- _____. 1976. Kwadacha Park Trip Report. B. C. Parks Branch Files. 10 pages.
- LUCKHURST, A.J. 1973. Winter Flight Report for Stikine River Drainage. A.R.D.A. Canada Land Inventory. 8 pages.
- OSMOND-JONES, E.J., SATHER, M., HAZELWOOD, W.G., FORD, B. 1977. Spatsizi and Tatlatui Wilderness Parks. An Inventory of Wildlife, Fisheries and Recreational Values in a Northern Wilderness. B.C. Parks Branch. 292 pages.