

GITNADOIX RECREATION AREA

WILDLIFE SURVEY

FEBRUARY 20, 1989

INTRODUCTION:

The Gitnadoix Recreation Area is a 58,000 hectare area; containing a north-south trending, glacial valley, draining to the Skeena River from Alistair Lake; which is located at the south end and is 9km long. The terrain stands mainly on end and is suited to the habitat needs of mountain goats, in particular. Moose frequent the riparian bottoms from the lake north to the confluence with the Skeena River.

This winter count was intended to gather information on these two species, with other species data coming as a supplement to the central survey. Sightings of Wolves, Porcupine, Ptarmigan, Bald Eagles, and Trumpeter Swans were all recorded. Flocks of small passerines, such as Grosbeaks, Redpolls, etc, were observed, but not recorded, during the survey.



This young Billie was photographed on the slides above the Git-naddoix River, in 1988, by Mike Whelpley. The Goat was resting about 150 metres above the river.

HISTORICAL DATA OF SURVEYS

AND

COMPULSORY REPORTING

1969:

In January of 1969, the Canada Land Inventory conducted a survey flight through the Gitnadoix drainage, with a Beaver aircraft and this Author on board. The local Game Warden, Gary Smyth, was also present and indicated 17 Moose had been harvested out of the Gitnadoix drainage, that hunting season. We observed 5 Moose wintering between Magar Creek and the Skeena. No goats were seen, although, tracks were observed in Kadeen Creek.

1987:

In the course of a Coastal Skeena Moose survey, the Gitnadoix was again surveyed, this time by helicopter. Unfortunately, the survey was a stratified, random sampling technique that included the Skeena Islands, from Shames to the Exchamsiks and only the lower Gitnadoix below Magar Creek. The recorded 39 Moose in late January, of which 14 were calves. It is not known how many Moose were observed in the Gitnadoix Recreation Area compared to the islands on the Skeena. Nor can we speculate on how many were missed below Alastair Lake, where 50% of the 1989 count was located.

HARVEST SUMMARY:

Goat harvests have been very moderate on the Gitnadoix, with residents taking 5 Billies and 2 Nannies from 1983 to 1987; while guided non-residents killed 2 goats during the same period of time. Ages ranged from a two year old Billy to an 11 year old Billy in the harvest.

Moose were exclusively males in the legal harvest; with 19 taken in five years, from 1983 to 1987, by residents. No Grizzly were harvested during this period in the Gitnadoix, that were reported.

1989:

This survey was conducted on February 20, 1989, in an Okanogan Helicopter, Jet Ranger. Viewing conditions were optimal for Moose, with high cloud negating snow glare. The intensive survey found 27 Moose in the Gitnadoix and while occasional mature Spruce canopy eliminates a 100% survey certainty, an estimated population of 30 Moose would be the maximum.

The Mountain Goat survey was much less successful, for several reasons. The flat light and compacted snow made tracks very hard to see without any shadow effect from bright sunshine. Snow-showers were present at higher elevations and in the heads of the drainages. The most important problem was that almost all goats and tracks were found between 2,500 feet and 4300 feet, elevation. They were all under mature timber, adjacent to but not on, open bluffs and cliffs. Judging from track abundance at these wintering elevations and the exclusion of obvious goat habitats from our survey; due to time and fuel limitations, it is obvious we missed most of the goats. Based upon the findings of 29 goats it is likely that we observed only about 20% of the population wintering in the Gitnadoix drainage. The only wintering concentration found was 15 animals at the top of a south facing cliff, opposite Magar Creek. A July survey, when almost all goats are above timberline, would provide the best data for a population estimate with minimal speculation.

Of management importance, is the continued use of the Upper Gitnadoix River, by Trumpeter Swans. As well, in 1969, we observed several swans wintering at the Lake outlet. This historic use is extended by the utilization of nesting habitat by one or two pairs of swans. We took pictures of nests in 1969 and the local trapper reported a nesting pair in 1988.

Wolves den in the drainage and the 11 that we observed, were exiting the valley when seen. No kill sites were found. Although, the Bald Eagle sighting may indicate the possible location of one, as they actively scavenge the remains whenever possible.

The following table, documents our findings, from the February 20, survey of 2 hours and 20 minutes; plus 30 minute ferry time, from Terrace Airport. Animals are separated as being within the Gitnadoix Recreation Area or outside of it. Obviously, these animals are capable of moving in or out of the Area on a seasonal or daily basis; as we were witness to the Wolf Pack leaving the area during our flight.

TABLE I:

	UNCLASSIFIED				TOTAL
	MALES	FEMALES	ADULTS	IMMATURE	
Moose (Gitnadoix)	6	16	0	5	27
Moose (Adjacent Skeena Islands)	3	15	1	5	24
Moose Total:	9	31	1	10	51

TABLE II:

	UNCLASSIFIED				TOTAL
	MALES	FEMALES	ADULTS	IMMATURE	
Mountain Goat (Gitnadoix)	5	13	6	5	29
Mountain Goat (Skeena/Mt Jackman)	1	2	0	2	5

Goat Total	6	15	6	7	34

TABLE III:

	UNCLASSIFIED				TOTAL
	MALES	FEMALES	ADULTS	IMMATURE	
Wolves	0	0	11	0	11
Porcupine	0	0	1	0	1
Ptarmigan	0	0	1	0	1
Bald Eagle	0	0	1	0	1
Trumpeter Swans	0	0	15	0	15

Totals:	0	0	29	0	29

The population dynamics in Table I, show that 32% fecundity exists for Moose cow/calf ratios and this equates to 31 calves per 100 cows. A ratio of 56 bulls, per 100 cows is also indicated. The percentage of calves in the population is 19.6%. The percentage of males is 29% compared to females. Only one set of twins were observed on the Skeena Islands. One bull Moose at Alistair Lake had a scared face from fighting Wolves or from fighting in rut.

The Mountain Goat population exhibits 46.7% fecundity for nanny/kid, giving a ratio of 47 Kids per 100 Nannies. The presence of 46 Billies per 100 Nannies indicate a healthy population, as well. The percentage of young in the population is 20.6% and the percentage of males to females is 40%. Only one set of twins was observed and only one 2 year old was positively identified. One Billy was an obvious snowslide victim as the skin was missing on his left rear leg, from hip to knee. The injury didn't seem to impair his movements at all.

Table III contains wildlife observations recorded during the Moose and Goat inventory. Only the Trumpeter Swan population was expected and a sharp watch was kept for their presence. All of the birds were in adult white plumage. Four were in an open water area, at the swampy toe of a snowslide and the other 11 were on a one kilometre, open stretch, of the Gitnadoix River, just below the lake.

The Wolf Pack was located on the back channel of the Skeena that extends eastward, just up the Gitnadoix River from the confluence. They had just come out of the Alders of the Recreation Area and all of the Pack members appeared to be of German Shepherd pelage and healthy. The leader had black hind and forequarters with a light gray body color; which was distinctive. They were all moving upstream on the slough and were not aware of the cow/calf pair of Moose bedded 100 metres to the north. The group of eight bedded Moose; six cows and two bulls, were however on their apparent line of travel. They showed no fear of the circling helicopter; indicating that they have not been harassed from the air recently.

Other more incidental species, such as Ptarmigan, flushed in the Alpine of Mt Jackman, Porcupine, seen near the bedded Moose and Bald Eagle were all single sightings. Flocks of small birds; such as, Evening Grosbeaks, Common Redpolls, etc, were also seen.

CONCLUSION:

The Moose and the Mountain Goat populations appear to be healthy in the Gitnadoix Recreation Area. Young, of the year levels, are lower than optimum and the large Wolf Pack may be a part of the cause, with dense and crusted snow pack conditions for much of the winter.

The low bull Moose count may be due to hunter pressure and access on the Skeena Islands as it is half the number of bulls in the Gitnadoix Valley. Conversely, cows traditionally move out of side valleys onto good winter areas before bulls in late fall, so the Skeena Island population may become skewed towards females in any event.

The Mountain Goat population, due to its propensity for wintering at intermediate elevations in mature timber presents visibility problems for purposes of census and classification. Their flight reaction to the helicopter is to rush to the base of a nearby tree and crowd against it. Further winter flights are not advised, for effective inventory of this species in the Recreation Area.

RECOMMENDATIONS:

- 1) Establish a program for Mountain Goat inventory, by helicopter in July, when the animals utilize the top third of their elevational range in the open cliffs and Alpine areas. The search area shrinks to become more cost effective as well as search effective and the molting patterns of Goats allows separation of males from females, young from old and lactating females from dry ones.
- 2) If a Grizzly and Black Bear census is to be considered, it should be a late Spring helicopter survey of snowslide areas in tandem with a riparian riverboat examination of sand-mud track measurements during Fall Salmon die-offs.
- 3) That Trumpeter Swan nesting and feeding areas be identified and intensively managed to minimize people/wildlife conflicts at critical times of nesting and rearing.

ALPENGLOW RESOURCES

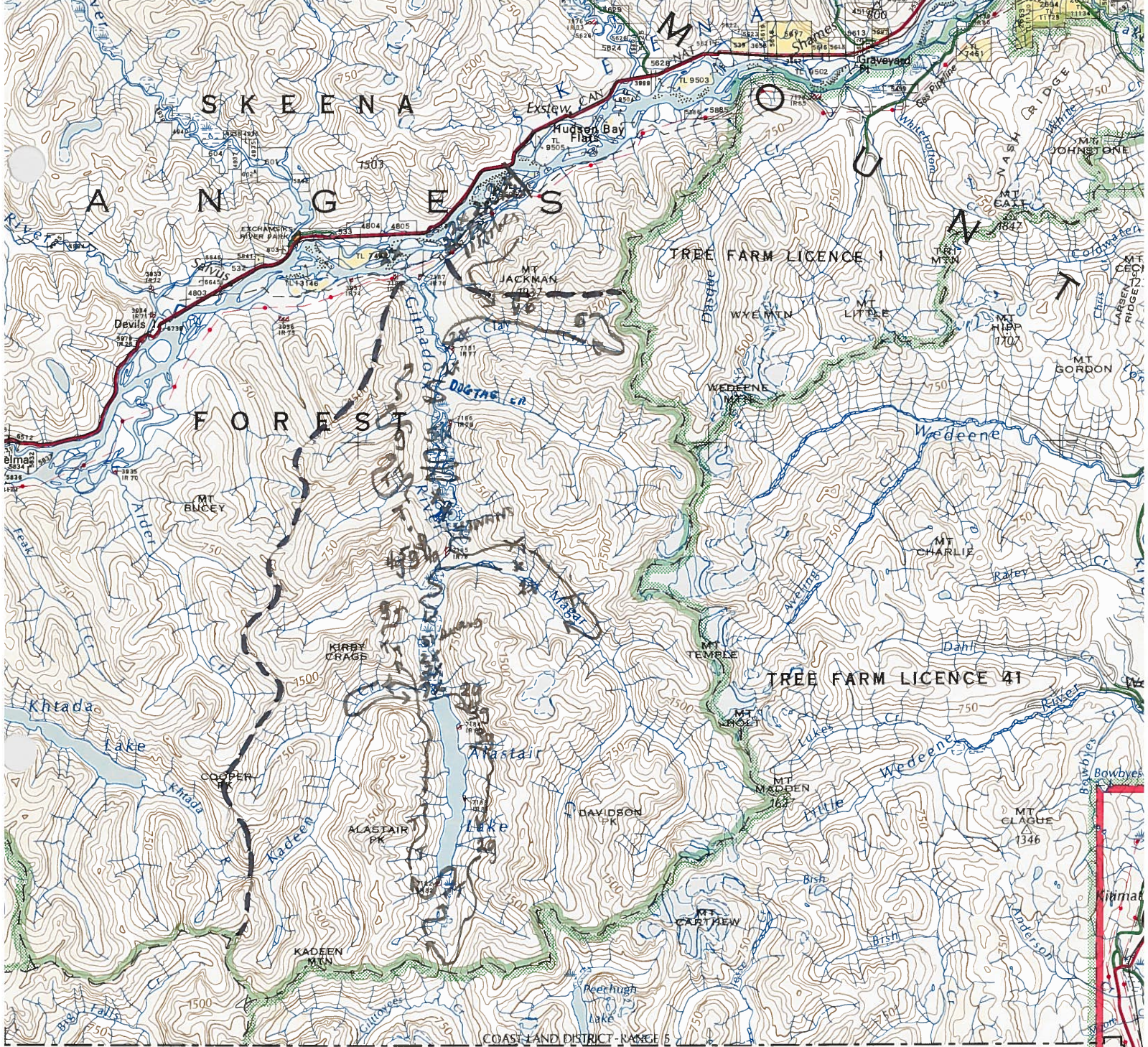
WG Hazelwood

Alpenglow Resources, represented by WG Hazelwood, at the specific request of BC Parks, has carried out the following wildlife survey, of the Gitnadoix Recreation Area, on February 20, 1989.

February 20:	Conducted helicopter survey with two Parks employees	
	1 day @ \$200.00	\$200.00
February 21:	Research previous surveys and correlate data	
	1 day @ \$200.00	\$200.00
February 22:	Write report and complete map compilation	
	1 day @ \$200.00	\$200.00
February 23:	Finalize report and data	
	1/2 day @ \$100.00	\$100.00
	Purchase of six maps for the Project	\$26.50

	TOTAL AMOUNT DUE:	\$726.50

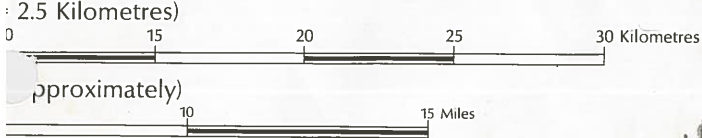
W. Grant Hazelwood



0' 15' 129°00' 45'

ERT - TERRACE

OLUMBIA
 STRICT RANGE 5
 250 000



26°45' East at centre of map, 1976
 annually 3'

Mercator Projection 1 Mile = 16093 Kilometres

lists may be obtained from
 on, British Columbia Lands

Handwritten notes:
 41
 84
 205

Handwritten notes:
 2X (imm)
 2X 90
 5X (120) 47
 X 9 120/47
 X 9
 4 120/47
 2X 9 (imm)
 11 120/47
 1X 9

REFER

- Roads: Hard Surface
- Loose Surface, Main
- Loose Surface, Secondary
- Rough
- Trail
- Highway Route Number
- Railway
- Power Line (Main)
- Lighthouse
- Survey Control Station (Main)
- Elevation in metres above mean sea level
- Contours (Interval 150 metres)
- Swamp or Marsh
- Intermittent Lake or Seasonal Inundation
- Mud, Sand, or Gravel
- Glacier or Icefield
- Dyke
- Customs Office
- Communications Tower
- Forest Service Lookout



GITNADOIX VALLEY FROM HIGHWAY
LOOKING SOUTH



THREE NANNIES + 2 KIDS IN TIMBER AT
3000' ELEVATION ON COMPACTED SNOW PACK

