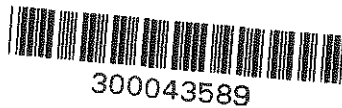


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GAME HARVEST REPORT
and
SUMMARY OF QUESTIONNAIRE
ANALYSIS

G.M. Lortie February 1976



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PR-7602

INTRODUCTION:

1975 was the third consecutive year the Game Branch investigated the status of big game populations, hunting pressure and hunter success rates. This report also includes the 1975 harvest estimates for all big game species taken by each licence class.

All resident hunters were mailed Game Harvest Reports in early November at the close of the 1975 hunting season. The percentage return was 39.8%.

4296 questionnaires were mailed to resident licence holders of all classes - 155 or 3.6% of which were returned to the Branch undelivered.

Of the 1625 licensed resident sport hunters submitting a questionnaire return, 66 or 4.1% did not hunt.

For the first year the system of Game Management Zones was in effect and achieved the short term objectives in Zones 7 and 9. During 1974 with a 3/4 curl rule on sheep in GMZ #7, local over-harvesting and a total of 31 sheep were taken by residents. In 1975 under the new full curl rule, only 20 were taken by residents, all but 2 being trophy class animals. This rule in GMZ #7 shifted the balance of the unchanged total resident sheep harvest to adjacent zones.

Residents took 6 goat in GMZ #7 in 1975 compared to 4 in 1974, in spite of a shortened season and the new 8" horn minimum.

With the implementation of the new zoning regulations, these facts indicate that resident sheep and goat hunters are capable of subjectively evaluating trophy heads.

RESIDENT HUNTER SUCCESS RATES

As in 1974, the Game Branch examined all known sheep, goat and grizzly skulls taken during the 1975 regular hunting season. Estimates of the legal kill on these species are derived from legislated hunter trophy submissions.

The harvest estimates on moose, caribou and black bear are derived from the Game Harvest Report. In computing the estimates on these species, two basic assumptions are made:

- (i) The sample is unbiased, i.e., a successful hunter has the same probability of response to the questionnaire as an unsuccessful hunter.
- (ii) Licence holders were considered to have hunted if they purchased any big game tag.

Hunter success rates and harvest estimates for moose, caribou and black bear are lower this year due to a change in our assumptions. In previous years, 18-20% of responding hunters noted that they did not hunt big game and this was accepted at face value. This year, however, as noted above (assumption (ii)), a holder of any big game tag was considered to have hunted, thereby increasing the hunter population by approximately 15%. All of these hunters of course were unsuccessful in bagging big game, thereby lowering the success rate of the hunter population as a whole. With few exceptions, these unsuccessful hunters, while not specifically engaging in hunting, were in a position to take big game opportunistically. A further depressant to the resident success rate is the separate estimation of the big game harvest by status Indians.

An error was noted in the Game Harvest Report produced last year. In the section dealing with hunter success rates, the third sentence in the last paragraph should read - The 733 resident hunters holding sheep tags killed 56 known sheep for a success rate of 7.6%. This 1975 report has been corrected and new copies are available.

TABLE I 1975 Harvest Estimates and Success Rates - Resident Sport Hunters. Total Licence Sales 3714 Resident. Questionnaire Return (n = 1625)

Species	Tags	Kills	% Success	Total Tag Sales	Harvest Estimate	Species Specific Pressure
Moose	1504	397	26.4%	3331	879	89.7%
Caribou	688	103	15.0%	1601	240	43 %
Goat			5.7%	140	8*	3.8%
Sheep			7.1%	743	53*	20 %
Grizzly			3.3%	305	10*	8.2%
Black Bear	206	12	5.8%	598	35	16.1%

* These figures represent trophy submissions and are minimums which are likely within 10% of the actual harvest.

Kill Composition:

Moose: 86% bulls, 14% cows and antlerless moose (n = 397)
 Caribou: 72% bulls, 28% cows (n = 103)
 Goat: 63% males, 37% females (n = 8)
 Grizzly: 80% males, 20% females (n = 10)
 Black Bear: 67% males, 33% females (n = 12)

THE STATUS NATIVE HARVEST

The taking of game by status Indians is provided for in the Yukon Act (Section 17, sub-section (3)). Status Indians therefore are not obliged to obtain a hunting licence or seals before taking big game. It should be noted, however, that some of these people do obtain a hunting licence free of charge.

Because of the obvious accounting problems inherent with this system, the harvest of big game by status Indians has never been evaluated. The questionnaire results for the previous two years have pooled any reports by contributing status natives with those of other residents.

Included in the questionnaire return this year were 59 submissions by status natives. These contributors harvested: 54 moose, 16 caribou, 5 sheep, 1 grizzly and 3 black bear during the fall season. While the sample is too small to evaluate the total harvest of big game by status Indians it does indicate a very high success rate for moose.

With the cooperation of these 59 contributors and our district Conservation Officers, the following presents the known minimum status native harvest of moose to the end of February 1976.

Watson Lake & Upper Liard: \pm 100 moose taken during 1975.

Haines Junction: 13 female, 2 calf, 7 male, 3 undetermined-25 moose taken in December 1975, and January and February 1976.

Mayo: 45 moose and 11 caribou during 1975.

Dawson: 30 taken during 1975

Ross River: 60 moose and \pm 30 caribou during 1975

HUNTING PRESSURE

Species specific pressure represents the percentage of the hunter population that hunted each species (see Table I). During 1975 these percentages remain consistent with the previous two years except for grizzly bear. For some reason in 1975 resident hunters purchased 35% more grizzly tags than in 1974, while the hunter population increased only 4.8%. In spite of this apparent increase in effort by resident and general licence holders the kill declined from an estimated 32 grizzlies in 1974 to 25 in 1975.

During the 1975 regular hunting season: 525 contributing hunters spent an average of 5.99 days afield for a total of 3144 man-days of hunting effort in August, and September saw 826 contributing hunters afield for 6.06 days each for a total of 5006 man-days of effort. In October, 478 contributing hunters each spent 5.08 days each in the field for a total of 2426 man-days of effort.

These averages, when applied to the total of 3562 resident hunters that hunted, result in the following:

Recreational Value:

$$\text{August: } \frac{525}{1625} = \frac{x}{3562} = 1151 \text{ hunters} \times 5.99 \text{ days} = 6893 \text{ man-days}$$

$$\text{September: } \frac{826}{1625} = \frac{x}{3562} = 1811 \text{ hunters} \times 6.06 \text{ days} = 10,972 \text{ man-days}$$

$$\text{October: } \frac{478}{1625} = \frac{x}{3562} = 1048 \text{ hunters} \times 5.08 \text{ days} = 5,323 \text{ man-days}$$

TOTAL: 23,188 man-days

At a hunter-day value of \$75.00/day, recreational sport hunting in 1974 was worth \$1,739,100.00.

See: Hoefs, M. 1975. Proceedings of the 5th Northern Resources Conference. pp 100 - 108.

Discussion:

The results of the 1975 Game Harvest Report, are the best achieved over the last three years. The percentage return of 39.8%, and the improved level of hunter cooperation is entirely attributable to the draw for incentive prizes from among the returnees. This innovation should be continued and expanded by offering three prizes of better quality next year.

Big Game Taken By General Licence Holders

Big game harvested by trappers in a licence year, has in the past been predicted on the success rate of the previous year. In the last two years, this method has proved unsatisfactory, as harvests of all big game species are consistently over-estimated.

The table below presents the estimated harvest of big game taken by Yukon trappers during the 1974-75 trapping season. Updated (1975-76) figures will be presented later this year.

TABLE II Estimates based on 1974-75 General Licence Affidavits

	# licences sold	# licences returned	% return	Moose	Caribou	Sheep	Goat	Grizzly	Black Bear
South of Peel River	287	229	79.8%	244	86	13	1	8	39
Old Crow	51	39	76.5%	18	490			3	
Ft. McPherson	33	18	54.5%	17	39			4	
Aklavik-Inuvik	62	28	45.2%	4	181				
TOTALS:	433			283	796	13	1	15	4

The Non-Resident Harvest

The numbers of each big game species taken by non-resident hunters are not estimated but are the actual kill derived from detailed reports submitted by each outfitter and hunter.

TABLE III The Non-Resident Harvest

	No. Hunters	Moose	Caribou	Sheep	Goat	Grizzly	Black Bear
Hunting with outfitters	358	150	140	192	16	75	8
Hunting with residents	23	2	1	2			
TOTALS:	381	152	141	194	16	75	8

Kill Composition:

Goat: GMZ 11; 80% male, 20% female (n= 10)
GMZ 7; 33% male, 67% female (n= 3)

Grizzly: 54% males, 46% females (n= 69)

TABLE IV Summary of Big Game Harvest

Licence Class	Moose	Caribou	Sheep	Goat	Grizzly	Black Bear
3714 resident	879	240	53*	8*	10*	35
Status natives	260*	57*	5*		1*	3*
381 non-residents	152	141	194	16	75	8
433 General	283	796	13	1	15	42
TOTALS:	1574	1234	265	25	101	88

* Known minimums.

