

## **Summary of Resident Hunter - Barren-ground Caribou Harvest 1995-2007**

**This information prepared in response to Information Request by Wek'eezhii Renewable Resources Board. December 2009**

### **Sheet RHS Summary graphs**

Summary of the estimated BGCAR killed for each species surveyed by the Resident Hunter survey

#### **RHS 3 REGIONS:**

**YELLOWKNIFE ONLY;**

**FORT SMITH = all smaller communities in NS, DC, SS;**

**INUVIK = Sahtu, Inuvialuit, Gwich'in**

**These RHS regions were designed in the 1980s to ensure there are enough hunters-tags per regions to make estimates.**

**Prior to 1999, RHS also included the eastern Arctic (Nunavut).**

1 - Questionnaire survey is sent to all resident hunter with a licence - questions on number kills, where, month, age of animal, number of hunts.

The questionnaires are sent in 3 waves, a first time to all, then a second time, and a third time to hunters who have not responded yet.

2- Answers are entered in a database that is kept confidential

3- Two methods can be used to estimate BGCAR killed per year (see the 2007-08 Est harvest calcul sheet for details)

#### **GRAPH METHOD**

For species where there are enough tags sold to use this method (e.g., more than 100 tags),

*Estimated kill = total numbers of BGCAR tags sold x (caribou reported killed per reported tag ratio).*

The number of caribou reported killed per reported tag is the slope of the graph, where  $y = x + 0$ .

Example: Total number of tags sold in Yellowknife for BGCAR in 2007-08 = 674

Caribou reported killed per reported tag ratio = 0.1928 (slope of the graph on the right); this is a very low hunting success, for each group of 10 tags sold only about 2 (1.928) caribou was harvested.

Estimated number of BGCAR killed by Yellowknife hunters in 2007-08 = 130 using the graph method

#### **RATIO METHOD**

For species where there are NOT enough tags sold used the graph method (e.g., less than 100 tags),

*Estimated kill = total numbers of BGCAR tags sold x caribou reported killed / total number tags who responded*

Example: Total number of tags sold in Yellowknife for BGCAR in 2007-08 = 674

Number of caribou reported killed = 55

Number of BGCAR tags who reported = 289

Estimated number of BGCAR killed by Yellowknife hunters in 2007-08 = 128 using the ratio method

**Note that because tags are not sold for specific hunting zones, with either method, the estimated number killed CANNOT be calculated for each hunting zone, only for each REGION where the hunter's residence is.**

### **Sheet BGCAR tags**

Summary of the total number of hunters and the total number of tags for BG caribou sold - per RHS region

Data is taken directly from the licencing databases. The database used since 2007 is LISIN. Data is recorded in each region via a secure internet link.

### **Sheet Female\_Male**

**Summary of the sex and age ratio for BG caribou hunted for years 1995-96 to 2003-04 per hunting zone**

**Note that in 2007, regulation change reduced number of tags for resident hunters from 5 to 2 and male only**

1- For each year, verified the information on location, entered the zone code if missing

2- Used the web page [http://geonames.nrcan.gc.ca/search/search\\_e.php](http://geonames.nrcan.gc.ca/search/search_e.php) to find proper zone if only the name of a Lake was provided by the hunter

3- Added the number of males, females and juveniles reported killed for each year, for each hunt (up to 5 different "hunts" can be reported on the

questionnaire, based on zone info available. Not all hunted animal has zone information available so this data and data used to calculate estimated kill will differ.

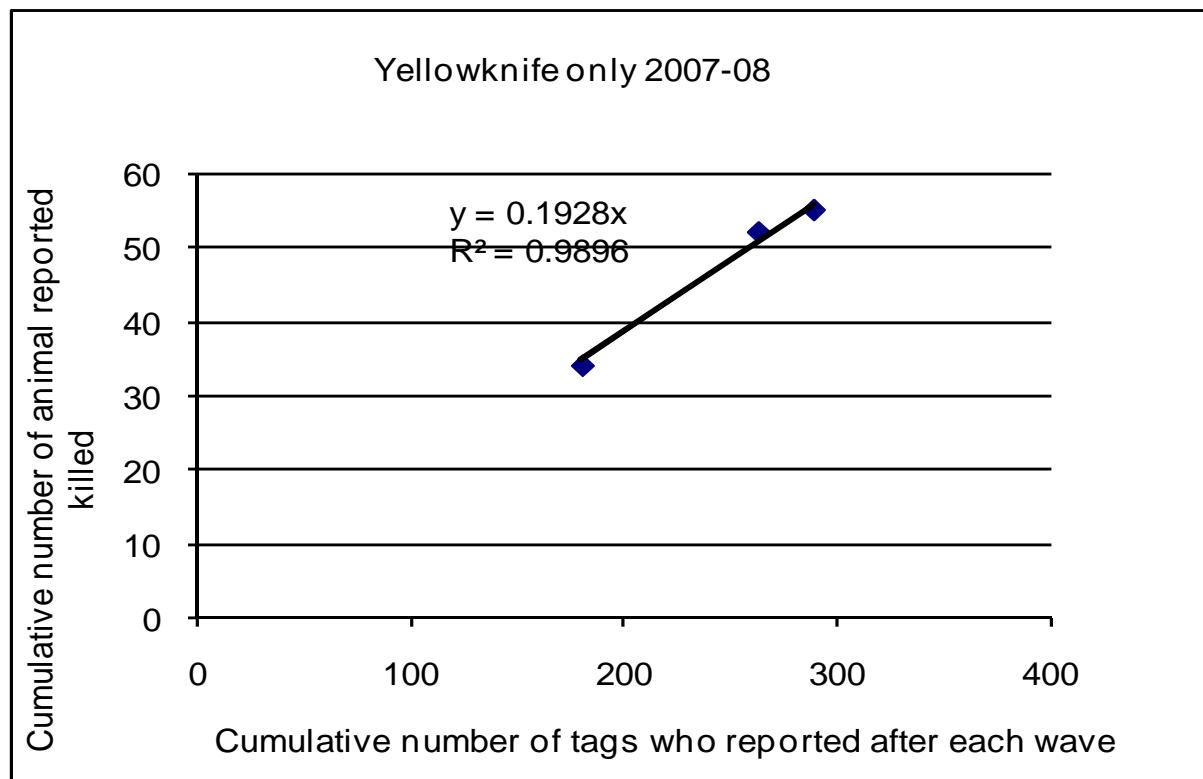
4- Add all bulls, cows and juv for all 5 possible hunts

**Sheet Timing of hunts**

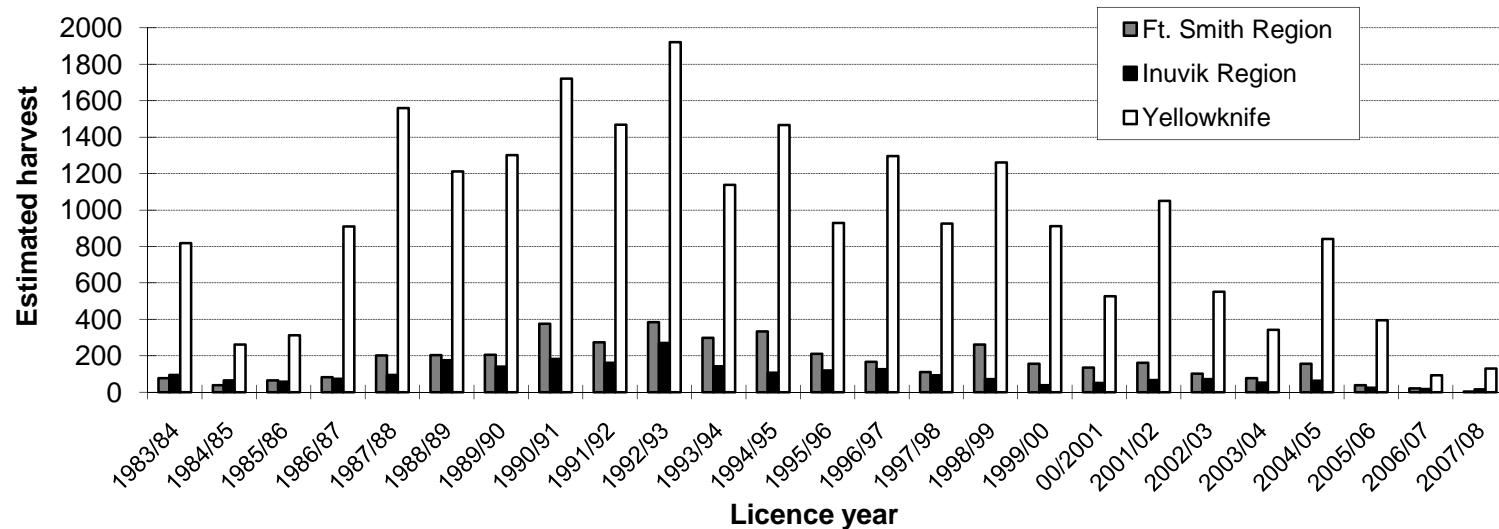
**Summary of hunts in each month**

1 -Used Pivot tables to sort all hunters who reported hunting in a specific month, for RHS region = Yellowknife and Fort Smith

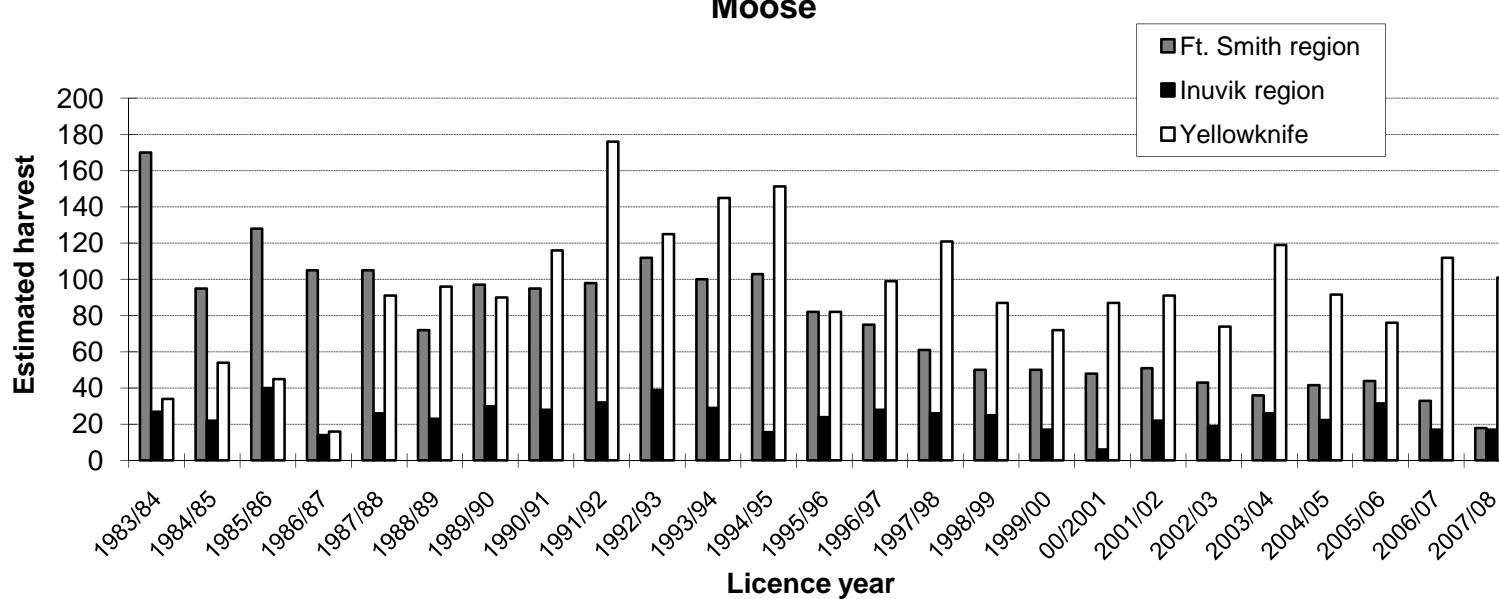
2- Added all 5 possible hunts per month and made a graph



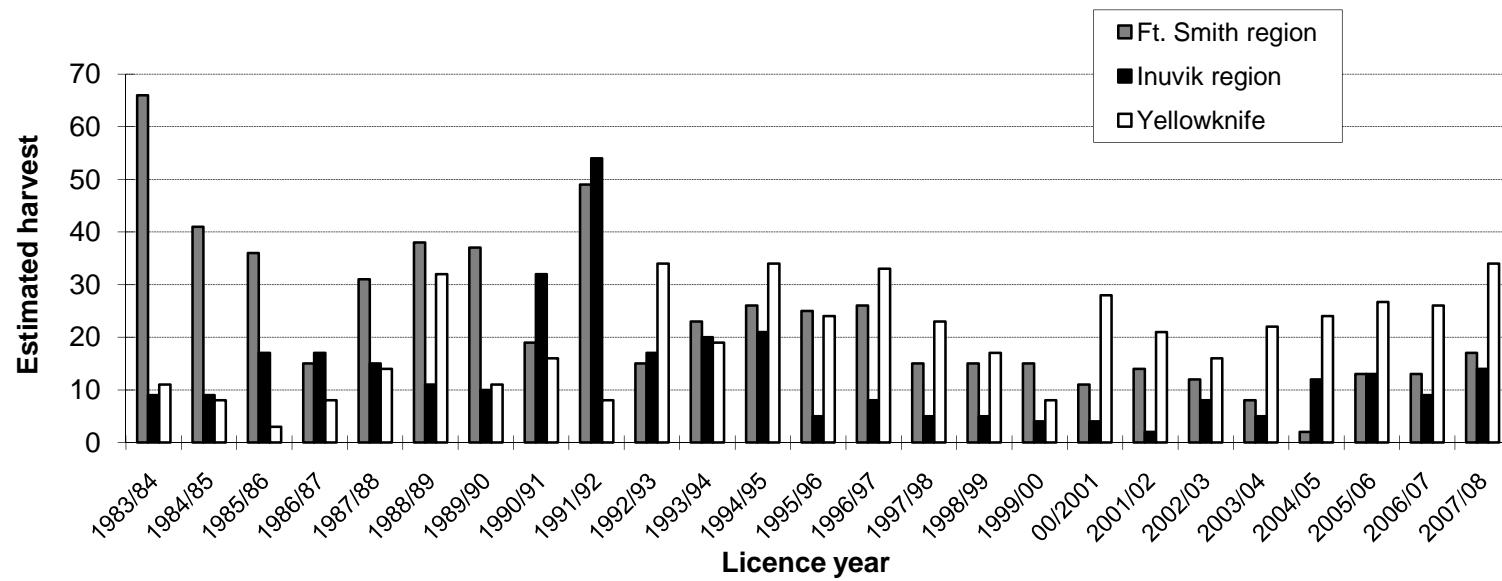
### Barren ground caribou



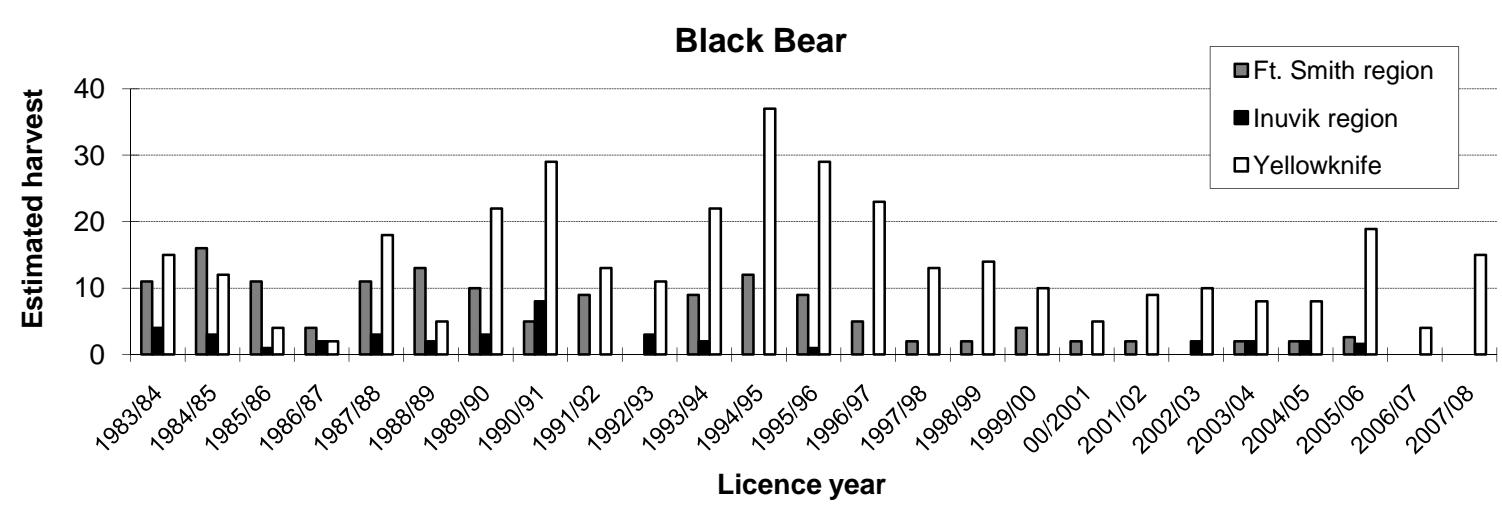
### Moose

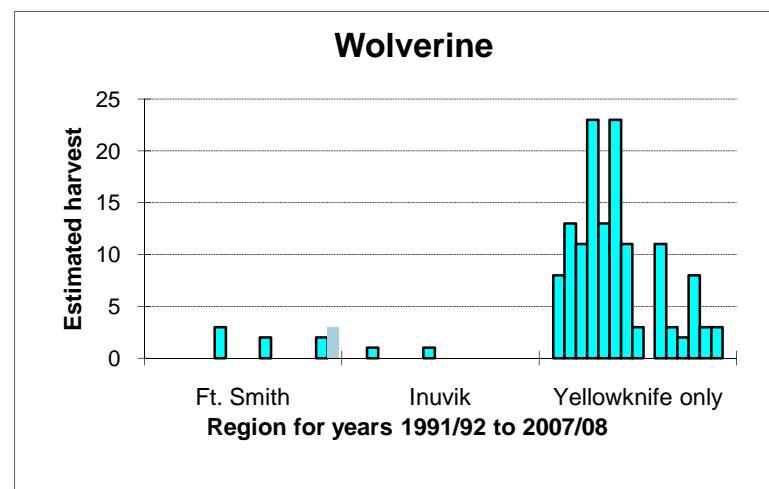
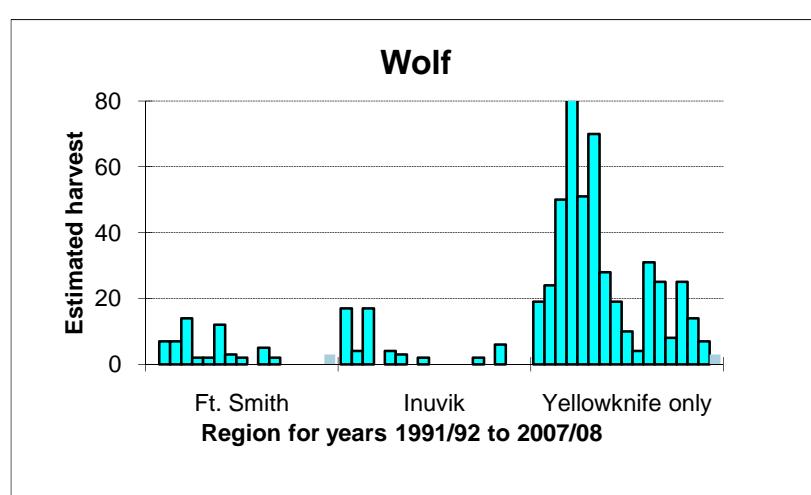
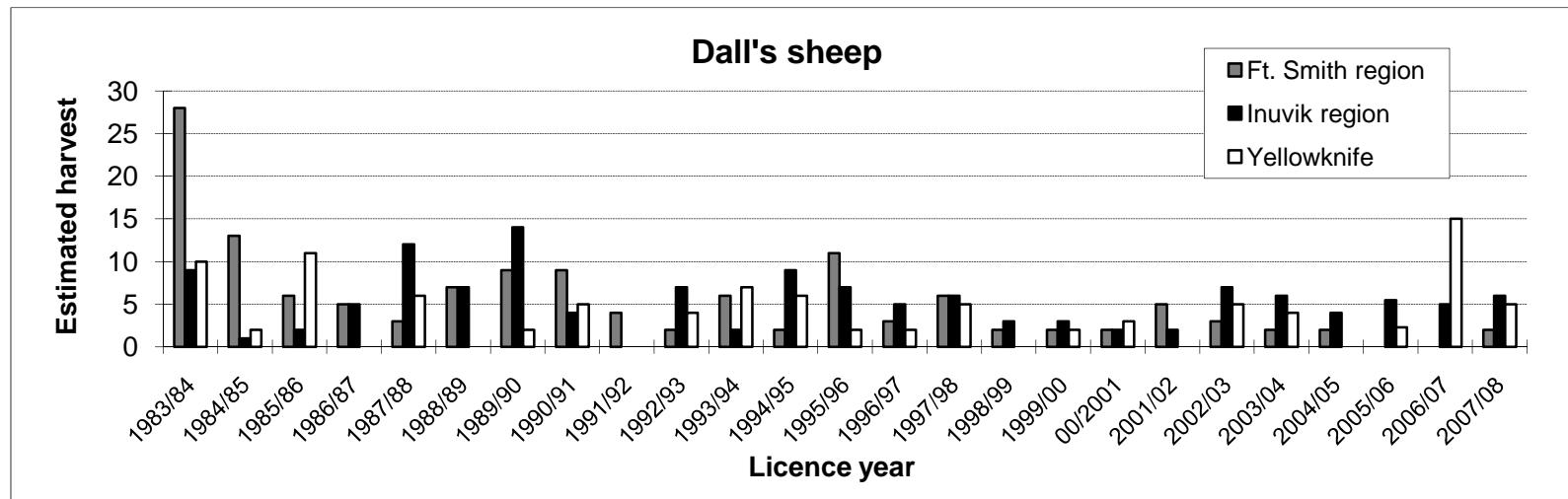


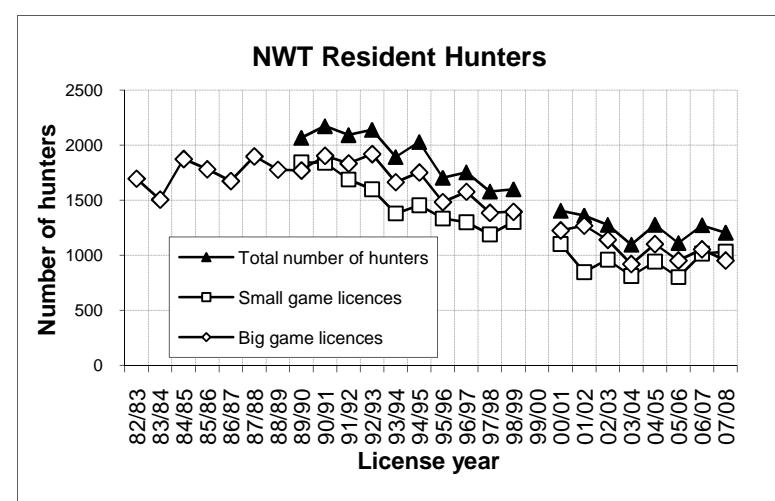
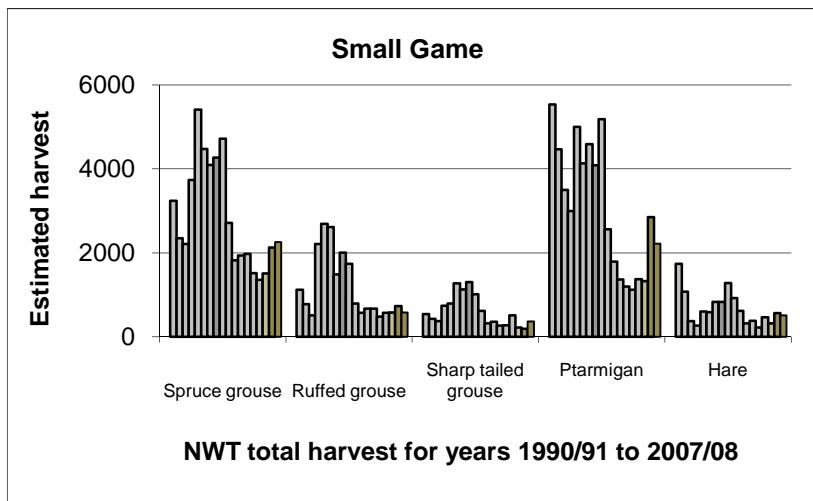
## Woodland Caribou



## Black Bear



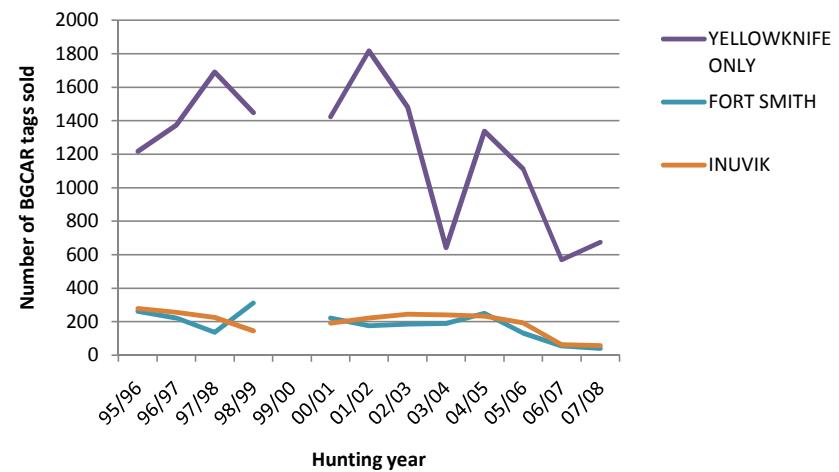




YEAR	NWT-wide			Number of BGCAR tags sold			
	Total number of hunters	Small game licences	Big game licences	YELLOW KNIFE ONLY	FORT SMITH	INUVIK	Nunavut regions
82/83			1695				
83/84			1505				
84/85			1873				
85/86			1780				
86/87			1673				
87/88			1897				
88/89			1776				
89/90	2065	1842	1769				
90/91	2172	1838	1903				
91/92	2091	1687	1833				
92/93	2138	1598	1918				
93/94	1891	1379	1663				
94/95	2028	1453	1751				
95/96	1702	1333	1482	1218	261	280	738
96/97	1752	1300	1576	1373	222	256	719
97/98	1579	1189	1385	1692	136	226	548
98/99	1597	1303	1394	1449	312	146	
99/00	unknown Problem with new licence database - Used previous year's tag sold to estimate harvest for that year.						
00/01	1403	1101	1225	1423	221	191	
01/02	1359	847	1269	1817	175	221	
02/03	1275	960	1139	1480	186	244	
03/04	1095	811	920	642	190	241	
04/05	1276	942	1101	1338	250	234	
05/06	1110	801	952	1113	132	193	
06/07	1271	1015	1054	570	55	64	
07/08	1204	1032	952	674	41	58	

GRAPH BELOW

### Number of BG Caribou tags sold



**Barren-ground Caribou (RHS regions = Yellowknife and Fort Smith)**

Region	All regions
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**Number of BGCAR hunters who reported hunting in 95-96**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
First	7	22	1	2	15	38	57	43	4
Second	1	0	0	0	1	6	6	5	2
Third	0	1	0	0	1	1	5	2	0
Fourth	0	0	0	0	1	0	0	2	0
Fifth	0	0	0	0	1	0	0	0	0
<b>1995-96</b>	<b>8</b>	<b>23</b>	<b>1</b>	<b>2</b>	<b>19</b>	<b>45</b>	<b>68</b>	<b>52</b>	<b>6</b> <span style="border: 1px solid black; padding: 2px;">224</span>

**Number of BGCAR hunters who reported hunting in 96-97**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
First	10	18	0	6	18	48	65	69	3
Second	1	0	1	0	1	7	10	12	2
Third	0	0	0	0	1	0	3	6	0
Fourth	0	0	0	0	0	0	2	1	0
Fifth	0	0	0	0	1	0	1	0	0
<b>1996-97</b>	<b>11</b>	<b>18</b>	<b>1</b>	<b>6</b>	<b>21</b>	<b>55</b>	<b>81</b>	<b>88</b>	<b>5</b> <span style="border: 1px solid black; padding: 2px;">286</span>

**Number of BGCAR hunters who reported hunting in 97-98**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
First	10	19	0	8	21	51	60	67	10
Second	0	1	0	0	4	10	17	23	2
Third	0	0	0	0	0	2	7	10	0
Fourth	0	0	0	0	0	0	2	4	0
Fifth	0	0	0	0	0	0	0	1	2
<b>1997-98</b>	<b>10</b>	<b>20</b>	<b>0</b>	<b>8</b>	<b>25</b>	<b>63</b>	<b>86</b>	<b>105</b>	<b>14</b> <span style="border: 1px solid black; padding: 2px;">331</span>

**Number of BGCAR hunters who reported hunting in 98-99**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April
First	4	12	2	9	25	24	37	39	6
Second	0	3	0	3	6	5	9	9	3
Third	0	0	0	0	1	1	3	4	0
Fourth	0	0	0	0	0	0	0	0	0
Fifth	0	0	0	0	0	0	0	0	0
<b>1998-99</b>	<b>4</b>	<b>15</b>	<b>2</b>	<b>12</b>	<b>32</b>	<b>30</b>	<b>49</b>	<b>52</b>	<b>9</b> <span style="border: 1px solid black; padding: 2px;">205</span>

**Number of BGCAR hunters who reported hunting in 99-00**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	4	12	2	9	25	24	37	39		6
Second	0	3	0	3	6	5	9	9		3
Third	0	0	0	0	1	1	3	4		0
Fourth	0	0	0	0	0	0	0	0		0
Fifth	0	0	0	0	0	0	0	0		0
<b>1999-00</b>	<b>4</b>	<b>15</b>	<b>2</b>	<b>12</b>	<b>32</b>	<b>30</b>	<b>49</b>	<b>52</b>	<b>9</b>	<b>205</b>

**Number of BGCAR hunters who reported hunting in 00-01**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	3	14	1	5	15	22	22	35		13
Second	1	3	1	0	3	3	7	8		5
Third	0	0	0	0	0	1	3	3		1
Fourth	0	0	0	0	0	1	2	0		0
Fifth	0	0	0	0	0	0	0	0		0
<b>2000-01</b>	<b>4</b>	<b>17</b>	<b>2</b>	<b>5</b>	<b>18</b>	<b>27</b>	<b>34</b>	<b>46</b>	<b>19</b>	<b>172</b>

**Number of BGCAR hunters who reported hunting in 01-02**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	2	23	0	12	45	36	34	52		16
Second	0	0	0	2	3	8	10	13		11
Third	0	0	0	0	2	2	2	3		3
Fourth	0	0	0	2	1	0	1	2		1
Fifth	0	0	0	0	0	1	0	0		1
<b>2001-02</b>	<b>2</b>	<b>23</b>	<b>0</b>	<b>16</b>	<b>51</b>	<b>47</b>	<b>47</b>	<b>70</b>	<b>32</b>	<b>288</b>

**Number of BGCAR hunters who reported hunting in 02-03**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	2	38		11	8	26	31	48		20
Second		1		1	2	4	7	7		1
Third								3		
Fourth						0		1		
Fifth						1		1		
<b>2002-03</b>	<b>2</b>	<b>39</b>	<b>0</b>	<b>12</b>	<b>10</b>	<b>30</b>	<b>38</b>	<b>60</b>	<b>21</b>	<b>212</b>

**Number of BGCAR hunters who reported hunting in 2003-04**

Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	2	16	1	2	7	16	29	20		5
Second	0	0	0	0	0	1	4	5		0
Third	0	0	0	0	0	0	0	0		0
Forth	0	0	0	0	0	0	0	0		0
Fifth	0	0	0	0	0	0	0	0		0
<b>2003-04</b>	<b>2</b>	<b>16</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>17</b>	<b>33</b>	<b>25</b>	<b>5</b>	<b>108</b>

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**Number of BGCAR hunters who reported hunting in 2004-05**

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Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	2	17	7	11	29	26	28	44		4
Second	0	0	1	1	1	6	6	15		4
Third	0	0	0	0	1	0	3	4		0
Fourth	0	0	0	0	0	0	0	1		0
Fifth	0	0	0	0	0	0	0	0		0
<b>2004-05</b>	<b>2</b>	<b>17</b>	<b>8</b>	<b>12</b>	<b>31</b>	<b>32</b>	<b>37</b>	<b>64</b>	<b>8</b>	<b>211</b>

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**Number of BGCAR hunters who reported hunting in 2005-06**

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Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	2	7	0	3	10	13	20	30		8
Second	0	0	0	0	0	4	2	3		1
Third	0	0	0	0	0	1	0	1		0
Fourth	0	0	0	0	0	1	0	0		0
Fifth	0	0	0	0	1	0	0	0		0
<b>2005-06</b>	<b>2</b>	<b>7</b>	<b>0</b>	<b>3</b>	<b>11</b>	<b>19</b>	<b>22</b>	<b>34</b>	<b>9</b>	<b>107</b>

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**Number of BGCAR hunters who reported hunting in 2006-07**

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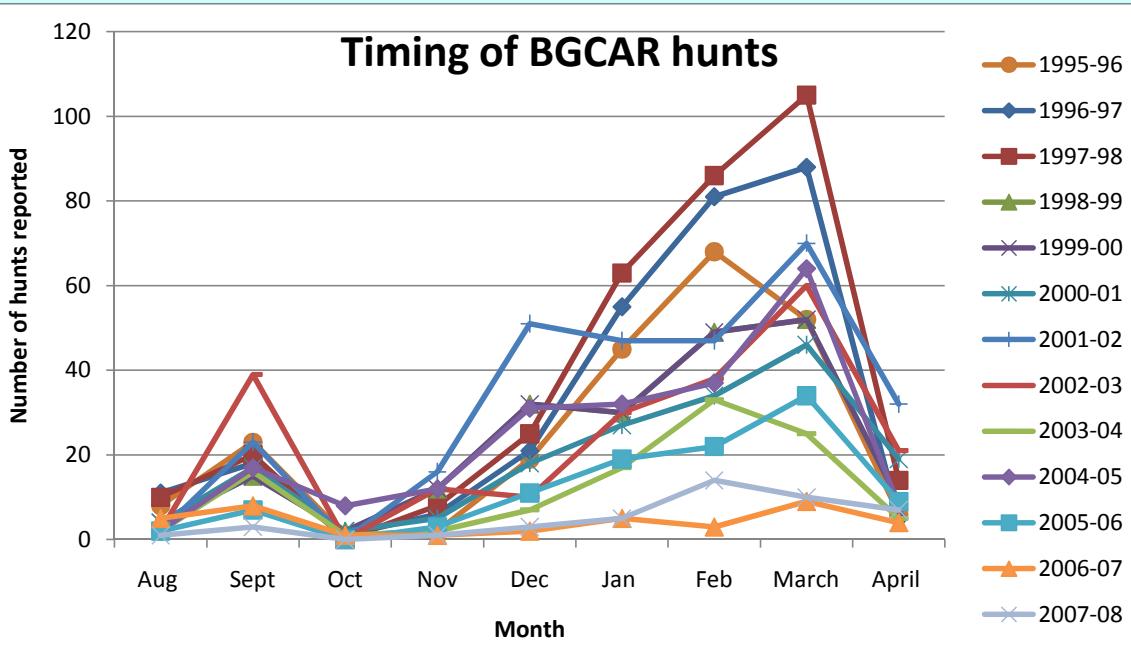
Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	5	8	1	1	2	4	3	9		3
Second	0	0	0	0	0	1	0	0		1
Third	0	0	0	0	0	0	0	0		0
Fourth	0	0	0	0	0	0	0	0		0
Fifth	0	0	0	0	0	0	0	0		0
<b>2006-07</b>	<b>5</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>9</b>	<b>4</b>	<b>38</b>

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**Number of BGCAR hunters who reported hunting in 2007-08**

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Hunts	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	
First	1	3	0	1	3	5	12	10		5
Second	0	0	0	0	0	0	2	0		2
Third	0	0	0	0	0	0	0	0		0
Fourth	0	0	0	0	0	0	0	0		0
Fifth	0	0	0	0	0	0	0	0		0
<b>2007-08</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>5</b>	<b>14</b>	<b>10</b>	<b>7</b>	<b>44</b>

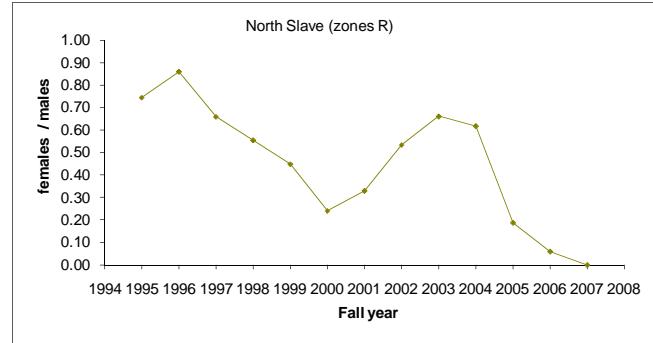


Summary of the sex and age ratio for BG caribou hunted for years 1995-96 to 2007-08 per hunting zones R and U

Number of females, males, juvenile reported killed for each hunting zone grouping (R and U) See Hunting zone sheet

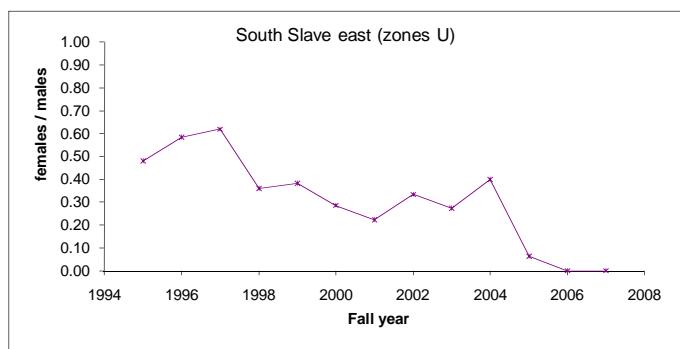
Hunting Zones North Slave (R, R/BC/01, old zone F1 and F2)

Fall Year	Male	Females	Juv.	% juv	total	Females/Males ratio
1995	286	213	25	4.8	524	0.74
1996	351	302	51	7.2	704	0.86
1997	264	174	18	3.9	456	0.66
1998	427	237	33	4.7	697	0.56
1999	256	115	11	2.9	382	0.45
2000	187	45	5	2.1	237	0.24
2001	388	128	22	4.1	538	0.33
2002	176	94	11	3.9	281	0.53
2003	127	84	8	3.7	219	0.66
2004	228	141	20	5.1	389	0.62
2005	133	25	3	1.9	161	0.19
2006	50	3	0	0.0	53	0.06
2007	47	0	0	0.0	47	0.00



Hunting Zones South Slave (U, U/BC/01, old zone H3)

Fall Year	Male	Females	Juv.	% calf	total	Females/Males ratio
1995	13	12	0	0.0	25	0.48
1996	10	14	2	7.7	26	0.58
1997	16	26	1	2.3	43	0.62
1998	16	9	0	0.0	25	0.36
1999	21	13	0	0.0	34	0.38
2000	55	22	0	0.0	77	0.29
2001	7	2	0	0.0	9	0.22
2002	6	3	1	10.0	10	0.33
2003	8	3	2	15.4	13	0.27
2004	3	2	0	0.0	5	0.40
2005	15	1	0	0.0	16	0.06
2006	4	0	0	0.0	4	0.00
2007	4	0	0	0.0	4	0.00



## **HUNTER HARVEST QUESTIONNAIRE 2008/2009**

**DO NOT REMOVE LABEL.**  
**QUESTIONNAIRE IS CONFIDENTIAL**  
**WHEN COMPLETED.**

**NOTE:**

1. **THIS QUESTIONNAIRE IS FOR THE PERIOD JULY 1, 2008 TO JUNE 30, 2009.**
2. **PLEASE complete each section whether your hunting trip was successful or not.**
3. **This information is confidential and will not be used for enforcement purposes.**
4. **A 'Wildlife Zone' map is enclosed.**

**IF YOU PURCHASED A SMALL GAME AUTHORIZATION ONLY PLEASE PROCEED TO SECTION H**

**A**

**DID YOU HUNT BARREN GROUND CARIBOU? Yes  No**

**If yes, were you successful? Yes  No**

**Please provide the following information - whether your hunt was successful or not.**

Hunt Location Lat/Long or nearest landmark	Wildlife Zone	Month of Hunt	# Days Hunted	Number of each type of kill		
				Bulls	Cows	Juveniles

**B**

**DID YOU HUNT MOOSE? Yes  No**

**If yes, were you successful? Yes  No**

**Please provide the following information - whether your hunt was successful or not.**

Hunt Location Lat/Long or nearest landmark	Wildlife Zone	Month of Hunt	# Days Hunted	Type of kill		
				Bull	Cow	Juvenile

**C**

**DID YOU HUNT WOODLAND CARIBOU? Yes  No**

**If yes, were you successful? Yes  No**

**Please provide the following information - whether your hunt was successful or not.**

Hunt Location Lat/long or nearest landmark	Wildlife Zone	Month of Hunt	# Days Hunted	Type of kill		
				Bull	Cow	Juvenile

**D**

**DID YOU HUNT BLACK BEAR? Yes  No**

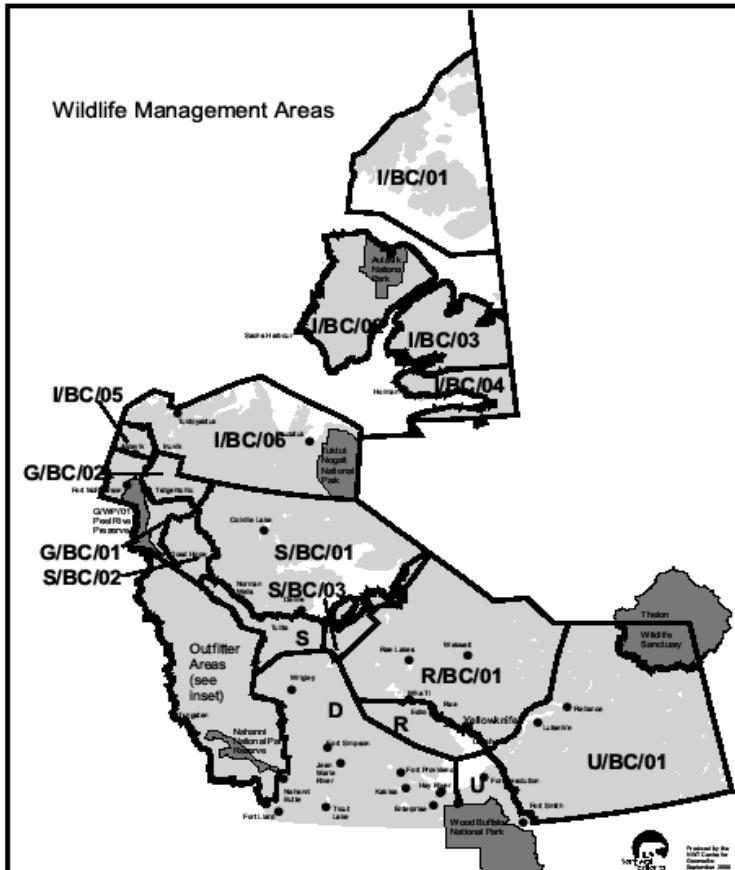
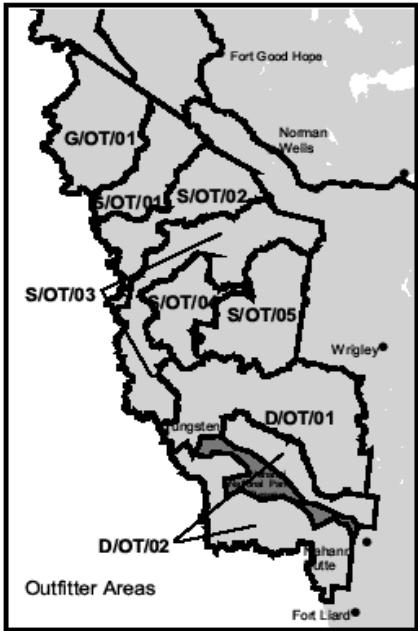
**If yes, were you successful? Yes  No**

**Please provide the following information - whether your hunt was successful or not.**

Hunt Location Lat/long or nearest landmark	Wildlife Zone	Month of Hunt	# Days Hunted	Type of Kill	
				Boar	Sow

<b>E</b>	<b>DID YOU HUNT WOLF?</b>		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
	If yes, were you successful?		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Please provide the following information - <b>whether you were successful or not.</b>								
Hunt Location Lat/Long or nearest landmark		Wildlife Zone	Month of Hunt	# Days Hunted	# Killed			
<b>F</b>	<b>DID YOU HUNT WOLVERINE?</b>		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
	If yes, were you successful?		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Please provide the following information - <b>whether you were successful or not.</b>								
Hunt Location Lat/Long or nearest landmark		Wildlife Zone	Month of Hunt	# Days Hunted	# Killed			
<b>G</b>	<b>DID YOU HUNT DALLS SHEEP?</b>		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
	If yes, were you successful?		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
Please provide the following information - <b>whether you were successful or not.</b>								
Hunt Location Lat/Long or nearest landmark		Wildlife Zone	Month of Hunt	# Days Hunted	Type of Kill 3/4 curl	full curl		
<b>H</b>	<b>DID YOU HUNT SMALL GAME?</b>		Yes <input type="checkbox"/>	No <input type="checkbox"/>				
How many of each kind did you bag?								
Hunt Location Lat/Long or nearest landmark		Wildlife Zone	Month of Hunt	Spruce Grouse	Ruffed Grouse	Sharp-Tailed Grouse	Ptarmigan	Hare

# NWT Resident Hunter Survey



2007-08 NWT Resident Hunter Big Game Kill

REGION	BLACK BEAR				WOODLAND CARIBOU				DALLS SHEEP			
	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL
Fort Smith	30	3	0	0	91	38	7	17	13	6	1	2
Inuvik	26	6	0	0	60	31	7	14	31	15	3	6
Yellowknife	160	21	2	15	238	77	11	34	50	10	1	5
TOTALS	216	30	2	15	389	146	25	64	94	31	5	13

REGION	MOOSE				WOLF				WOLVERINE			
	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL
Fort Smith	211	94	8	18	38	13	1	3	10	4	1	3
Inuvik	113	53	8	17	46	26	0	0	12	7	0	0
Yellowknife	497	168	34	101	209	67	1	3	116	38	0	0
TOTALS	821	315	50	136	293	106	2	6	138	49	1	3

Barren ground caribou:																
REGION	wave 1				wave 2				accum. 2		wave 3		accum. 3		See Graph	Ratio method
	no. hunters	tot. tags	resp. tags	rep. kill	EST. KILL	EST. KILL										
Fort Smith	22	41	5	2	13	0	18	2	6	0	24	2	4	3		
Inuvik	31	58	6	3	5	2	11	5	9	0	20	5	18	15		
Yellowknife	374	674	180	34	83	18	263	52	26	3	289	55	130	128		
TOTALS	427	773	191	39	101	20	292	59	41	3	333	62	152	146		

1.810304 tags per hunters

Graph BG Caribou calculations

Wave	Fort Smith		Inuvik		Yellowknife only	
	cumm. reported	resp. tags kills	cumm. reported	resp. tags kills	cumm. reported	resp. tags kills
1	5	2	6	3	180	34
2	18	2	11	5	263	52
3	24	2	20	5	289	55

BGC ratio kill/tags (graph sl) 0.1016

Estimated kills 4

Ratio method BG Caribou calculations

REGION	BGCARIBOU			
	TOTAL TAGS	RESP. TAGS	REP. KILL	EST. KILL
Fort Smith	41	24	2	3
Inuvik	58	20	5	15
Yellowknife	674	289	55	128
TOTALS	773	333	62	146

152

