

**REPORT ON THE 1991  
BELUGA WHALE  
AND WALRUS SUBSISTENCE  
HARVEST LEVELS**

**BY THE INUIT OF NUNAVIK**

May 1992

Report on the 1991  
Beluga Whale and Walrus Subsistence Harvest Levels  
by the Inuit of Nunavik

Prepared for:  
Department of Fisheries and Oceans

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## Introduction

Since 1981, the Inuit of Nunavik have been participating in a program to record information on their harvests of beluga whales and walrus. The data obtained from this program is designed to monitor the Beluga Whale Management Plan which was jointly developed by the Inuit of Nunavik and the Department of Fisheries and Oceans (DFO). The data are also used in conjunction with statistics available from as far back as 1974 through "The Research To Establish Present Levels of Native Harvesting", in order to provide resource managers and users with a long term profile of harvesting activities.

Data on harvest levels are required for several important reasons. First, the James Bay and Northern Quebec Agreement provides for guaranteed levels of harvesting for the Inuit of Nunavik. These levels were set in 1985 based principally upon the results of the seven-year Research to Establish Present Levels of Native Harvesting. In order to properly implement these guarantees in the context of the principle of conservation, however, reliable data on status of each population or stock of beluga whales and walrus, the sustainable yield from each and the annual harvest from each are required.

Second, it has been determined that the beluga populations which frequent the offshore area of Nunavik are in need of specific management initiatives and protection. The Committee on the Status of Endangered Wildlife in Canada (COSEWIC) have assigned a "Protected" status to the eastern Hudson Bay population and an "Endangered" status to the Ungava population. In addition, international pressure on the general plight of the beluga whale worldwide, is focussing attention on those areas where beluga whales are still harvested for food. It becomes increasingly important, therefore, that Inuit and government manage this harvest cooperatively to ensure that it is conducted in a sustainable manner.

While walrus populations in the region are not considered either by Inuit or government managers to be in need of special protection, their vulnerability to over-exploitation justifies monitoring of harvest levels. In

addition, occasional cases of trichinellosis poisoning report in Nunavik make it important to locate the source of the contaminated walrus meat.

Finally, as the Inuit of Nunavik move steadily towards self-government, an increasing awareness of the need for planning and the value of information in this process is developing.

Figure 1 locates the Inuit communities participating in the data collection program and indicates the communitiy quotas assigned by the "1990-1991" Beluga Whale Management Plan for Nunavik".

## **Methodology**

Data were collected on a weekly basis between the period of June 2 to December 12, 1991. Animals harvested prior to this period were reported at the beginning of the program. An individual in each of the 14 Inuit communities was responsible for obtaining information on the number of beluga whales and walrus taken each week along with supporting information such as sex, relative age, location of kill, strikes and losses, sitings, weather conditions or any notable circumstances.

The information was called or telefaxed in to an employee of DFO located in Inukjuaq. This employee acted as coordinator of the program and was also responsible for following up with each community agent if information was not forthcoming. The coordinator compiled the information as it was obtained, keeping a running total with commentary, on the progress of the hunts. This information was transmitted to DFO at the end of the recording year.

## Beluga Whales

Beluga whales (*Delphinapterus leucas*) have long been an important subsistence resource for the Inuit of Nunavik. Apart from being a significant source of meat, the skin or *muktuk* is considered a delicacy. Beluga whale harvesting, especially the summer hunt along the coast in the estuaries of certain rivers, is also associated with the advent of the summer season, characterized by moving residence to summer camps. It is a social event as both the harvesting and processing of the kill are group efforts.

Nunavik hunters have access to the three beluga whale populations or stocks: the Ungava, Hudson Strait and eastern Hudson Bay. The Ungava and eastern Hudson Bay hunts occur in the summer months where the animals are found along the coast in river estuaries. Occasionally, animals are taken further offshore, usually in proximity to offshore islands. Harvesting in the Hudson Strait occurs in the spring and fall while animals are migrating. There have been instances of winter kills of animals that have been 'trapped' by the ice from moving into open water.

As estimates of initial population size from historical harvest records show, the beluga whale populations in the Nunavik region have dropped dramatically over the last century (COSEWIC Status Report). Large scale commercial fisheries, conducted principally by the Hudson Bay Company were removing hundreds and sometimes thousands of animals per year in the late 1800's and early 1900's from southeastern Hudson Bay and southern Ungava Bay.

Inuit began to move from the land into centralized communities in the 1950's, which were commonly located at river estuaries. The associated noise, increased activity and local hunting pressure resulting from these demographic changes, likely effected the beluga whale populations.

At present only Native people (Inuit and Indians) can harvest beluga whales from these populations. Current population estimates, based on research conducted in the 1980's, indicate that the summering populations of southeastern Hudson Bay and Ungava Bay require protective measures. As a

result, specific management techniques such as sanctuaries at the Mucalic and Nastapoka River estuaries, controlled harvesting techniques and quotas are now all in place under the "1990-1991 Beluga Whale Management Plan" for Nunavik.

#### The 1991 harvest

The 14 participating communities reported a harvest of 284 beluga whales. By region this represents 124 beluga whales taken in Hudson Bay, 127 in Hudson Strait, and 33 in Ungava Bay.

Table 1 presents the reported harvest by community, by month. According to the data sheets, most of the animals reported by Inukjuaq, Povungnituk and Akulivik were taken from the Nastapoka during the months of July and August. From the locational data, at least 33 whales were taken during July at the Nastapoka River. Kuujuaq reported one whale taken in the Mucalic River sanctuary. Of the 33 animals reported by the Ungava Bay communities, it appears that only 11 of these were taken outside of Ungava Bay in the Quartaq region.

Data on the sex and relative age are almost nonexistent. Only one strike/loss was reported. Two animals were reported caught in nets, one accidentally.

Table 2 presents the 1991 harvests in relation to reported harvests since 1974. The harvest precisely doubled from 1990.

#### Management Implications

Table 3 presents the 1991 harvests with the existing quotas for each community and beluga population established by the "1990-1991 Beluga Whale Management Plan for Nunavik. It is obvious that in specific cases the quotas have been exceeded. This, in conjunction with hunting during the July moratorium at the Nastapoka River and the harvest from Ungava Bay, including the Mucalic River sanctuary, strongly argues for further



communication among government and Inuit resource managers, users and the organizations that represent them.

## Walrus

Walrus (*Odobenus rosmarus*) are found in scattered groups throughout the Nunavik, region. While some coastal harvesting takes place, offshore islands are the main harvesting sites. Walrus were usually harvested as a source of dog food, therefore, with the shift from dog teams to motorized transport by the 1960's, Inuit say that the harvest dropped. This was also the period where the last of the old Peterhead boats, which were the main mode of transport to the distant offshore island disappeared.

Interest in walrus harvesting had a resurgence in the 1980's when larger sea-going boats were introduced to Nunavik through government sponsored vessel acquisition programs. Other factors, such as outbreaks of trichinellosis associated with walrus meat and an indication that young Inuit are less appreciative of walrus meat than the elders, appear to be limiting the numbers harvested.

### The 1991 harvest

A total of 66 walrus were reported for 1991. Table 4 presents the harvest by community and by month harvested. Of the 14 animals harvested by Inukjuaq and Povungnituk, 11 were taken during a single hunt at the Sleeper Islands using the MV "Qairulik" and the MV "Kigiak" during the month of September. Ivujivik harvested its 13 walrus at Nottingham Island in October.

Table 5 presents the 1991 reported harvests including historical data since 1974. While the total harvest is higher than that reported in 1990, it is well within the range of annual harvests since 1974, both in terms of regional totals and individual community totals.

### Management Implications

As mentioned earlier in the text, walrus in the Nunavik region are not considered in need of specific management initiatives. The harvests for 1991 and the events surrounding them should not give rise to any concern for resource managers.

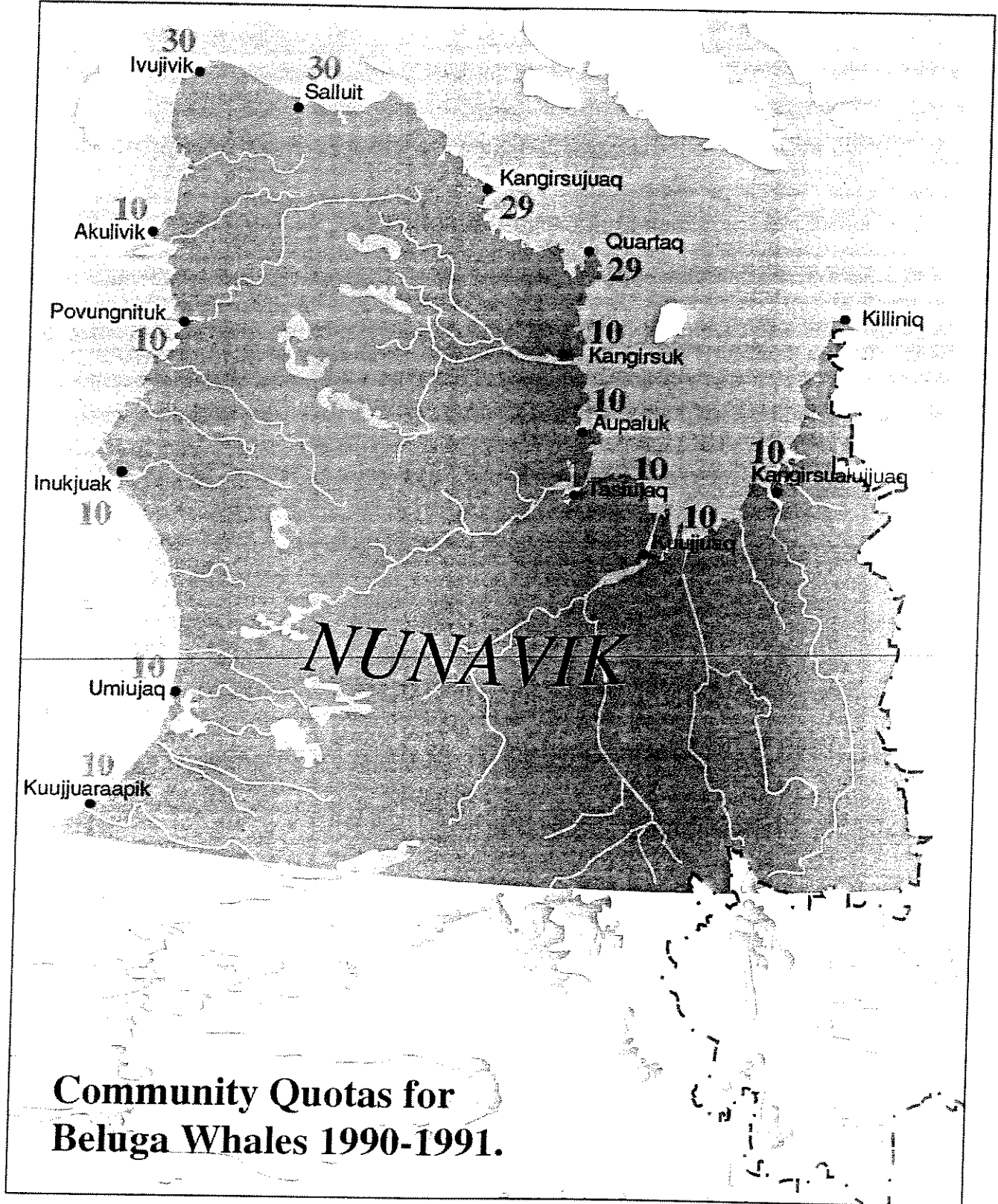
## Conclusion

Cooperation from the communities in providing harvest data was generally good. The lack of accompanying information on the harvests of beluga whales and walrus, however, indicates that this type of data is much more difficult to obtain. It may be useful for the responsible agencies to assess the relative importance of this information and the risk that requiring too much detail may jeopardize the success of the program as a whole. Seeking the advice of local personnel on this matter would be advisable.

While it would not be responsible to suggest that the increase in harvests from 1990 means that the management plan is not being respected, it would also not be responsible to suggest that all is well. Clearly, whether at the individual or community-wide level, some problems do exist. These will need to be openly discussed in the context of continuing co-management with the possibility of enforcement mechanisms evaluated.

International environmental groups are continuing to lobby for a ban on all hunting/harvesting of small cetaceans. It is a continuing issue at the International Whaling Commission and has been introduced to the 1992 United Nations Conference on Environment and Development where it has garnered some support. Environmental groups do have an influence on the ability of Native peoples and local communities to continue to harvest wildlife. We only have to witness the devastating results on Inuit and Indian communities from the ban of fine furs and seal skins. Solid data, education, and sound management practices are the only way to counter these pressures.

Figure 1



Orientation C.G.R.

Table 1  
1991 Nunavik  
Beluga Whale Harvest by Community, by Month

Community	March	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Kuujjuarapik		6	2	4					12
Umiujaq		4	12	1	1		6		24
Inukjuak			12	8					20
Povungnituk			22	11			17		50
Akulivik				10		8			18
Ivujivik		19		1		10	1		31
Salluit			23			5			28
Kangiqsujuaq		14	15		1		9		39
Quartaq		12	16	1					29
Kangirsuk		1	5	6					12
Aupaluk				1	1	7			9
Tasiujaq				2					2
Kuujjuaq			1	2					3
Kangiqsualujuaq	1			1			4	1	7
Totals	1	56	108	48	3	30	37	1	284

Table 2

## Annual Beluga Whale Harvest for Nunavik (1974-1991)

Community	Harvest Year																	
	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
<b>Hudson Bay Communities</b>																		
Kuujuarapik	28	24	50	55	51	63	75	32	45	46	35	40	10	11	0	8	8	12
Umivjaq	-	-	-	-	-	-	-	-	-	-	-	-	3	15	12	18	12	24
Inukjuak	88	106	79	124	62	120	144	26	18	19	58	11	7	11	17	17	11	20
Povungnituk	-	-	-	-	-	-	-	-	-	-	-	-	0	16	23	41	22	50
Akulivik	3	7	4	2	7	28	1	3	10	4	4	11	12	12	12	19	9	18
Sub-total	119	137	133	181	120	211	220	61	73	69	97	62	32	65	64	103	62	124
<b>Hudson Strait Communities</b>																		
Ivujivik	-	-	-	-	-	-	-	-	58	126	69	69	5	24	19	118	-	31
Salluit	84	159	66	104	36	42	50	57	41	53	29	22	24	20	16	53	17	28
Kangiqsujuaq	150	174	98	118	62	74	37	14	21	22	26	32	22	28	28	28	24	39
Quartaq	26	36	55	85	39	30	65	28	25	38	46	32	21	21	15	35	18	29
Sub-total	260	369	219	307	137	146	152	157	213	182	170	121	72	93	78	234	59	127
<b>Ungava Bay Communities</b>																		
Kangirsuk	37	48	44	79	10	4	4	14	9	12	3	7	9	8	7	11	10	12
Aupaluk	-	-	6	31	4	-	-	4	2	3	2	3	3	1	2	3	5	9
Tasiujaq	4	9	3	23	-	3	11	5	6	13	4	9	14	4	11	9	3	2
Kuujuuaq	41	64	102	30	13	34	31	30	29	14	5	2	10	5	2	8	3	3
Kangiqsuajuaq	10	27	20	15	10	37	14	26	12	3	5	3	5	2	1	0	0	7
Killiniq/Tagpangayuk	0	15	9	16	-	-	-	-	-	-	-	8	1	0	4	-	-	-
Sub-total	92	163	184	194	37	78	60	79	58	45	19	32	42	20	27	31	21	33
Total	471	669	536	682	294	435	432	297	344	296	286	215	146	178	169	368	142	284

(-) No data available

Table 3

1991 Beluga Whale Harvest and Existing Quotas  
as Established by the  
1990-1991 Beluga Whale Management Plan for Nunavik

Community	Total Quota	Total 1991 Harvest
<u>Hudson Bay Region</u>		
Kuujjuarapik	10	12
Umiujaq	10	24
Inukjuak	10	20
Povungnituk	10	50
Akulivik	10	18
Sub-total	50	124
<u>Hudson Strait Region</u>		
Ivujivik	30	31
Salluit	30	28
Kangiqsujuaq	29	39
Quartaq	29	29
Sub-total	118	127
<u>Ungava Bay Region (to be harvested in Hudson Strait)</u>		
Kangirsuk	10	12
Aupaluk	10	9
Tasiujaq	10	2
Kuujjuaq	10	3
Kangiqsualujjuaq	10	7
Sub-total	50	33
Grand total	218	284

Table 4  
1991 Nunavik  
Walrus Harvest by Community, by Month

Community	Aug.	Sept.	Oct.	Nov.	Total
Kuujjuarapik					0
Umiujaq					0
Inukjuak		5	3		8
Povungnituk		6			6
Akulivik				9	9
Ivujivik			13		13
Salluit		3			3
Kangiqsujuaq	2			1	3
Quartaq		10			10
Kangirsuk		6			6
Aupaluk		2			2
Tasiujaq		6			6
Kuujjuaq					0
Kangiqsualujjuaq					0
Totals	2	38	16	10	66



Table 5

## Annual Walrus Harvest for Nunavik (1974-1991)

Community	Harvest Year																	
	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91
<b>Hudson Bay Communities</b>																		
Kuujuarapik	0	1	2	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0
Umiujaq	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	1	0
Inukjuak	4	7	1	3	2	8	7	7	2	0	15	9	11	12	7	0	8	8
Povungnituk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	16	0	6
Akulivik	12	15	18	0	0	3	5	24	8	1	0	16	1	18	10	1	4	9
Sub-total	16	23	21	3	2	11	12	32	10	2	15	26	23	30	33	2	13	23
<b>Hudson Strait Communities</b>																		
Ivujivik	-	-	-	-	-	-	-	33	29	57	-	16	0	19	8	11	-	13
Salluit	57	59	13	1	0	5	36	30	73	2	27	16	91	1	8	0	10	3
Kangiqsujuaq	2	5	4	7	0	0	9	0	0	1	0	17	41	2	0	0	0	3
Quartaq	13	9	5	7	0	7	10	3	2	6	9	8	7	6	10	4	12	10
Sub-total	72	73	22	15	0	12	55	66	104	66	36	57	139	28	26	15	22	29
<b>Ungava Bay Communities</b>																		
Kangirsuk	7	7	7	9	2	1	8	4	5	7	3	13	3	0	7	5	-	6
Aupaluk	-	-	1	0	0	0	0	0	0	1	1	3	0	0	0	0	3	2
Tasiujaq	0	0	2	0	0	0	0	0	0	0	0	0	9	7	3	5	3	6
Kuujuuaq	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Kangiqsuajjuaq	0	1	1	0	0	1	0	0	0	0	0	0	0	3	0	5	0	0
Killiniq/Taqpangayuk	1	4	0	1	-	-	-	-	-	-	-	1	0	0	-	-	-	-
Sub-total	8	12	11	10	2	2	8	4	5	8	4	17	12	10	10	18	6	14
Total	96	108	54	28	4	25	75	102	119	76	55	100	174	68	69	35	41	66

(-) No data available.

## **Acknowledgements**

The participation of the Nunavik hunters and boat captains is indispensable to the success of the belgua whale and walrus harvest study. Their cooperation in 1991 is appreciated. As coordinator of the study, Mr. Moses Nowkawalk's efforts, and the work of the individual community agents, along with the continued financial and technical support of DFO is also acknowledged.

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