

**Aalisarnermut, Piniarnermut Nunalerinermullu Pisortaqarfik**  
Aqutsinermi allattoqarfik

**Direktoratet for Fiskeri, Fangst & Landbrug**  
Ledelsessekretariatet

**Department of Fisheries, Hunting and Agriculture**  
Management board



## **The Supervisor**

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### **Subj.: Greenland's comment to US plan of listing the polar bear as threatened under the endangered species act**

4. april 2007  
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I would like to respond to the request for public comments on the proposed rule to list polar bears as a "threatened species" under the U.S. Endangered Species Act.

I circulated a first draft of the letter you are reading now and its associated appendices among the Department of Industry, the Department of Environment and Nature, and the Organization of Fishermen and Hunters in Greenland. I have incorporated the comments of these organizations to the text, and thus this letter represents the view of the Greenland Home Rule Government, and the Greenlandic hunters. Additionally, the Greenland Institute of Natural resources has reviewed the validity of the biological facts mentioned in the letter and appendices.

In the following pages we will try to explain why Greenland Home Rule thinks it is premature to list polar bears as threatened given the information available now, and why such listing may work against more effective conservation measures. Instead we would advice to closely monitor the status of the species and take future decisions on the basis of actual demographic changes.

In the appendices to this letter, I am providing you with detailed and updated information about the status of the polar bear populations and the current management of polar bears in Greenland. I hope that this will help you to assess the current situation of our polar bear populations, and provide useful information on the likely implications for Greenland of listing of the polar bear as "Threatened" under the US Endangered Species Act.

### **Significance of polar bears for Greenland**

Besides being a significant natural resource, polar bears play a central role in our mythology and in our culture. As you can see from the logo of our Home Rule Government, the polar bear is the national symbol of Greenland.

Allakkat tamarmik pisortaqarfinnut nassiunneqassapput inunnut ataasiakkaanuunngitsaq.

Al korrespondance bedes adresseret til direktoratet og ikke til enkelte personer

All correspondence should be addressed to the department, not individual employees

In a country mostly covered by ice, and in an environment unsuitable for large-scale agriculture, people could only thrive and develop by being able to fish and hunt. Fishing and hunting are still important parts of the culture and the economy of modern Greenland. Many families depend on income from the country's natural resources, which we are committed to preserve. Polar bears are particularly important for the subsistence hunters in the remote areas of East and Northwest Greenland, where living conditions are particularly harsh and alternative sources of income are limited (see appendix 1).

Conservation and sustainable utilization of polar bears is therefore very important for Greenland, for cultural, social and economic reasons. Greenland will therefore continue to take part in international fora to ensure conservation and sound management practises.

### **Likely effects of listing polar bears under the U.S. Endangered Species Act.**

According to the US Endangered Species Act of 1973, "...it is unlawful for any person subject to the jurisdiction of the United States to-(A) import any such species into, or export any such species from the United States;..."<sup>1</sup>

The listing the polar bear as threatened could therefore result in import and export restrictions that are stronger than the bans existing today. An up-listing of the polar bear by the US may result in other international bodies (e.g. CITES, EU, etc.) initiating an up-listing of the species. This can lead to other export and import bans in potential markets for trophy hunting and souvenir sales, with consequences for the rural Inuit communities that depend on income from this species.

Such stronger bans may negatively affect the income that the Inuit hunters and the tourist industry derive from the sale of mounted skins, skulls, polar bear parts in jewellery and other ornamental products. A stronger ban will also prevent future access to US market for trophy hunting, which in Greenland is recognised as having the potential to constitute an important income in the remote areas where polar bear hunting occur.

Should the US Government decide to list the polar bear as threatened, Greenland strongly support that the US Fish and Wildlife Service consider a special rule allowing continued import of trophies from healthy populations as mentioned on the US Fish and Wildlife Service website<sup>2</sup>.

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<sup>1</sup> US ESA, section 9 (a) (1).

<sup>2</sup> see <http://www.fws.gov/home/feature/2006/PolarbearFAQ.pdf>

## Climate change

The US Endangered Species Act requires that a species be listed if it is imperiled by one or more out of five criteria. Polar bears are being considered on the basis of “Present or threatened destruction, modification or curtailment of its habitat or range”<sup>3</sup>. The potential “destruction, modification or curtailment” of the polar bear’s habitat is due to the melting of sea ice caused by human-induced climate change.

Reduction of Arctic sea ice during summer has been a trend during the past few decades, and further reduction is expected in the future<sup>4</sup>. Polar bear and other species that depend on the edge of the sea ice for survival may have to shift their distribution in order to adapt to changing conditions. However, climate change will affect ice conditions and prey distribution differently in different regions of the Arctic, and therefore the response of individual polar bear populations to climate change will also vary. Those populations inhabiting the southern limits of polar bear distribution are expected to be more affected by a warming climate<sup>5</sup>.

As far as we know, reduction associated with climate change has been documented only for the Western Hudson Bay population. We would like to point out that a documented decline in a few southern populations, such as Western Hudson Bay does not necessarily imply that the polar bears as a species are likely to become “threatened” or “endangered” in the foreseeable future. Polar bear populations may decline, shift their range, thrive or even be unaffected by climate change. Therefore, listing of polar bears should not be automatically warranted by the decline of a single population in the southernmost edge of the polar bear range.

The polar bear have become an icon for climatic change and several environmental groups are advocating for the enlisting of polar bears as a threatened species, with the aim of using the polar bear as a symbol that will help to put pressure on governments to reduce carbon emissions. We understand the importance of reducing carbon emissions and we are concerned about the accumulation of toxic chemicals in our food sources (especially on top predators of fish and wildlife species). As a people living in the north, where the effects of climate change are predicted to be more dramatic, we urge all countries to reduce their levels of pollution. However, using the polar bear as a symbol to reduce global warming will have a negative impact on the livelihoods of Inuit people, who ironically are already being adversely affected by climate change. Greenland therefore finds it is utterly unfair to make the Inuit people pay the price of a good publicity campaign.

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<sup>3</sup> US ESA, SEC. 4. (a) GENERAL. - (1)

<sup>4</sup> Arctic Council (2004). Arctic Climate Impact Assessment, Cambridge University Press, UK.

<sup>5</sup> Parks *et al.* 2006. Seasonal and annual movement patterns of polar bears on the sea ice of Hudson Bay. *Can. J. Zool.* 84: 1281 – 1294

### **Management of polar bears in Greenland**

Our country is within the range of five polar bear populations recognized by the IUCN/SSC Polar Bear Specialist Group. In 2005, this group made a status report of all populations of polar bears<sup>6</sup>. Out of the 19 existing populations, not a single one was considered as threatened or endangered. Seven were categorized as data deficient, five were stable, two were increasing and five were under the risk of declining due to probable unsustainable harvest levels.

Of the populations considered under the risk of declining, one is shared by the US and Canada (Southern Beaufort Sea), two are in Canada (Norwegian Bay and Western Hudson Bay) and the remaining two are shared by Canada and Greenland (Kane Basin and Baffin Bay).

The Greenland Institute of Natural Resources pointed out that the combined catches of Greenland and Nunavut for the Baffin Bay and Kane Basin populations are higher than the recommended sustainable off-take. Acknowledging a need for improved control of the polar bear hunt in Greenland, a new executive order introducing quotas and other protection measures was implemented by The Home Rule Government in October 2005<sup>7</sup>.

Quotas were introduced the 1<sup>st</sup> January 2006. Biological advice from Greenland Institute of Natural Resources indicated that the polar bear quotas from 2006 were still above the recommended sustainable off-take for some populations (see appendix III). The Department of Fisheries, Hunting and Agriculture therefore adopted a three-year quota reduction plan that should lead to sustainable quotas in 2010 (see appendix II).

The reason for gradually decreasing quotas is to provide local hunters with time to adapt to new regulations by identifying or developing alternative income-generating activities. A sudden reduction of quotas would have implications for the livelihood of many subsistence hunters in East and Northwest Greenland who are already under serious economical pressure due to recent restrictions on the catches of marine birds, narwhals, belugas and walrus. The Department of Fisheries, Hunting and Agriculture therefore find it necessary to reduce the quotas gradually, in order to ensure local adherence to regulations. This is especially important in a country with limited financial resources for control and logistical challenges in terms of vastness of territory and harsh climate conditions. Introduction of drastic

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<sup>6</sup> Compiled and edited by Jon Aars, Nicholas J. Lunn and Andrew E. Derocher (2006). *Polar Bears: Proceedings of the 14th Working Meeting of the IUCN/SSC Polar Bear Specialist Group, 20–24 June 2005, Seattle, Washington, USA*. IUCN, Gland, Switzerland and Cambridge, UK.

<sup>7</sup> This is described in: Lønstrup, A. (2006). Polar bear management in Greenland. In: Aars, J., Lunn, N. J., Derocher, A. E. (eds.). *Polar Bear: Proceedings of the 14<sup>th</sup> working meeting of the IUCN / SSC Polar Bear Specialist Group, 20-24 June 2005, Seattle, Washington, USA*. IUCN, Gland, Switzerland and Cambridge, UK. Pp. 133-134.

limitations to local livelihoods have elsewhere shown to cause communities to ignore new management regulations<sup>8</sup>.

As we increase restrictions on hunting, hunters need to find or develop alternative sources of income. In 2005, we introduced a new executive order that opens a possibility for these hunters to take paying customers into well-organised trophy hunting. Trophy hunting is being considered as a way to increase the profit that hunters and small communities can obtain out of one bear. In Greenland it is seen as a way to optimise local income from sustainable harvest of available natural resources and thus help increase the adherence to regulations and the motivation to keep harvests at a sustainable level through economic incentives.

Trophy hunting of polar bears is at present not allowed in Greenland. The current policy is that trophy hunting will not be practiced until we can ensure that the harvest is sustainable and that it is carried out in an organised and regulated way that provides benefit for communities with limited alternative sources of income. We would like to stress the fact that trophy hunting will NOT lead to an increase in the number of bears taken. More will it be a management tool to increase conservation incentives in local hunting communities.

The assumed decrease of some polar bear populations is based on modelling including previous population estimates, catch statistics and a number of more or less well known biological parameters. We have no firm documentation of decreasing polar bear populations in Greenland. We therefore find it important to improve monitoring in times were climatic changes may lead to changes in distribution patterns for the polar bear. The Greenland Home Rule Government and the Greenland Institute of Natural Resources, therefore have taken several initiatives that will improve adaptive management responses to possible changes<sup>9</sup>.

In summary, we are doing considerable progress towards ensuring a sustainable management of the polar bears.

### **International agreements**

The Kingdom of Denmark, on behalf of Greenland, is one of the five countries that in 1973 signed the International Agreement on the Conservation of Polar Bears and Their Habitat, also known as the Oslo Agreement. The other signatories are

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<sup>8</sup> Gibson, C. C. and Marks, S. A. (1995). Transforming rural hunters into conservationists: An assessment of community-based wildlife management programmes in Africa. *World Development*, vol. 23 (6), pp. 941-957. Abstract available at:

[http://www.sciencedirect.com/science?\\_ob=ArticleURL&\\_udi=B6VC6-3YCMM78-2V&\\_user=10&\\_coverDate=06%2F30%2F1995&\\_rdoc=1&\\_fmt=&\\_orig=search&\\_sort=d&view=c&\\_acct=C000050221&\\_version=1&\\_urlVersion=0&\\_userid=10&md5=106bbfd85474b80da91d063999e35987](http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VC6-3YCMM78-2V&_user=10&_coverDate=06%2F30%2F1995&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=106bbfd85474b80da91d063999e35987)

<sup>9</sup> The Greenland Institute of Natural Resources has applied for funding for assessing polar bear populations in East Greenland and Baffin Bay, and the Home Rule Government is seeking to develop local-based monitoring.

Canada, the United States of America, Russia (then the USSR) and Norway. We have incorporated the relevant articles of the Oslo Agreement into our legislation. As part of our commitment to fulfill the intent of the Agreement, we conduct national research programs, coordinate these with other signatory countries and attend the working meetings of the IUCN/SSC Polar Bear Specialist Group.

During the fall of 2000, the Greenland Home Rule Government signed a Memorandum of Understanding (MOU) with the Government of Nunavut (Canada). This is a general agreement of cooperation, with a specific mention to polar bears.

Recognising the further need for collaborative management of shared polar bear populations, the Ministry of Fisheries, Hunting and Agriculture has had a number of meetings with representatives of the Government of Nunavut and the Government of Canada since early 2006. We have discussed cooperation in the management of the populations of Kane Basin and Baffin Bay and have agreed to develop a formal international bilateral agreement that will contribute to the sustainable management of these populations. This agreement should respect existing consultation processes and legal requirements concerning polar bears in Greenland, Nunavut, and Canada. In the meanwhile, we continue exchanging information relevant to management of polar bears in both areas.

Greenland is thus committed to collaborative management of shared populations to improve the conservation and management of polar bears. We coordinate our efforts with the other Arctic nations through the Oslo Agreement and with our neighbours in Nunavut. International mechanisms to protect and manage polar bears exist and, given the status of polar bear populations and socio-economic implications for rural areas, Greenland sees no need to list the polar bear as a "threatened species" under the U.S. Endangered Species Act at present. Instead Greenland finds it important to closely monitor populations to allow adaptive management responses to occurring changes.

## **Conclusion**

The Greenland Home Rule is addressing the concerns raised by our advising scientists, and we are doing considerable progress towards ensuring a sustainable management of the polar bears. Internationally, Greenland takes part in multilateral agreements and research organizations dealing with polar bears and we have engaged in collaborative management discussions with Canada and Nunavut to ensure sustainable use of shared polar bear populations.

Listing polar bears as threatened may actually work against our efforts to increase the protection of polar bears, since it may lead to import/export bans that would affect efforts to optimize income from a sustainable harvest of available natural resources in remote polar bear areas. Economic incentives associated with a continued utilization of the polar bear, may ensure stronger local support sustainable use and adherence to regulations.

Despite the negative effects for our country of potential import/export bans, we would support the listing of polar bears as threatened if such an action was based on facts and the polar bears were indeed threatened. However, polar bears are abundant throughout their entire original range and not a single population is considered as threatened by the IUCN/SSC Polar Bear Specialist Group.

Therefore Greenland would advise the US Government to closely monitor the status of the species in collaboration with the IUCN/SSC Polar Bear Specialist Group, and secure that an eventual future decision to up-list the polar bear under the US Endangered Species Act is based on the factual status of polar bear populations.

Should the US decide to list the polar bear as threatened, Greenland strongly urge The US Fish and Wildlife Service to adopt a special rule that allows import of trophies and other souvenirs from healthy, sustainable managed populations. This would only be fair for the hunting communities in the arctic, whose livelihood depends on natural resources for subsistence and income.



Amalie Jessen

Deputy Minister of Fisheries, Hunting and Agriculture

Appendix I – Status of Polar Bear Management in Greenland 2007

Appendix II – Greenland Home Rule, Press release on polar bear quotas for 2007 – 2009

Appendix III – Biological advice from the Greenland Institute of Natural Resources (at present only available in Danish. An English translation can be prepared upon request)

Appendix IV – Executive order on protection and management of polar bears in Greenland

## Appendix 1

**Table 1. Status of Polar bear populations in Greenland**

| Population   | Population size    |                          |   | Biological advice on sustainable harvest <sup>2</sup> | Quotas<br>Actual harvest in ( )   |  | Comments based on IUCN/SSC PBSG comments to population status <sup>3</sup>   |
|--|--------------------|--------------------------|---|---|---|--|--|
|  | Year of assessment | Number of bears          | Methodology   |   | Greenland   | Canada/<br>Nunavut   |  |
| Kane Basin   | 2006               | 164                      | Satellite radio-collars and Mark - recapture                          | 7   | 2006: 24 (7)<br>2007: 10<br>2008: 8<br>2009: 6  | 2006: 5 (0)  | Nunavut actual harvest 2006 was 0. Hence Greenlandic hunters were the only to harvest from this population in 2006. Combined Greenlandic and Canadian quotas were unsustainable in 2006 according to IUCN PBSG <sup>3</sup> . Co-management discussions with Canada have been initiated. |
| Baffin Bay   | 1984-1989          | 300-600*                 | Mark - recapture  | 92  | 2006: 76 (71) <sup>~</sup><br>2007: 73 <sup>~</sup><br>2008: 71 <sup>~</sup><br>2009: 68 <sup>~</sup> | 2006: 93 (97)  | The IUCN Polar Bear Specialist Group stated at their 2005 meeting that the population appear to be substantially over-harvested. Since then Greenland have introduced quotas and begun collaborative management discussions with Canada. <sup>3</sup>                                    |
|  | 1993-1997          | 2074                     | Mark - recapture  |   |   |  |  |
|  | 2004               | 1600                     | Simulation model  |   |   |  |  |
| Davis Strait   | 1980               | 900 <sup>#</sup>         | Mark – recapture  | 53  | 2006: 2 (see ~)<br>2007: 2<br>2008: 2<br>2009: 2  | 2006: 42 (33) <sup>^</sup>   | The Canadian Polar Bear Technical Committee increased population estimate in 1993, based on the observation that annual harvest has been sustained for the last 20 years and non-quantitative observations continue to suggest the sub-population has increased. <sup>3</sup>            |
|  | 1993               | 1400 <sup>□</sup>        | -   |   |   |  |  |
|  | 2004               | 1650                     | Trad. Ecol. Knowledge   |   |   |  |  |
| For populations with no size estimate, average harvest data prior to quota introduction in 2006 are presented. |                    |                          |   |   |   |  |  |
| Population   | Year of assessment | Harvest average per year | Methodology   | Biological advice on sustainable harvest <sup>2</sup> | Quota   | IUCN PBSG Comment to population status   |  |
| East Greenland   | 1952-2002          | 80                       | Several types of catch statistics compiled ca. 1952-2002 <sup>1</sup> | None  | 2006: 54 (44)<br>2007: 54<br>2008: 54<br>2009: 54   | The effects of arctic warming in East Greenland polar bears have not been documented, but there is concern about negative effects of continued environmental changes. <sup>3</sup> |  |
|  | 1999-2003          | Ca. 70                   | Catch statistics from Piniarneq <sup>§</sup> 1999-2003 <sup>2</sup>   |   |   |  |  |
| Arctic Basin   | None               | 0                        |   | None  | 0   | Bears occur at low densities and other populations use the area. If climate warming continues, this area may become more important as a refugia for polar bears. <sup>3</sup>      |  |

\* The study is probably an underestimate as it did not consider that an unknown fraction of the population is off-shore during the spring and therefore unavailable for capture<sup>3</sup>.

<sup>#</sup> Corrected from 726 to 900 by Stirling et al. 1980, due to possible bias in the sampling.

<sup>□</sup> Increased by Canadian Polar Bear Technical Committee to account for bias in sampling created by the inability of researchers to survey extensive area of off-shore pack ice.

<sup>1</sup> Rosing-Asvid, A. (2002). The Polar Bear Hunt in Greenland. Technical Report No 45, Greenland Institute of Natural Resources.

<sup>2</sup> Witting, L. and Born, E. (2006). Advice on sustainable hunting of Polar Bears in Greenland. Greenland Institute of Natural Resources.

<sup>3</sup> Aars, J., Lunn, N. J., Derocher, A. E. (2006). Polar Bear: Proceedings of the 14<sup>th</sup> working meeting of the IUCN / SSC Polar Bear Specialist Group, 20-24 June 2005, Seattle, Washington, USA. IUCN, Gland, Switzerland and Cambridge, UK.



## Appendix 1

§ Database to which all hunters report their annual catch. Administered by the Department of Fisheries, Hunting and Agriculture.

^ Other regions in Canada may hunt bears from the Davis Strait population. The total Canadian quota could therefore be somewhat higher.

~ Harvest data for Baffin Bay (BB) also contain bears from Davis Strait (DS) population. DS bears move into BB area to get to Greenland and can therefore not be distinguished from BB bears.

### Comments to Table 1.

Judged by the information in the Proceedings of the 14<sup>th</sup> working meeting of the IUCN / SSC Polar Bear Specialist Group, none of the five polar bear populations in Greenland have been surveyed more than once using identical methodologies. It may therefore be difficult to draw conclusions about changes in population size, regardless of whether these indicate increasing or decreasing populations.

Greenland therefore find it important to improve monitoring in times were climatic changes may lead to changes in distribution patterns and abundances for the polar bear. The Greenland Home Rule Government and the Greenland Institute of Natural Resources, have initiated several initiatives including assessment of polar bear populations in East Greenland and Baffin Bay, and the Home Rule Government is seeking to develop local-based monitoring.

**Table 2. Socioeconomic situation in typical polar bear areas compared to entire Greenland<sup>4</sup>**

| Category                     | Greenland, in total | In typical polar bear areas* |
|------------------------------|---------------------|------------------------------|
| Number of inhabitants        | 56.901              | 7370                         |
| Number of full-time hunters  | 2.731               | 760                          |
| Number of spare-time hunters | 6.564               | 701                          |
| Number of households         | 22.520              | 2628                         |
| Average annual income        | 120-160.000 DKR     | 60-70.000 DKR                |

\* The majority of Greenlandic catches are from the municipalities of Qaanaaq, Upernavik, Tasiilaq and Ittoqqortoormiit.

### Comments to Table 2

Assuming that the ratio of full-time hunters to number of households correspond to the national average in 2002 (1714 households with 2731 full-time hunters<sup>1</sup>), 18 % of households in typical polar bear areas were depending on income from full-time hunters in 2006 (only full-time hunters are allowed to hunt polar bears). Similarly 32% of the households include one or more spare-time hunters.

There is a marked regional difference in income level between typical hunting regions (East and North-west Greenland) with an average annual income of 60-70.000 DKR pr year, which is about half the average national income of 120-160.000 DKR<sup>5</sup> (see table 2). Coupled with higher living costs compared to other areas, this highlight the need for optimizing income from natural resources.

<sup>4</sup> Greenland Home Rule Government (2007). Greenland 2006: Statistical Yearbook. Forlaget Atuagkat Aps, Greenland.

<sup>5</sup> Rasmussen, R. O. (2005). Socio-economic survey of hunting communities. DANCEA report to The Department of Fisheries, Hunting and Agriculture, Greenland Home Rule.

## Appendix IIa. New quotas for walrus and polar bear (19 December 2006)

Based on Greenland Home Rule executive orders on the protection and hunting of walrus and polar bears, respectively, the Cabinet has now set quotas for walrus and polar bear hunting for the quota years 2007 up to and including 2009.

### Walrus

Total quotas were set at 200 in 2007, 175 in 2008 and 155 in 2009, distributed on stock levels, see the table below.

| Stock        | 2007       | 2008       | 2009       | Biological advice |
|--------------|------------|------------|------------|-------------------|
| North west   | 90         | 80         | 75         | 20-75             |
| West         | 80         | 65         | 50         | 25-60             |
| East         | 30         | 30         | 30         | 30                |
| <b>Total</b> | <b>200</b> | <b>175</b> | <b>155</b> | <b>63-155</b>     |

### Polar bear

The total quotas were set at 139 in 2007, 135 in 2008 and 130 in 2009, distributed on stock levels, see the table below.

| Stock                                     | 2007       | 2008       | 2009       | Biological Advice* |
|---|------------|------------|------------|--------------------|
| Kane Basin (Qaanaaq excluding Savissivik) | 10         | 8          | 6          | 7                  |
| Baffin Bay (West including Savissivik)    | 73         | 71         | 68         | 92                 |
| Davis Strait (West)                       | 2          | 2          | 2          | 53                 |
| East Greenland (East and South)           | 54         | 54         | 54         | -                  |
| <b>Total</b>                              | <b>139</b> | <b>135</b> | <b>130</b> |                    |

\*Biological advice is the total recommended catch for Greenland and Canada.

One of the reasons why quotas are set for several years is that this will provide hunters with knowledge of the size of the catch yields in the coming years and reduce the administrative burden of management.

In connection with the determination of quotas the Minister for Hunting was also authorised to carry out adjustments, after consultation with relevant parties, in case new knowledge might arise about stock status.

The quotas were fixed in consideration of international agreements, biological advice, user knowledge and after consultation with the Hunting Council.

### **Distribution of quotas among local authorities**

In accordance with the executive orders on the protection and hunting of walrus and polar bears, respectively, the distribution of the quota among the local authorities affected was made by the Minister for Hunting after consultation with KNAPK (The Association of Fishermen and Hunters in Greenland) and KANUKOKA (The National Association of Local Authorities in Greenland).

Finn Karlsen

Minister for Fisheries, Hunting and Agriculture

## Appendix IIb. Data basis for the determination of polar bear quotas

**Table A** shows the local authorities that catch polar bears from the individual stocks. The catch figures reported from PINIARNEQ have then been used to calculate catch figures for each stock (**Table B**). As the Davis Strait stock has to pass the area of the Baffin Bay stock to reach Greenland, catch figures cannot be calculated separately for these stocks. As the greater part of the catches from these two stocks in all probability originate from the Baffin Bay stock, we have chosen not to estimate catch figures for the Davis Strait stock (see **Table A**).

**Table C** shows biological advice, Canadian quotas, average catches from 1995-2004 and Greenlandic quotas for 2006. The catch figures and the quotas for Baffin Bay probably include polar bears from the Davis Strait stock.

**Table A.** Overview of local authorities catching polar bears from the individual stocks and a description of how catch figures are calculated.

| Stock          | Local authorities catching polar bears from the individual stocks   |
|----------------|---|
| Kane Basin     | The Qaanaaq local authority excluding Savissivik  |
| Baffin Bay     | Savissivik (in the Qaanaaq local authority district), the Upernavik local authority and to the Maniitsoq local authority to the south.<br><i>- Animals killed in the Nuuk and Paamiut local authority districts may have come from both the north (Baffin Bay/Davis Strait) and from the south (East Greenland). Catches from these local authority districts have therefore been distributed equally between the Baffin Bay and East Greenland stocks.</i> |
| Davis Strait   | <i>- Tagging of polar bears from Davis Strait shows that some animals reach Greenland through the Baffin Bay stock's area. Polar bears caught in Baffin Bay may therefore include polar bears from the Davis Strait stock. Therefore, DFFL (The Ministry of Fisheries, Hunting and Agriculture) cannot calculate catch figures for the Davis Strait stock.</i>  |
| East Greenland | Ittoqqortoormiit, Ammassalik, Nanortalik, Narsaq, Qaqortoq and Ivittuut local authorities.<br><i>- Catches from the Nuuk and Paamiut local authority districts have been distributed equally between catch statements for Baffin Bay and East Greenland.</i>  |

**Table B.** Greenlandic catch figures for Kane Basin, Baffin Bay and East Greenland. Catch figures for the Davis Strait stock are included in the catch figures for Baffin Bay (see **Table A2**).

| Stock                 | 1993       | 1994       | 1995       | 1996       | 1997       | 1998       | 1999       | 2000       | 2001       | 2002       | 2003       | 2004       | 2005*      |
|-----------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>Kane Basin</b>     | 17         | 11         | 13         | 9          | 7          | 6          | 8          | 6          | 10         | 13         | 12         | 9          | 25         |
| <b>Baffin Bay</b>     | 70         | 60         | 67         | 72         | 88         | 98         | 99         | 68         | 99         | 124        | 209        | 169        | 137        |
| <b>East Greenland</b> | 46         | 50         | 57         | 55         | 54         | 70         | 81         | 85         | 72         | 57         | 58         | 57         | 73         |
| <b>Total</b>          | <b>132</b> | <b>121</b> | <b>137</b> | <b>135</b> | <b>148</b> | <b>173</b> | <b>188</b> | <b>159</b> | <b>180</b> | <b>193</b> | <b>278</b> | <b>234</b> | <b>235</b> |

\*Catch figures for 2005 are for the first 9 months of the year. Final catch figures may therefore be higher.

**Table C.** Biological advice on sustainable catch levels, Canadian quota for 2004/2005, catch averages for 1995-2004 and quotas for 2006, distributed on the individual stocks. Note that Greenlandic and Canadian catches taken together must not exceed the biological advice in order that the catch can be regarded as sustainable.

| <b>Stock</b>                       | <b>Biological advice</b>   | <b>Canadian quota</b> | <b>Catch averages in Greenland 1995-</b> |                    |
|------------------------------------|----------------------------|-----------------------|--|--------------------|
|                                    |                            |                       | <b>2004</b>                              | <b>2006 quotas</b> |
| <b>Kane Basin</b>                  | 7                          | 5                     | 9  | 30*                |
| <b>Baffin Bay and Davis Strait</b> | 92 + 53                    | 105 + 48 <sup>#</sup> | 109 <sup>§</sup>                         | 64 + 2             |
| <b>East Greenland</b>              | -                          | -                     | 64                                       | 54                 |
| <b>Total</b>                       | <b>97 + East Greenland</b> | <b>162</b>            | <b>183</b>                               | <b>150</b>         |

\*In 2006, the Qaanaaq local authority was allocated a quota of 30 polar bears. Part of this quota is killed by hunters from SavissavikSavissivik, who in fact catch animals from the Baffin Bay stock. The catch from the Kane Basin stock is therefore somewhat lower than indicated by the quota.

<sup>#</sup>Figures for Davis Strait are catches and not quotas.

<sup>§</sup> Includes polar bears from both stocks, but the number of animals from the Davis Strait stock is probably small.

## Appendix 2. Reasons for the quotas set for the individual stocks

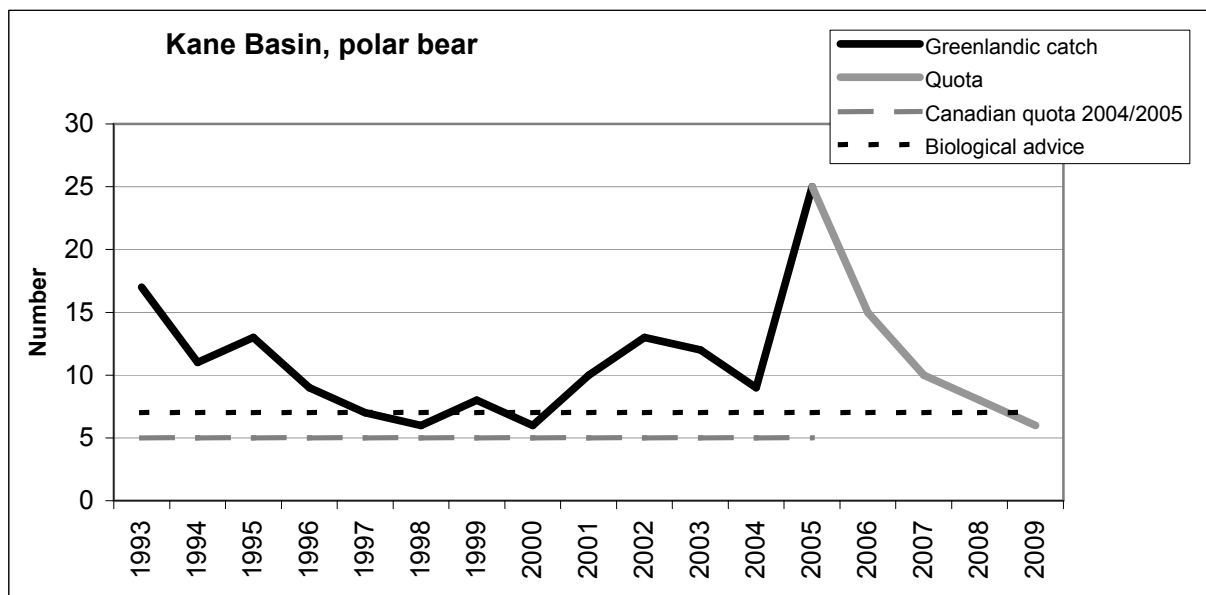
### Kane Basin

According to biological advice, the sustainable catch is 7 polar bears per year. The Canadian quota for the stock is 5 polar bears, and the average Greenlandic catch from 1995-2004 was 9 polar bears per year (Appendix 1, Table C).

In 2006, the Qaanaaq local authority was allocated a quota of 30 polar bears. However, most of the bears caught by hunters from Savissivik in the Qaanaaq local authority district are from the Baffin Bay stock. Hence, part of the quota of 30 polar bears will be taken from the Baffin Bay stock. However, the catch is still considerably higher than what is recommended for sustainable catches, particularly if the Canadian quota of 5 polar bears is included. To meet the objective of sustainable exploitation of the polar bear stock in the Kane Basin, it is therefore necessary to reduce the catch.

The Kane Basin quota for 2007 will be for the Qaanaaq local authority excluding Savissivik whereas Savissivik will be included in the quota for the Baffin Bay stock.

As the catch figures from 2001-2005 were at or above the past 10 years' (1995-2004) average of 9 polar bears per year, DFFL has chosen to set the quota for 2007 at 10 animals for Qaanaaq (excluding Savissivik), taking into account the hunting trade's possibilities for adaptation. A plan for gradual reduction of the quota is set out in Table 2 and Figure 1.



**Figure 1.** Greenlandic catch figures (1993-2005), Greenlandic quota (2006-2009), Canadian quota (2004-2005) and recommendation for sustainable catches (2005) in the Kane Basin. The quota for 2006 has been fixed at 15 polar bears as part of the quota of 30 animals allocated to the Qaanaaq local authority is caught from the Baffin Bay stock.

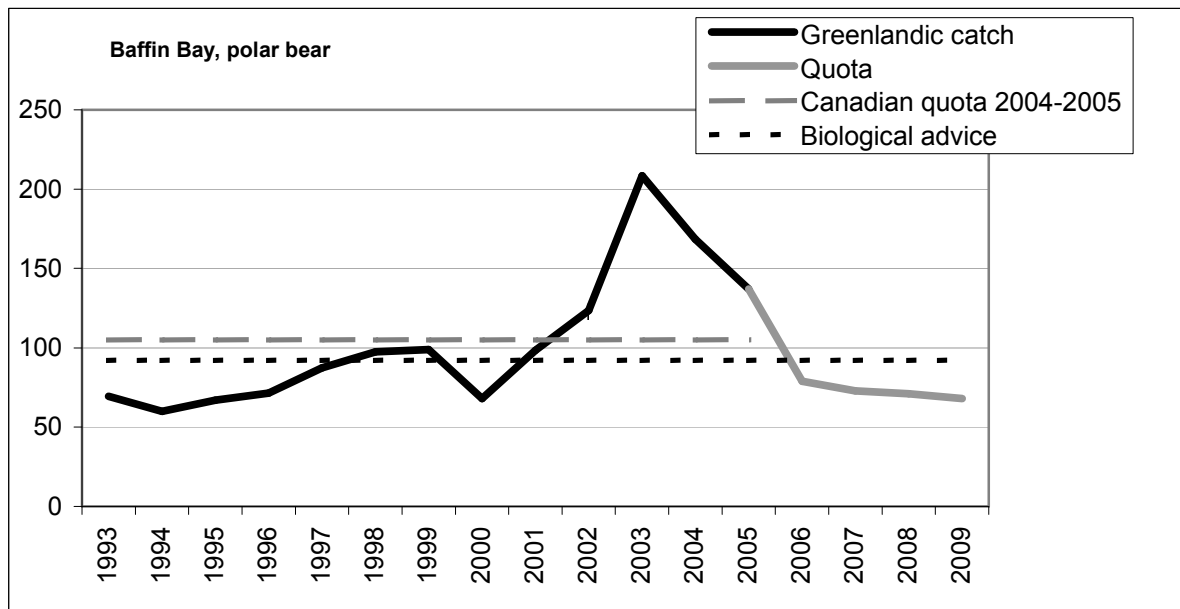
### Baffin Bay and Davis Strait

According to biological advice, the sustainable catch is 92 polar bears per year from Baffin Bay and 53 polar bears per year from Davis Strait. The number of polar bears from the Davis Strait stock that reach Greenland is uncertain but most of the polar bears killed in West Greenland are believed to come from the Baffin Bay stock. The average Greenlandic catch for the Baffin Bay/Davis Strait stocks from 1995-2004 was 109 polar bears per year (**Appendix 1, Table C**). The catch figures for the past 4 years (2002-2005) were above average (**Appendix 1, Tables B and C**), probably because of changed ice conditions.

The Greenlandic quota of 64 polar bears for the Baffin Bay/Davis Strait stocks in 2006 does not include animals killed by hunters from Savissivik (in the Qaanaaq local authority district). The real quota for Baffin Bay/Davis Strait in 2006 was therefore somewhat higher than 64.

The Canadian quota for the Baffin Bay stock is 105 animals, and the total Greenlandic-Canadian catch is therefore considerably higher than the recommended sustainable catch of 92 polar bears in total. To meet the objective of sustainable exploitation of the polar bear stock in the Baffin Bay, it is therefore necessary to reduce the catch.

Based on catch figures for Savissivik DFFL has chosen to set a quota of 15 polar bears for Savissivik. The quota for the rest of West Greenland is set at 58 for Baffin Bay and 2 for Davis Strait, i.e. a reduction of 4 polar bears. The total quota for 2007 will therefore be 75 polar bears for Baffin Bay and Davis Strait (which together have a biological recommendation for a sustainable catch of 145). A plan for gradual reduction of the quota is set out in **Table 2** and **Figure 2**.



**Figure 2.** Greenlandic catch figures (1993-2005), Greenlandic quota (2006-2009), Canadian quota (2004-2005) and recommendation for sustainable catches (2005) in Baffin Bay. Catch figures may

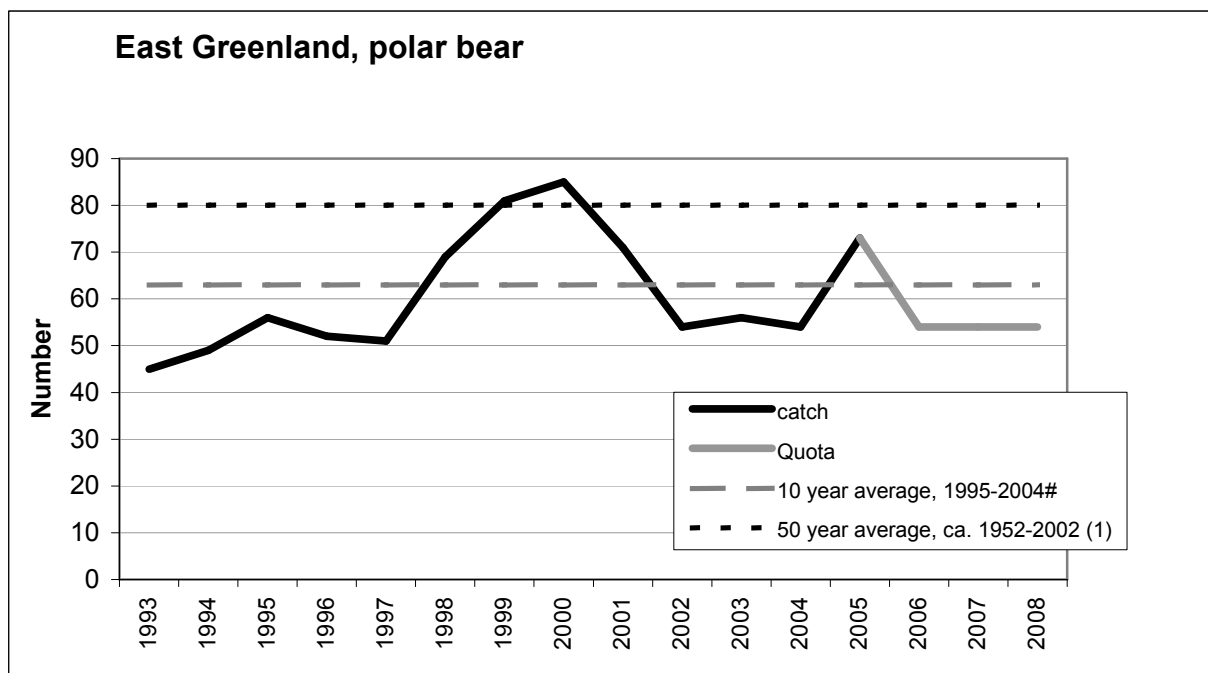
include animals from the Davis Strait stock, which in 2004/2005 had a biologically recommended sustainable catch of 53 polar bears and a Canadian catch of 48 polar bears.

### East Greenland

There is no biological recommendation for sustainable exploitation of polar bears in East Greenland. As the stock in East Greenland has not been counted, the quota should, according to the Greenland Research Institute, be determined according to the precautionary principle.

The average annual catch from 1995-2004 was 64 polar bears (**Appendix 1, Table C**). However, the Greenland Research Institute has pointed out that the number of polar bears being killed is probably higher than the figures from PINIARNEQ indicate. A look at first-hand sales of skins alone will show an average of 59 polar bears per year from 1972 – 1997 (South Greenland’s number of 5 per year was taken from the ”Catch Log” 1970-1984). Catch statements based on first-hand sales of skins, the “Catch log” and interviews etc show that the total catch from the East Greenland stock is approx. 80 polar bears per year, and the catch has been stable for more than 50 years<sup>1</sup>.

Against that background, DFFL has chosen to retain a quota of 54 polar bears from East Greenland in 2007. As the quota is lower than the average annual catch figures for the past 50 years (see **Figure 3**), DFFL finds there to be no reason for a further reduction of the quota.



**Figure 3.** Greenlandic catch figures, Greenlandic quota (2006-2009) and sustainable recommendation for polar bears in East Greenland. See also the note in the text above on the validity of the catch figures from PINIARNEQ. # Figures from PINIARNEQ.

<sup>1</sup> A. Rosing-Asvid (2002). The Polar Bear Hunt in Greenland. Technical report No. 45, Greenland Institute of Natural Resources.



Direktoratet for Fangst og Fiskeri  
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05.12.2006

40-00-01-45

### **Vedr.: Rådgivning for bæredygtig fangst på isbjørne**

I brev af 25. september 2006 (j.nr. 66.22/04) udbeder Direktoratet for Fiskeri, Fangst og Landbrug (DFFL) sig Grønlands Naturinstituts (GN) vurdering af, hvor stor bæredygtig udnyttelse af isbjørne i Grønland bør være i 2007.

### **Overordnede betragtninger**

Der er identificeret fire mere eller mindre adskilte isbjørnebestande i Grønland: Kane Basin (KB), Baffin Bugt (BB) og Davis Strædet (DS) langs vestkysten, samt een bestand på Østkysten (EG) (Fig. 1). Disse bestande behandles separat i vores svar.

For de tre vestgrønlandske bestandes vedkommende (KB, BB og DS) er der tale om, at de udnyttes af både Canada og Grønland. GN kan derfor på nuværende tidspunkt alene angive, hvor stor den samlede canadisk-grønlandske fangst bør være. En egentlig fordeling af denne fangst til hhv. Grønland og Canada bør foregå i samråd med de canadiske myndigheder, der er ansvarlige for forvaltning af isbjørne i deres respektive jurisdiktioner.

Det er endvidere GN's opfattelse, at instituttet på nuværende tidspunkt på grund af mangel på oplysninger om antallet af isbjørne i den østgrønlandske bestand ikke kan angive størrelsen af en bæredygtig fangst for Østgrønland.

Herudover påpeger GN, at en fremtidig beregning og fastlæggelse af bæredygtig fangst fra fælles bestande med fordel kan foregå i et internationalt videnskabeligt forum, såsom JCBN eller NAMMCO.

## ***Vestgrønland (KB, BB, DS)***

### **Kane Basin (KB)**

#### *Udbredelse og antal*

Med basis i sporing af bjørne med satellit-radiosender - og genfangst af mærkede dyr - er grænserne for Kane Bassin-isbjørnebestanden fastlagt til Nordvandet i syd, og Ellesmere Island og Grønland i hhv. vest og øst. Der er ikke genetisk forskel mellem isbjørne i KB og i Baffin Bugten. Indtil 1997 var KB bestanden stort set ikke udsat for fangst i Canada på grund af den store afstand fra den nærmeste canadiske bygd – Grise Fiord. Bestanden har sporadisk været udsat for fangst af Grise Fiord inuitter (i alt 3 dyr i perioden 1997-2001), og den er stadig udsat for fangst fra fangere fra Qaanaaq kommune.

Ud fra mærkning-genfangstmetodik er bestanden beregnet til 164 dyr (95% konfidensgrænser: 94-234 dyr).

#### *Fangst*

Gennemsnitligt er der blevet skudt 0,6 dyr (årlig variation 0-1 dyr) fra KB bestanden i Canada (1997-2001), mens skønnet over en grønlandske fangst fra denne bestand i perioden 1999-2003 (5 år) er 10 dyr/år (variation: 6-12 bjørne). En interviewundersøgelse blandt bjørnejægere i Qaanaaq kommune i februar 2006 gav oplysninger om bjørne, der muligvis blev fanget fra denne bestand i perioden 2001-2005. Hvis det antages, at alle dyr der er meldt skudt i Grønland nord for Inannganeq/Kap York, er ”ekstraheret” fra KB-bestanden har den grønlandske fangst været på 9,8 voksne dyr/år (variation: 5-15) i perioden 2001-2005. Inkluderer antallet af unger er de tilsvarende tal 11,2 (7-17 dyr).

Den samlede canadisk-grønlandsk fangst fra KB bestanden i perioden 1999/2000-2003/2004 (5 år) har været på ca. 10 bjørne i gennemsnit. Modelberegning viser, at der med en fangst på dette niveau er der 99% sandsynlighed for, at bestanden er i tilbagegang (Aars et al. 2006).

#### *Bæredygtig fangst*

Bæredygtig fangst fra KB bestanden er beregnet til 7 bjørne/år, og bestanden er således tilsyneladende udsat for over-udnyttelse (Aars m.fl. 2006). Nunavut har udstedt en kvote på 5 dyr for den canadiske i 2006/2007 fangst fra KB.

#### *Bemærkning*

Det bør bemærkes, at oplysninger indhentet under en interviewundersøgelse blandt i alt 25 isbjørnejægere i Qaanaaq kommune i februar 2006 antyder, at der i de seneste år (siden begyndelsen af 1990'erne og måske fra slutningen af 1990'erne; længden af den egentlige periode noget uklar) er sket en øgning i forekomsten af isbjørne i områderne nord for Inannganeq/Kap York. Det var opfattelsen hos flere informanter, at dette reflekterer en øgning i bestanden (antallet af dyr). Canadiske isbjørnestudier Hudson Bugt antyder dog, at en øgning i

kystnær forekomst ikke nødvendigvis afspejler en øgning i bestanden, men kan være udtryk for ændret udbredelse forårsaget af nedgangen i isen (Stirling & Parkinson 2006).

### **Baffin Bugt (BB)**

#### *Udbredelse og antal*

Satellitsporing og genfangst af mærkede bjørne har vist, at BB bestanden mod nord har grænse ved Nordvandet – mod øst er den begrænset af Grønlands kyst og mod vest af Baffin Island. Bevægelser af mærkede bjørne og satellitsporing viser, at BB-bestanden har en sydgrænse, der går fra ca. Cape Dyer på SØ Baffin Island over mod Sisimiut. Denne grænse for bevægelse skyldes formentlig, at der her findes en undersøisk højderyg, der påvirker strøm og isforhold således, at disse adskiller sig i Baffin Bugt fra forholdene i Davis Strædet. Et genetisk studium viste, at bjørne i BB ikke adskiller sig fra KB-bjørne, mens der fandtes genetisk forskelle mellem BB-bjørne og bjørne i de tilgrænsende områder Davis Strædet og Lancaster Sound.

Satellitsporing har vist, at BB-bestanden ”deles” af Canada og Grønland, der begge fanger fra bestanden.

Ved hjælp af mærkning-genfangstmetoden er BB-bestanden beregnet til at tælle 2074 dyr (SE = 266), Tabel 1. Dette tal repræsenterer et gennemsnit af bestandsberegningerne for årene 1994,-95 og -97 (Taylor m.fl. 2005).

#### *Fangst*

I perioden 1999/2000-2003/2004 (5 år) har det årlige gennemsnit for den samlede canadiske og grønlandske fangst af isbjørne fra BB-bestanden været på 192 isbjørne, hvoraf de 117 er meldt skudt i Grønland. Fangsten omfatter Piniarneq indberetninger fra Sisimiut nord til Qaanaaq (hvor 6-12 dyr er trukket fra Qaanaaq-indeberetningerne, idet de anses for skudt fra KB-bestanden) (Aars m.fl. 2006).

Modelberegning baseret på bestandsestimatet og den rapporterede fangst fra Canada og Grønland antyder, at bestanden med 90% sandsynlighed har været i nedgang og nu er reduceret til ca. 1600 dyr.

#### *Bæredygtig fangst*

Den totale canadisk-grønlandske bæredygtige fangst er på ca. 90 isbjørne pr. år (ca. 4,5% af bestandsestimatet på 2074), og under antagelse af, at bestandens ydeevne er maksimal måske op til 130/år (ca. 6% af bestanden). Bestanden anses som udsat for overudnyttelse (Aars m.fl. 2006). Nunavut har udstedt en kvote på 105 dyr for den canadiske fangst fra BB i 2006/2007.

#### *Bemærkning*

Det bør bemærkes, at oplysninger indhentet under en interviewundersøgelse blandt i alt 72 isbjørnejægere i Qaanaaq (25) og Upernavik (47) kommuner i februar 2006 antyder, at der i de seneste år (siden begyndelsen af 1990'erne og især i slutningen af 1990'erne) er sket en øgning i forekomsten af isbjørne langs de grønlandske kyster. Det var en formodning blandt de fleste informanter, at dette reflekterer en øgning i bestanden (antallet af dyr). Der var dog

nogle, som udtrykte, at det også kan repræsentere en ændring i udbredelse forårsaget af en klimabetinget nedgang i mængden af havis og i perioden med islæg. En øgning i de seneste år i forekomsten af isbjørne langs østkysten af Baffin Island er blevet meldt af canadiske inuitter. Som nævnt for KB-bestanden kan en øgning i den kystnære forekomst også være udtryk for ændret udbredelse pga. nedgangen i isen (Stirling & Parkinson 2006).

Grønlands Naturinstitut har planer om i 2008 i forbindelse med olieeftersøgningsaktiviteter at satellitspore isbjørne i Nordvestgrønland for at skaffe opdaterede oplysninger angående deres områdeudnyttelse. Desuden er det planen at foretage en optælling af isbjørne i Baffin Bugten i 2011. Begge undersøgelser gennemføres dog afhængige af, hvorvidt man modtager ekstern økonomisk støtte.

### **Davis Strædet (DS)**

#### *Udbredelse og antal*

Baseret på bevægelser af mærkede dyr og satellitsporing er det blevet vist, at denne bestand har udbredelse i østlige Hudson Strait, Davis Strædet syd for Cape Dyer – Sisimiut, og i Labradorhavet. Genetiske studier afslørede, at DS-bjørne adskiller sig fra BB-bjørne og bjørne i Foxe Basin.

Der er ikke egentlige, nyere beregning af antallet af isbjørne i DS. Bestanden er skønnet til at tælle 1650 bjørne (Aars m.fl. 2006).

Et studium, der tager sigte på at beregne størrelsen af DS-bestanden er igangsat fra canadisk side i august 2005.

#### *Fangst*

DS bestanden udnyttes af fangere i Nunavut, Quebec, Labrador og Grønland.

Der er i perioden 1999/2000-2003/2004 i gennemsnit blevet fanget i alt 65 isbjørne om året fra DS-bestanden, hvoraf den grønlandske fangst i gennemsnit har været på 1 bjørn/år (variation 0-2 dyr/år) (Aars m.fl. 2006). Fangsten omfatter Piniarneq indberetninger syd for Sisimiut men nord for Paamiut (dyr fra sydvestgrønland kommer fra Østgrønland). Nunavut har for fangstsæsonen 2004/2005 forøget deres kvote for DS-bestanden fra 34 til 46 dyr pr. år (ca. 35% forøgning). De øvrige dyr tages i Quebec, Labrador og Grønland.

#### *Bæredygtig fangst*

Samlet canadisk-grønlandsk bæredygtig fangst er beregnet til 53 isbjørne pr. år (ca. 82% af rapporteret fangst), og bestanden anses derfor som udsat for overudnyttelse (Aars m.fl. 2006).

#### *Bemærkning*

Det bør bemærkes, at grænsen ved kysten af Vestgrønland mellem Baffin Bugt og Davis Strædet bestandene er baseret på vandringer af satellitsendermærkede dyr. Desuden er placeringen af randen af pakisen (Vestisen) mod den vestgrønlandske kyst forskellig fra år til år

(og er under ændring i de senere år pga. opvarmning). Dette medfører, at grænsen mellem de to bestande er noget diffus og kan være foranderlig.

## ***Østgrønland***

### *Udbredelse og antal*

Der er ikke foretaget undersøgelser siden 1975 med det formål at vurdere antallet af isbjørne i Østgrønland. Mærkningsundersøgelser i årene 1973-75 var begrænset til de centrale dele af den østgrønlandske kyst, hvor det beregnedes, at der befandt sig under et par hundreder isbjørne. Området, som dette skøn refererer til omfatter Kong Oscars Fjord-Young Sund – dvs. Det vil sige en begrænset del af isbjørnens totale udbredelsesområde i Østgrønland.

Isbjørne er vidt udbredt i hele Østgrønlandsområdet og i drivisen i Fram Strædet, Grønlands Havet og Danmarks Strædet, men der er tegn på, at der kan forekomme mere eller mindre lokale grupper af bjørne inden for disse områder. Østgrønlandsbestandens udbredelse som helhed har ikke været genstand for undersøgelser, og den kendes derfor ikke særligt godt.

Isbjørne i Østgrønland adskiller sig kun ringe grad genetisk fra isbjørne ved Svalbard (Norge) og Franz Josef Land (vestlige Rusland), men mærkningsstudier og sporing ved hjælp af satelittelementri antyder, at der kun foregår en meget begrænset udveksling mellem isbjørnebestandene i Østgrønland og Svalbard-Franz Josef Land området.

### *Fangst*

I perioden 1999-2003 har den årlige fangst i Østgrønland (Ittoqqortoormitt og Ammassalik kommuner) ligget på 61 bjørne i gennemsnit (variation: 43-75 dyr/år) (Born & Sonne 2005). Dertil skal lægges ca. 9 dyr (variation: 2-16), der i snit fanges hvert år i Sydvestgrønland, hvortil de kommer fra Østgrønland. Den samlede fangst af isbjørne fra Østgrønlandsbestanden har således ligget på ca. 70 dyr/år i de senere årtier.

Til trods for, at det blev praksis i 1970'erne og 1980'erne for fangere i Ittoqqortoormiit/Scorebysund at tage længere nordpå under forårets bjørnejagter, er der ikke som helhed noget, der antyder at fangstindsatsen efter isbjørne er øget i de senere år. Med basis i indsamlede prøver fra fangsten i Ittoqqortoormiit/Scorebysund - og en interviewundersøgelser blandt østgrønlandske isbjørnejægere i 1999 - vurderedes andelen af voksne hunner (dvs. ældre end 2 år) i den østgrønlandske fangst at udgøre ca. 38% af den samlede fangst.

### *Bæredygtig fangst*

Tages der udgangspunkt i skønnet over den årlige fangst (ca. 70 dyr) og andelen af voksne hunner i fangsten, skal der findes ca. 1800 isbjørne i den bestand, der udnyttes, for at fangsten kan være bæredygtig. Imidlertid kendes den udnyttede bestands udbredelse ikke, og heller ikke antallet af dyr i bestanden (Aars m.fl. 2006).

På grund af de manglende oplysninger om den Østgrønlandske bestand kan GN ikke angive en bæredygtige fangst for Østgrønland. På grund af denne usikkerhed er det GNs opfattelse, at der bør udvises forsigtighed i kvoteangivelsen for Østgrønland.

*Bemærkning*

Ud over selve kvoten, kunne forsigtighed i udnyttelsen af bestanden i Østgrønland udmøntes ved at man begrænser jagten til områderne syd for Nationalparken. Fra videnskabelig studier og interviews blandt fangerne i Ittoqqortoormiit, vides det at der i Nationalparken er vigtige hi-områder for isbjørnen. Ved at undlade fangst af isbjørne inden for Nationalparken vil man derved opnå øget beskyttelse af reproduktive hunner, samtidig med at man etablerer et refugium der, i det mindste i en vis udstrækning, vil beskytte bestanden mod overudnyttelse.

Bestanden i Østgrønland er p.t. udsat for nedgang i udbredelse og tidsmæssig forekomst af havisen og dyrene har desuden forholdsvis højt indhold af organiske miljøgifte.

Grønlands Naturinstitut planlægger at satellitspore isbjørne i Østgrønland i 2007 samt at optælle bestanden i 2010. Begge studier er dog afhængig af bevilling af de nødvendige midler fra eksterne kilder.

Med venlig hilsen

Lars Witting  
Konstitueret Afdelingschef  
for Pattedyr og Fugle

Erik W. Born  
Seniorforsker

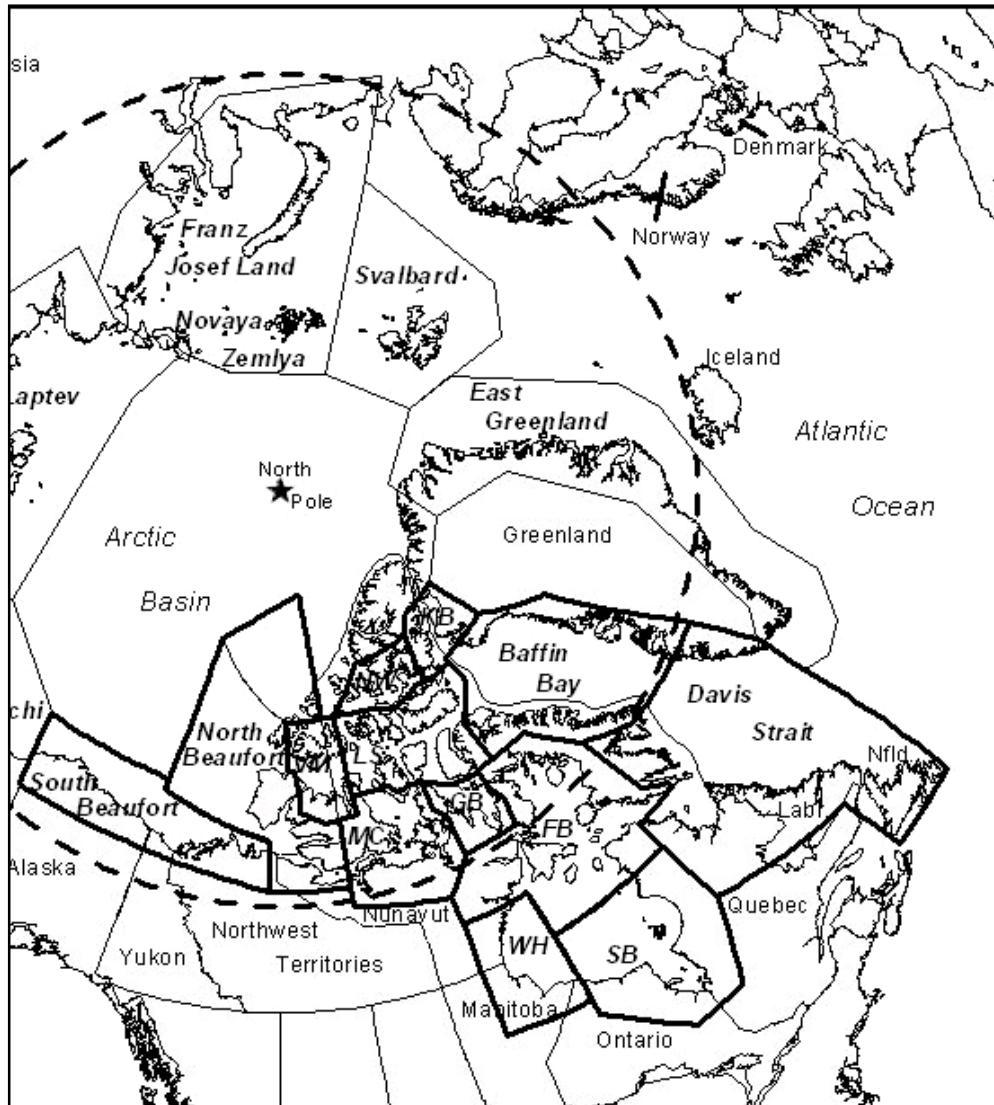
Litteratur:

Aars, J., N.J. Lunn & A.E. Derocher 2006. Polar Bears. Proceedings of the 14<sup>th</sup> Working Meeting of the IUCN/SCC Polar Bear Specialist Group, 20-24 June 2005, Seattle, Washington, USA: 189 pp.

Stirling, I. & C. L. Parkinson 2006. Possible effects of climate warming on selected populations of polar bears (*Ursus maritimus*) in the Canadian Arctic. *Arctic* 59: 261-275.

Taylor, M.K., J. Laake, P.D. McLoughin, E.W. Born, H.Dean Cluff, S.H. Ferguson, A. Rosing-Asvid, R. Schweinsburg & F. Messier 2005: Demography and viability of a hunted population of polar bears. *Arctic* 58: 203-214.

**Figur 1:** Kort, der viser grænserne for isbjørnebestande i Grønland og tilliggende områder. KB = Kane Bassin, BB = Baffin Bugt, DS = Davis Stræde og EG = Østgrønland.





## **Greenland Home Rule Executive Order No. 21 of 22 September 2005 on the Protection and Hunting of Polar Bears**

The following provisions are laid down pursuant to section 2(4), section 8, sections 11-13, section 15(4), and section 17 of the Landsting Act No. 12 of 29 October 1999 on Hunting and section 5, section 35, section 36(2), section 60(2), and section 61 of the Landsting Act No. 29 of 18 December 2003 on the Protection of Nature:

### *Scope*

1.-(1) This Executive Order applies to the protection and hunting of polar bears (*Ursus maritimus*) in the land and fishing territory of Greenland.

(2) Special provisions apply to access to the National Park in North and East Greenland and the Wildlife Reserve at Melville Bay, including provisions on hunting by persons with hunting rights in the areas. The provisions have been laid down in separate executive orders for these two areas.

### *Protection*

2.-(1) Polar bears are protected under a conservation order in the land and fishing territory of Greenland, cf., however, section 3.

(2) Cubs and females accompanied by one or more cubs are fully protected under a conservation order in the land and fishing territory of Greenland.

(3) "cubs", cf. subsection (2), shall mean cubs, who, regardless of their age, are dependent on their mother.

(4) Disturbing, including digging out, denning polar bears shall be prohibited.

### *Determination of quotas and hunting seasons*

3.-(1) The Cabinet shall fix an annual quota for polar bear catches. The quota shall be fixed in consideration of international agreements, biological advice, user knowledge and consultation with the Hunting Council.

(2) The Cabinet may determine that part of the quota, cf. subsection (1), shall be used for trophy hunting. Special provisions concerning trophy hunting of polar bears shall be laid down in a separate executive order.

(3) A quota may for biological reasons be limited to sex- and age-specific groups of animals and may be divided into small quotas who may be killed within limited areas.

(4) The hunting of polar bears, subject to quota restrictions, is allowed only during the period from 1 September to 30 June, both days included. Exempt from this rule are the local authority districts of Ittoqqortoormiit and Ammassalik, where polar bears may be hunted, subject to quota restrictions, in the period from 1 October to 31 July, both days included.

(5) The annual catch quotas and the conditions to which they are subject shall be published through a press release and on the homepage of the Greenland Home Rule Government.

(6) The quota year shall be valid during the period from 1 January to 31 December, both days included.

### *Distribution of catch quotas*

4.-(1) The Hunting Council shall be consulted on the framework of the quota catch. The distribution of the quotas among the local authorities shall be made by the Minister for Fisheries

and Hunting after consultations with Kalaallit Nunanni Aalisartut Piniartullu Kattuffiat - The Association of Fishermen and Hunters in Greenland - (KNAPK) and the National Association of Local Authorities in Greenland (KANUKOKA).

(2) The Minister for Fisheries and Hunting may instruct the local council to be in charge of the necessary administration of local authority catch quotas.

(3) The Minister for Fisheries and Hunting may reduce the local authority's quota for the quota year concerned or for the subsequent quota year if it is ascertained that polar bears have been illegally hunted in the local authority district.

#### *Issuance and distribution of permits etc*

**5.-(1)** Only persons holding a permit issued in pursuance of section 6 may kill polar bears.

(2) However, persons, cf. subsection (1), shall not be permitted to kill polar bears if they are transported by or are a paid companion for persons not holding a valid commercial hunting licence.

**6.-(1)** For the local authority catch quotas, cf. section 4, the local council shall issue numbered permits to applicants holding a valid commercial hunting licence and having their residence according to the residence register in the local authority district concerned. To participate in the distribution of permits applicants must have a valid commercial hunting licence at the time of application.

(2) In the event of the number of distributed permits for polar bear hunts being less than the number of applications received by a local authority, cf. subsection (1), the local council shall decide how to distribute permits.

(3) A form corresponding to the annex to the Executive Order shall be delivered by the local council to the permit recipient together with the permit.

(4) The local council shall establish sound control of the allocated quota. The use of the quota shall be monitored closely and hunting shall be stopped instantly when the allocated local authority quota is exhausted.

(5) The local council shall send a written notice to the Department of Fisheries and Hunting when the allocated local authority quota is exhausted.

**7.-(1)** The permit issuing authority shall fix a deadline for the retrieval of permits distributed. Persons who have received a permit and who cannot or do not want to utilise it shall return the unused permit to the permit issuing authority as soon as possible.

(2) Permits remaining unclaimed may be redistributed. Such redistribution shall be made in accordance with section 6(2). The time of redistribution shall be notified by the local council before the start of the hunting season.

**8.-(1)** A permit is personal and shall not be transferable or sold.

(2) One permit gives the right to kill one polar bear in the quota year in which the permit is issued. The hunting season is set out in the permit.

#### *Hunting methods*

**9.-(1)** No aircraft, helicopters or motorised vehicles, including snow scooters, and vessels of more than 20 GRT/15 GT may be used in polar bear hunts or as a means of transport to and from the hunting area.

(2) The use of poison, spring guns, traps, foot traps or any other technical aids to restrain the polar bear shall be prohibited.

(3) Polar bears may only be hunted using a rifle having a minimum calibre of 30.06 (7.62 mm). Use of fully automatic and semi-automatic rifles shall not be permitted.

(4) All meat, skins and other usable parts of a killed polar bear shall be brought back from the hunting location or be stored. Before the hunting location is left, any parts left over shall, if possible, be disposed of.

#### *Use, first-hand sale and sale of the catch*

**10.**-(1) No parts of the killed polar bear may be sold until the local authority or settlement office has recorded the catch by stamping the permit, cf., however, subsection (3).

(2) No parts from the killed polar bear may be sold or bought until the holder of the permit has signed a copy of the permit. Such copy shall show that the catch has been recorded by a municipal authority.

(3) However, selling may be commenced outside office opening hours if sales are recorded immediately after the office opens.

(4) On any resale or first-hand sale of polar bear parts, a copy of the signed and stamped permit shall accompany the sale.

(5) Buying or receiving meat and skins as well as other parts of an illegally killed polar bear shall be prohibited.

#### *Catch reporting and control*

**11.**-(1) All polar bear catches shall be reported after each hunt to the hunter's local authority on a form corresponding to the annex to the Executive Order. Also all woundings shall be reported. Any numbered tag or radio transmitter found shall be delivered together with the form. The form shall be delivered simultaneously with the stamping of the permit, cf. section 10.

(2) If no parts of the polar bear are to be sold, cf. section 10, the catch shall be reported on the form to the hunter's local authority without undue delay.

(3) All polar bear catches shall also be reported to Piniarneq through the annual registration form.

(4) In the case of collective catches, the catch shall only be reported by one person appointed to be responsible for reporting, e.g. the permit holder, with indication of the names and civil registration numbers of all participants in the hunt. The only person to report the catch to Piniarneq is the person responsible for form reporting.

(5) At the end of each month, the local council shall submit the forms received to the Department of Fisheries and Hunting.

**12.**-(1) If a polar bear is killed as a result of necessity or self-defence, cf. the provisions of the Criminal Act, all parts from the polar bear shall go to the Greenland Home Rule Government.

(2) The Department of Fisheries and Hunting shall be informed as soon as possible by the person who killed the polar bear.

#### *Local authority bylaws*

**13.** A local council or several local councils jointly may lay down additional regulations under sections 6-7 and sections 9-10 in local authority bylaws and issue guidelines for hunting in certain areas of the local authority district. Such bylaws shall be confirmed by the Minister for Fisheries and Hunting.

### *Tagging and export*

**14.-(1)** Any immobilisation and tagging of polar bears shall be subject to the permission of the Minister for Fisheries and Hunting.

(2) No polar bear, including polar bear cubs, may be kept in captivity without the permission of the Cabinet.

(3) The export of polar bear cubs from Greenland shall be prohibited. Adult polar bears may not be exported from Greenland without the permission of the Cabinet.

(4) The export of polar bear gall bladders or parts thereof shall be prohibited.

### *Exemption and additional hunting conditions*

**15.** The Minister for Fisheries and Hunting may grant exemption from the provisions of the Executive Order for scientific purposes or for the purpose of mapping Greenland's hunting resources.

**16.** The Minister for Fisheries and Hunting may lay down conditions for the hunting of polar bears, including requirements for delivering polar bear parts for biological studies.

### *Penalties*

**17.-(1)** Anyone who infringes section 2, section 3(4), section 5, sections 8 - 10, section 11(1), section 12 and section 14 may be held liable to a fine.

(2) The provisions of the Criminal Act shall apply in relation to confiscation.

(3) The decision to use confiscated parts from polar bears shall be made by the Minister for Fisheries and Hunting.

(4) Anyone who infringes local authority bylaws issued by virtue of the Executive Order may be held liable to a fine and confiscation of the catch.

### *Commencement and transitional provisions*

**18.-(1)** This Executive Order shall come into force on 15 October 2005. At the same time, the Greenland Home Rule Executive Order No. 20 of 11 May 1994 on the Hunting of Polar Bears in Greenland shall be repealed.

(2) Notwithstanding the provision of section 5(1), persons holding a valid commercial hunting licence may hunt polar bears without a permit in the period from the commencement of the Executive Order and until the start of the first quota year on 1 January 2006.

*Greenland Home Rule Government, 22 September 2005*

Hans Enoksen

/

Amalie Jessen