

**KIVALLIQ WILDLIFE BOARD**

**WRITTEN SUBMISSION**

NUNAVUT WILDLIFE MANAGEMENT BOARD  
PUBLIC HEARING ON THE TOTAL ALLOWABLE HARVEST FOR THE WESTERN HUDSON BAY  
POLAR BEAR SUB-POPULATION

Filed by:

Kivalliq Wildlife Board

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## Table of Contents

1. Background and Objectives.....	2
2. General Comments and Recommendations.....	3
2.1 Maintaining Inuit Ways and Knowledge of Hunting Polar Bears .....	3
2.2 Public Safety is a Top Concern .....	3
2.3 Disagreement with Sub-Population Understanding of Polar Bears .....	4
2.4 Concern with Manitoba Polar Bear Tourism .....	4
2.5 Concern with Invasive Wildlife Research.....	5
3. Specific Comments and Recommendations .....	5
3.1 Increase TAH from 34 to 45 .....	5
3.2 Moratorium on Flexible Quota System Penalizations for Overharvesting Females .....	6
3.3 Provide Clarity on Tag Penalizations.....	7
3.4 Increase Bear Deterrence Programs .....	7
3.5 Increase Funding for Wildlife Damage Prevention and Compensation Programs .....	7
3.6 Research and Actions on Improving Community Infrastructure .....	7

# Written Submission for the NWMB Public Hearing on the Total Allowable Harvest for the Western Hudson Bay Polar Bear Sub-Population

## 1. Background and Objectives

The Kivalliq Wildlife Board (KWB) is the Regional Wildlife Organization (RWO) for the Kivalliq Region. The board consists of representatives from each community Hunters and Trappers Organization (HTOs) in the Kivalliq region.

The mandate of RWOs and HTOs is contained in Article 5.7 of the 1993 *Nunavut Agreement*.<sup>1</sup> The *Nunavut Agreement* gives HTOs and RWOs a broad mandate to oversee and manage Inuit wildlife harvesting in their respective communities and regions. The *Nunavut Agreement* also provides HTOs with a mandate to represent the interests of Inuit hunters and their hunting rights, including the right to sue on behalf of members for rights infringements (5.7.15).

KWB has been actively involved in the co-management of the Western Hudson Bay Polar Bear Sub-Population (WH PB) for several years. Before and after the signing of the *Nunavut Agreement* and the creation of the Nunavut territory, KWB has been a strong proponent of including Inuit Qaujimajatuqangit of Elders and expert hunters in management decisions about polar bears as well as other wildlife. KWB, along with five Kivalliq HTOs, worked with the Government of Nunavut (GN) Department of Environment (DoE) and the Nunavut Wildlife Management Board (NWMB) to create and sign the *Polar Bear Management Memorandum of Understanding for the Management of the "Western Hudson" Polar Bear Population*<sup>2</sup> that currently provides the framework for WH PB management. Every year the KWB works with the HTOs to allocate tags that correspond to the Total Allowable Harvest (TAH) and does its best to meet the management requirements for WH PB.

In recent years, a lot of challenges exist around the management of polar bears. The GN and NWMB's work with co-management partners towards creating a new Nunavut Polar Bear Management Plan (PBMP) to replace the existing Memoranda of Understanding has not been without its difficulties. Prior to the scheduled hearing in June 2017 on the PBMP draft plan, as expressed in a letter to NWMB, KWB had concerns about NWMB's commitment to allowing equal and fair opportunity for all HTOs in Nunavut to participate in the public hearing process and also had concerns about how seriously recommendations from RWOs and HTOs are taken. Providing funding for enough participants from all the Kivalliq communities that harvest WH PB to participate in this current WH PB TAH public hearing is a start. The KWB was also pleased with the recently recommended and accepted increase in WH PB TAH from 28 to 34. These tags were allocated to HTOs at the KWB AGM in October 2017. KWB remains committed to working with its co-management partners on polar bear management.

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<sup>1</sup> Nunavut Tunngavik Inc. and Minister of Indian Affairs and Northern Development and Federal Interlocutor for Métis and Non-Status Indians. (2010). *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada as amended*.

<sup>2</sup> Arviat HTO, Baker Lake HTO, Aqigiq HTO (Chesterfield Inlet), Aqiggiaq HTO (Rankin Inlet), Issatik HTO (Whale Cove), Kivalliq Wildlife Board, and GN Department of Environment. (2005). *Polar Bear Management Memorandum of Understanding for the Management of the "Western Hudson" Polar Bear Population*.

While pleased with the increase in TAH, KWB feels that a TAH of 34 is still not enough for the current situation in the Kivalliq. Polar bear encounters with humans have increased significantly, especially near Arviat, Chesterfield Inlet and Whale Cove. At the 2017 KWB AGM, Rob Harmer, Kivalliq Regional Manager, GN DoE reported 185 polar bear observances without deterrence and 205 polar bear observances with deterrence in Arviat alone in a single year (KWB AGM, October 18, 2017). Public safety and protection of property is a major concern for people in the Kivalliq. Furthermore, limited TAH levels and increased bear encounters have led to increased Defense of Life and Property Kills (DLPKs).<sup>3</sup> These kills further limit the ability for Inuit to participate in and learn traditional polar bear hunting practices and the Inuit Qaujimajatuqangit that is shared during these hunts. KWB supports a main goal of polar bear management being the continued practice of polar bear hunting by Inuit.

KWB wants the TAH for WH PB to be increased to 45 (with 40 tags being allocated to Kivalliq communities in Nunavut and 5 tags being allocated to Manitoba). As will be explained, KWB finds that this figure continues to meet the management goal of maintaining a stable polar bear population. At the same time, a higher TAH will decrease polar bear and human encounters and increase public safety as well as allow for the continued hunting of polar bears by Inuit. The following two sections provide the general and specific comments and recommendations that support this overarching objective.

## 2. General Comments and Recommendations

### 2.1 Maintaining Inuit Ways and Knowledge of Hunting Polar Bears

The 2016 *Draft of the Nunavut Polar Bear Co-Management Plan*<sup>4</sup> states that the goal of polar bear management in Nunavut is: “To maintain viable and healthy polar bear subpopulations for current and future generations and to ensure that polar bears remain an integrated and functioning part of the ecosystem while monitored and appropriate harvests are allowed” (p. 8).

KWB contends that a primary goal of polar bear management in Nunavut should be maintaining Inuit hunting practices and cultural learning that has existed since time immemorial and that this should be expressed more clearly in the goal of the polar bear management plan. Inuit do not want to change their ways for management plans; if they must exist, KWB wants management plans to accommodate Inuit hunting traditions and practices.

In order for this goal to be achieved, it is extremely important that Inuit Qaujimajatuqangit become even more integrated into polar bear management and that the deep historical understanding of bears in the Kivalliq is respected by wildlife managers.

### 2.2 Public Safety is a Top Concern

Public safety of people and property is a top priority of the KWB. Human and polar bear interactions have been increasing and many people are worried that human life could be lost if

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<sup>3</sup> See Table 1 and Table 2 in attached WH PB Tables and Figures document. Particularly in the years 2008-2013, there was a significant decrease in TAH (to as low as 8 bears for the entire WH sub-population) and a subsequent increase in DLPKs.

<sup>4</sup> Government of Nunavut Minister of Environment and Nunavut Wildlife Management Board. (2016). *Draft of the Nunavut Polar Bear Management Plan*.

something is not done to limit human and polar bear encounters. As already expressed, polar bear observances are very high in Arviat, Whale Cove and Chesterfield Inlet, and it is extremely important that something is done to reduce this.

Inuit Qaujimajatuqangit about polar bears reaches far into the past and many Inuit express that polar bear populations are currently higher than they ever were from the early 1900s to the 1970s. In an IQ study done by Nirlungayuk and Lee<sup>5</sup>, hunters and Elders who frequently and extensively traveled the land and sea in the Kivalliq and Western Hudson Bay reported seeing very few polar bears during this time period and note that more recently, since the 1980s, polar bears have been seen with greater frequency.

KWB wants polar bear and human encounters to be reduced for the safety of both humans and bears. As expressed in the teachings of Elders who grew up and lived on the land and ice, one way to do this is to actively hunt polar bears.

### 2.3 Disagreement with Sub-Population Understanding of Polar Bears

It is important to note that the knowledge of Elders and hunters as expressed through Inuit Qaujimajatuqangit tells us that polar bears do not know the boundaries created by human wildlife managers. Polar bears move up and down the coast and travel on ice pans across the Hudson Bay. The same bears can be WH, Foxe Basin (FB) or Southern Hudson Bay (SH) polar bears during their lifetimes.

Sometimes the borders cause issues for humans in the Kivalliq as well. The WH sub-population and FB sub-population boundary is south of Chesterfield Inlet, which can cause disagreements within the Kivalliq about who should get tags from the TAH.

Issues are noted with the sub-population boundaries. However, there are also concerns about too many levels of government and bureaucracy existing in polar bear co-management, and if any sub-population boundaries are reconsidered, KWB would not want to open up management of polar bears in the Kivalliq to even more jurisdictions, which could create even more political-legal complications.

### 2.4 Concern with Manitoba Polar Bear Tourism

There are issues with how people in Nunavut and how people in Manitoba interact with bears. In Nunavut, bears are hunted by Inuit, while in Manitoba, they are a tourist attraction and part of the tourism industry. KWB is concerned with the Manitoba tourism industry because it is felt that increased human interactions with polar bears may be habituating polar bears to humans. This is a public safety concern because it means that bears may come around humans more often. KWB would like to see the GN DoE and NWMB work more with the appropriate agencies in Manitoba to research and address concerns about the effects of tourism on polar bears.

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<sup>5</sup> Nirlungayuk, G. & Lee, D. S. (2009). A Nunavut Inuit perspective on Western Hudson Bay polar bear management and the consequences for conservation hunting. In M. M. R. Milton & L. Foote (Eds.), *Inuit, polar bears, and sustainable use: Local, national, and international perspectives* (pp. 135-142). Edmonton, AB: CCI Press.

## 2.5 Concern with Invasive Wildlife Research

KWB has concerns with the impact of invasive research on polar bears overall health. The continued mark and recapture practices of researchers from Environment and Climate Change Canada's Canadian Wildlife Service in Manitoba that includes flying close to bears, tranquilizing bears, handling bears to take measurements, tagging and tattooing bears, taking samples from living bears and putting satellite radio collars on bears<sup>6</sup> are a concern to Inuit. Inuit ancestors stressed that animals are not to be played with and have feelings and that they are to be respected; hunting animals is a form of respect, and certain rules have to be followed after a successful hunt to respect animals in death.<sup>7</sup> KWB questions what impact invasive research has on bears and whether bears frequently getting tranquilized and examined contributes to deteriorating body conditions.

KWB supports less invasive research methods like aerial surveys, fur collection through snagging hair on scratch posts and sample and measurement collection after harvesting.

## 3. Specific Comments and Recommendations

### 3.1 Increase TAH from 34 to 45

KWB requests that the TAH of WH PB be further increased from 34 to 45. 40 of these tags should be made available to Kivalliq HTOs and 5 tags should be made available to Manitoba.

KWB maintains that this harvest level still meets the overall management goal of maintaining the stability of the WH PB population. A TAH of 45 is 4.5% of 1000, a population estimate supported by both the 2011<sup>8</sup> and 2016<sup>9</sup> aerial surveys when the confidence interval is considered. With the on-the-ground observations of active Inuit hunters and Elders expressing that polar bear populations are higher than they have been within living memory, KWB believes this higher population estimate is reasonable. Historically, a harvest rate of 4.5% of the total population has been used as a suitable rate to harvest from the WH PB while keeping the population stable.

During community consultations with Kivalliq HTOs and KWB about the results of the 2016 aerial survey of the WH PB, the GN DoE presented findings that the 2016 population estimate is not significantly different than the 2011 population estimate and that the population remains

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<sup>6</sup> McCue, D. (2017, November 1). Polar bears in Churchill face bleak future, researchers warn. *CBC News*, <http://www.cbc.ca/news/multimedia/polar-bears-in-churchill-face-bleak-future-researchers-warn-1.4380568>, accessed November 11, 2017.

<sup>7</sup> For just a few examples of the importance Inuit place on respecting animals, see chapters by Kalluak, M.; Angutinngurniq, J.; Ayalik, A.; Uluadluak, D. (2017) In J. Karetak, F. Tester & S. Tagalik (Eds.), *Inuit Qaujimagatuqangit: What Inuit have always known to be true*. Halifax & Winnipeg: Fernwood Publishing.

<sup>8</sup> Government of Nunavut, University of Manitoba, and Government of Manitoba. (2012). Western Hudson Bay polar bear aerial survey, 2011 – Final Report.

<sup>9</sup> Government of Nunavut, Department of Environment. (2017). 2016 Aerial survey of the Western Hudson Bay polar bear sub-population – Final report.

stable.<sup>10, 11</sup> KWB feels that the WH PB population can stay stable with a TAH of 45 as it did in the past when a TAH of between 47 and 56 was common (prior to 2006).

An increased TAH also increases the likelihood of hunter's compliance to polar management regulations. In the past, when the TAH was 38 or higher, harvesting levels were almost always under the TAH and never over it. It was only when the TAH was reduced to 8 and then stayed below 30 that overharvesting occurred.<sup>12</sup> Furthermore, when the TAH has been higher, DLPKs occur less often<sup>13</sup> and the 2M:1F ratio is achieved with regularity.

KWB strongly feels that a TAH of 45 can maintain a stable WH PB population as well as increase public safety and encourage Inuit hunting practices and the transfer of Inuit Qaujimaqtuqangit.

### 3.2 Moratorium on Flexible Quota System Penalizations for Overharvesting Females

The 2M:1F sex-selective harvesting requirements in the flexible quota system creates too many penalizations and can be burdensome and difficult to maintain, particularly when the TAH is very low and DLPKs are very high. Too often, Inuit are severely penalized when a female bear is caught. When penalizations add up, it can lead to several years of a community not having the ability to hunt. Hunting is one of the main ways that ecological knowledge of bears develops, and if youth and other hunters are not hunting polar bears, they are likely not learning ways to distinguish living male bears from female bears, making sex-selective harvesting even more difficult to follow into the future.<sup>14, 15</sup>

KWB would like to see a moratorium on severe penalizations resulting from overharvesting females in the flexible quota system for five years. Instead, hunters should be encouraged by KWB, HTOs and other co-management partners to hunt bears at a 2M:1F ratio, but there should not be punishment if this ratio is not maintained perfectly. If overharvesting occurs beyond the TAH, a one to one reduction should occur in the next year's TAH.

After five years, a harvesting analysis and population survey can be done to determine what ratio of males and females were actually caught during the time period and evaluate the impact on the overall WH PB population to determine whether severe penalizations for overharvesting females need to be reinstated.

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<sup>10</sup> Government of Nunavut, Department of Environment. (2017). Consultation meeting to discuss the results of the 2016 aerial survey for the Western Hudson Bay polar bear sub-population.

<sup>11</sup> Government of Nunavut. (2017). Submission to the Nunavut Wildlife Management Board for polar bear total allowable harvest recommendations for the Western Hudson Bay sub-population.

<sup>12</sup> See Figure 2 in attached WH PB Tables and Figures document.

<sup>13</sup> See Figures 3-7 in attached WH PB Tables and Figures document.

<sup>14</sup> Wenzel, G. (2008). Inuit TEK and the sport-hunt. In G. Wenzel, *Sometimes hunting can seem like business: Polar bear sport hunting in Nunavut* (pp. 21-31). Edmonton, AB: CCI Press.

<sup>15</sup> Tyrrell, M. (2009). Guiding, opportunity, identity: The multiple roles of the Arviat polar bear conservation hunt. In M.M.R. Freeman and L. Foote (Eds.), *Inuit, polar bears, and sustainable use: Local, national, and international perspectives* (pp. 25-38). Edmonton, AB: CCI Press.

### 3.3 Provide Clarity on Tag Penalizations

Certain issues related to harvesting and tag allocation/penalizations need to be clarified. For example, recently, there was a DLPK by a hunter from Rankin Inlet who was close to Whale Cove when he had to kill a bear. Whale Cove lost a tag for the DLPK, despite the hunter being from Rankin Inlet. This caused quite a bit of disagreement and animosity between the HTOs and the communities. Clarity at the management level is needed to handle issues like these, and defining how scenarios like these will be handled should be in the management plan. These types of scenarios need to be considered ahead of time with clear procedures on how tags will be used up.

### 3.4 Increase Bear Deterrence Programs

Arviat has a strong bear deterrence program which involves a GN Conservation Officer (with the possibility of one more), two bear deterrers and one World Wildlife Fund officer (with the possibility of one more) using live trapping, bear bangers, rubber bullets and ATVs to deter bears from entering town.<sup>16</sup>

KWB would like to see this type of program setup in Whale Cove and Chesterfield Inlet to help deter bears from entering the communities and causing public safety concerns. This would include the training of bear deterrers, the provision of equipment and the funding to keep this program running and working. In Whale Cove, it is very important that a Conservation Officer is hired and trained to coordinate these types of duties in the town.

### 3.5 Increase Funding for Wildlife Damage Prevention and Compensation Programs

The Government of Nunavut currently has a small amount of funding dedicated to programs for Wildlife Damage Prevention and Compensation. These programs are underfunded and difficult to access for people of Nunavut. KWB wants these programs to receive more funding and for there to be an easy and transparent way for Inuit to access these programs to help prevent polar bears and other wildlife from damaging their properties as well as to receive compensation for damaged property.

### 3.6 Research and Actions on Improving Community Infrastructure

KWB wants there to be more research studies on how to build or retrofit community infrastructure (e.g. dumps, meat caches, cabins, etc.) to reduce the likelihood of polar bears entering a community. Beyond research, KWB wants actions to be taken by the GN and municipalities to create better infrastructure that helps prevent bears from coming close to communities. Looking into what Churchill, MB has done for their land fill and other infrastructure might offer guidance on what could be done in the Kivalliq.

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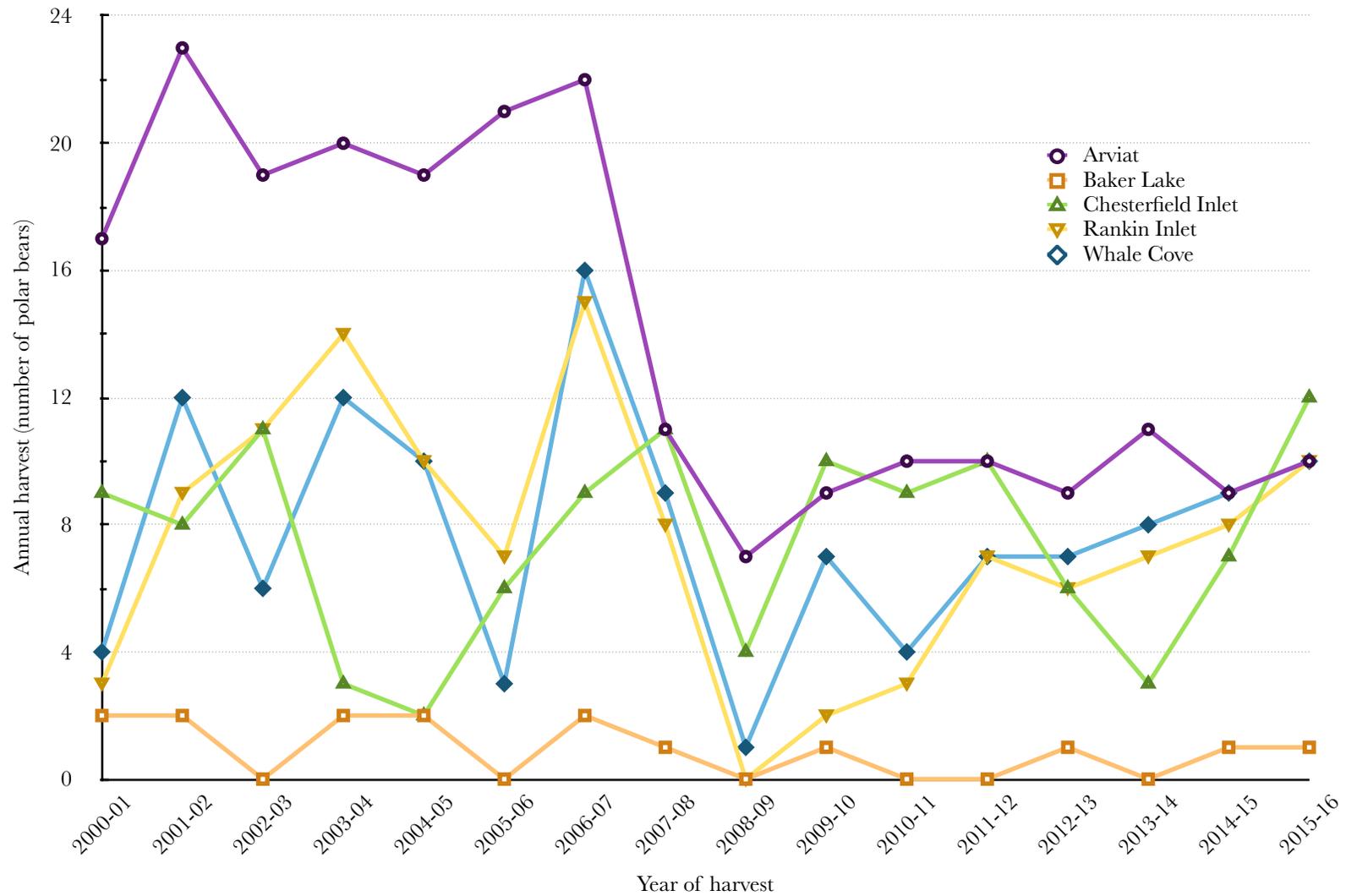
<sup>16</sup> Rob Harmer, Kivalliq Regional Manager, GN DoE presentation at KWB AGM, October 18, 2017



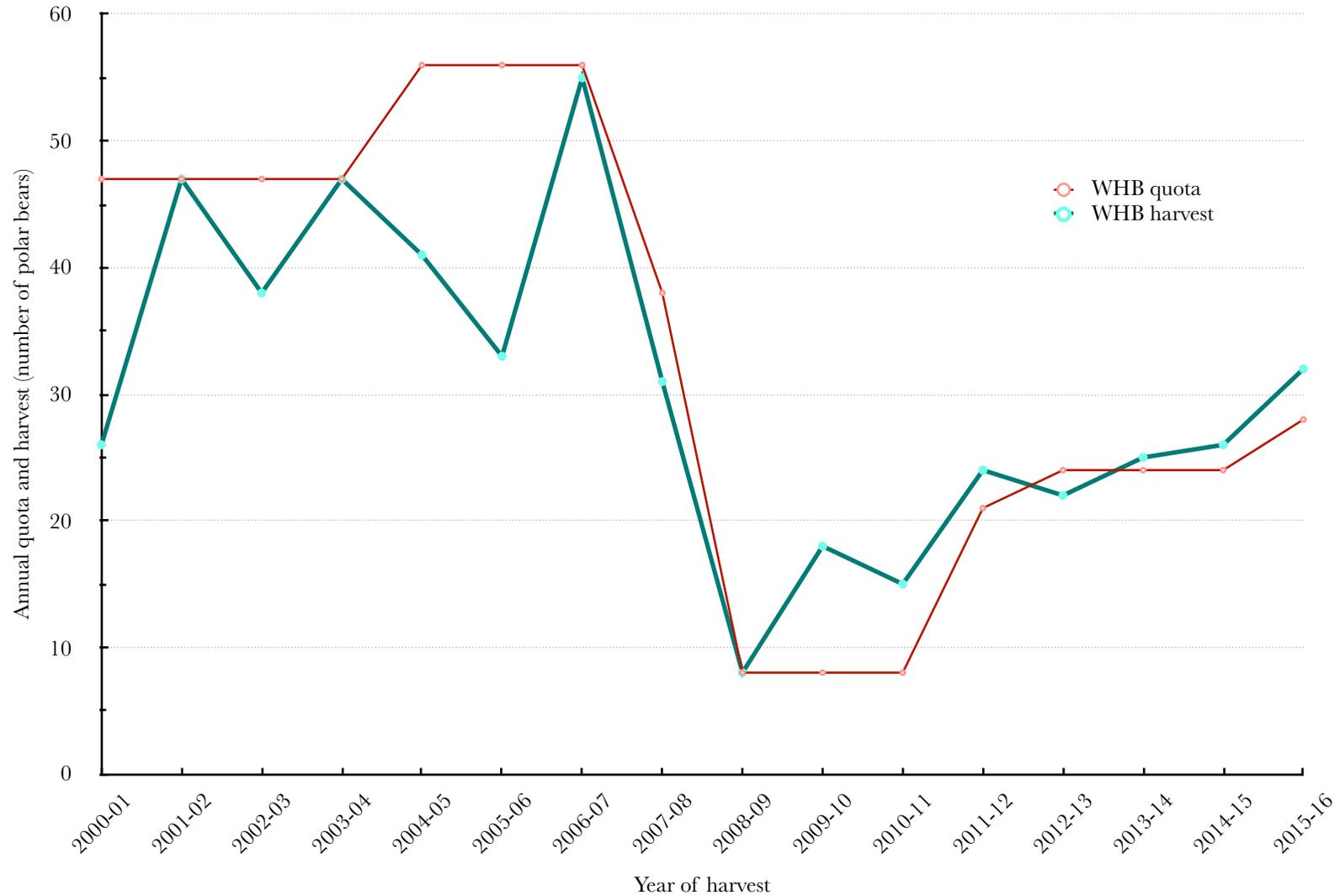
**Table 2.** Annual and averaged polar bear harvests (**black bold**) of Kivalliq communities associated with the Western Hudson Bay polar bear subpopulation, from 2000-2001 to 2015-2016, broken down according to harvest type: Regular harvest (**bold green**), sport hunt (**light blue**) or defense kill (**bold orange**). Illegal kills and miscellaneous hunts annotated individually. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)

	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	Average
Arviat	<b>17</b>	<b>23</b>	<b>19</b>	<b>20</b>	<b>19</b>	<b>21</b>	<b>22</b>	<b>11</b>	<b>7</b> <sup>1</sup>	<b>9</b>	<b>10</b> <sup>2</sup>	<b>10</b>	<b>9</b>	<b>11</b>	<b>9</b>	<b>10</b>	<b>14</b>
	<b>14</b>	<b>15</b>	<b>14</b>	<b>13</b>	<b>15</b>	<b>15</b>	<b>16</b>	<b>10</b>	<b>0</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>9</b>	<b>11</b>	<b>8</b>	<b>6</b>	<b>10</b>
	<b>3</b>	<b>5</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>
Baker Lake	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>1</b> <sup>3</sup>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>
	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Chesterfield Inlet	<b>9</b>	<b>8</b>	<b>11</b> <sup>4</sup>	<b>3</b> <sup>5</sup>	<b>2</b>	<b>6</b>	<b>9</b>	<b>11</b>	<b>4</b>	<b>10</b>	<b>9</b>	<b>10</b>	<b>6</b>	<b>3</b>	<b>7</b>	<b>12</b>	<b>8</b>
	<b>8</b>	<b>8</b>	<b>6</b>	<b>1</b>	<b>2</b>	<b>0</b>	<b>9</b>	<b>10</b>	<b>3</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>0</b>	<b>1</b>	<b>7</b>	<b>11</b>	<b>6</b>
	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Rankin Inlet	<b>3</b>	<b>9</b>	<b>11</b>	<b>14</b>	<b>10</b>	<b>7</b>	<b>15</b> <sup>6</sup>	<b>8</b>	<b>0</b>	<b>2</b>	<b>3</b>	<b>7</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>8</b>
	<b>1</b>	<b>9</b>	<b>11</b>	<b>13</b>	<b>10</b>	<b>7</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>7</b>	<b>5</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>7</b>
	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Whale Cove	<b>4</b>	<b>12</b>	<b>6</b>	<b>12</b>	<b>10</b>	<b>3</b>	<b>16</b>	<b>9</b>	<b>1</b>	<b>7</b>	<b>4</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>8</b>
	<b>3</b>	<b>11</b>	<b>5</b>	<b>12</b>	<b>10</b>	<b>3</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>7</b>	<b>7</b>	<b>9</b>	<b>8</b>	<b>6</b>
	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

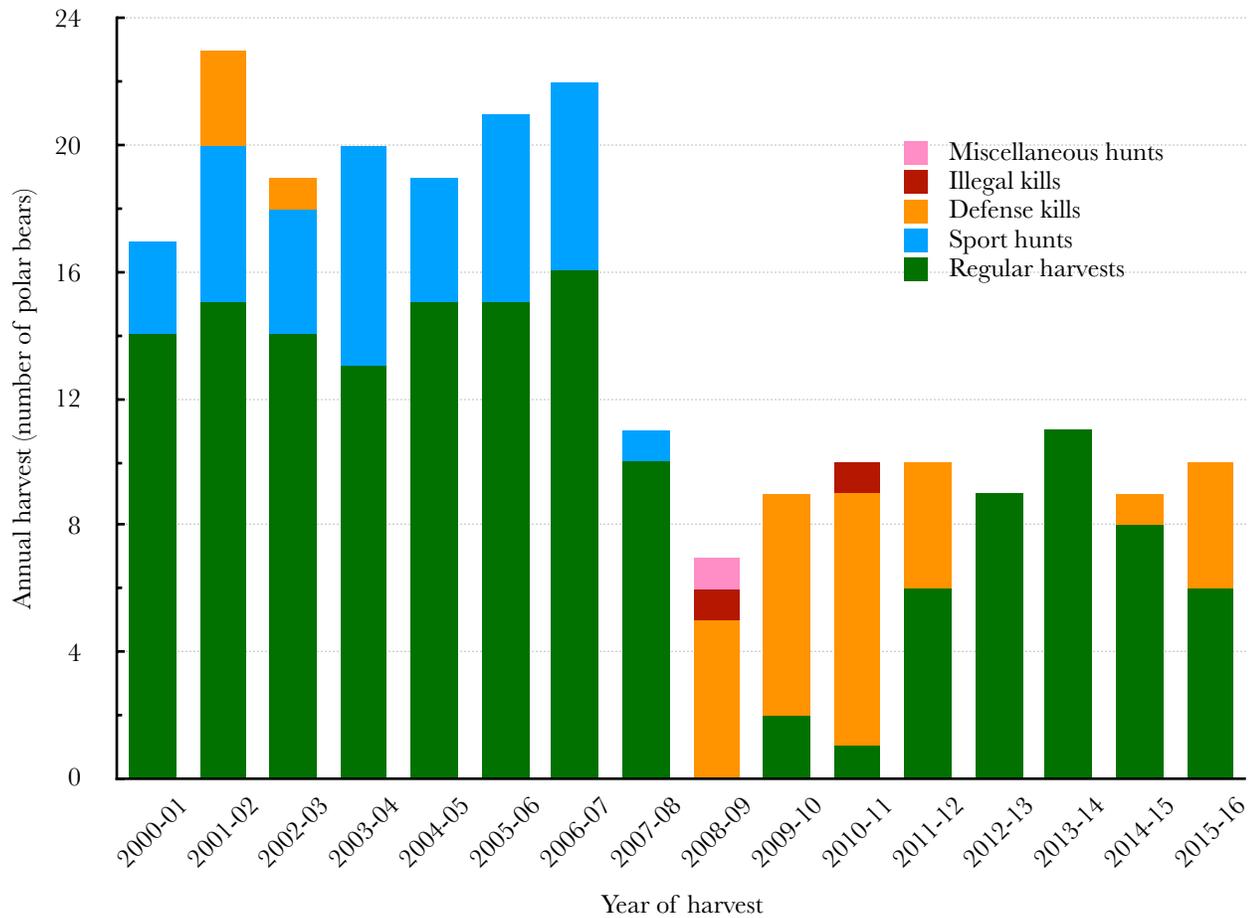
<sup>1</sup> 1 illegal kill and 1 miscellaneous hunt; <sup>2</sup> 1 illegal kill; <sup>3</sup> 1 illegal kill; <sup>4</sup> 3 illegal kills; <sup>5</sup> 1 illegal kill; <sup>6</sup> 1 illegal kill



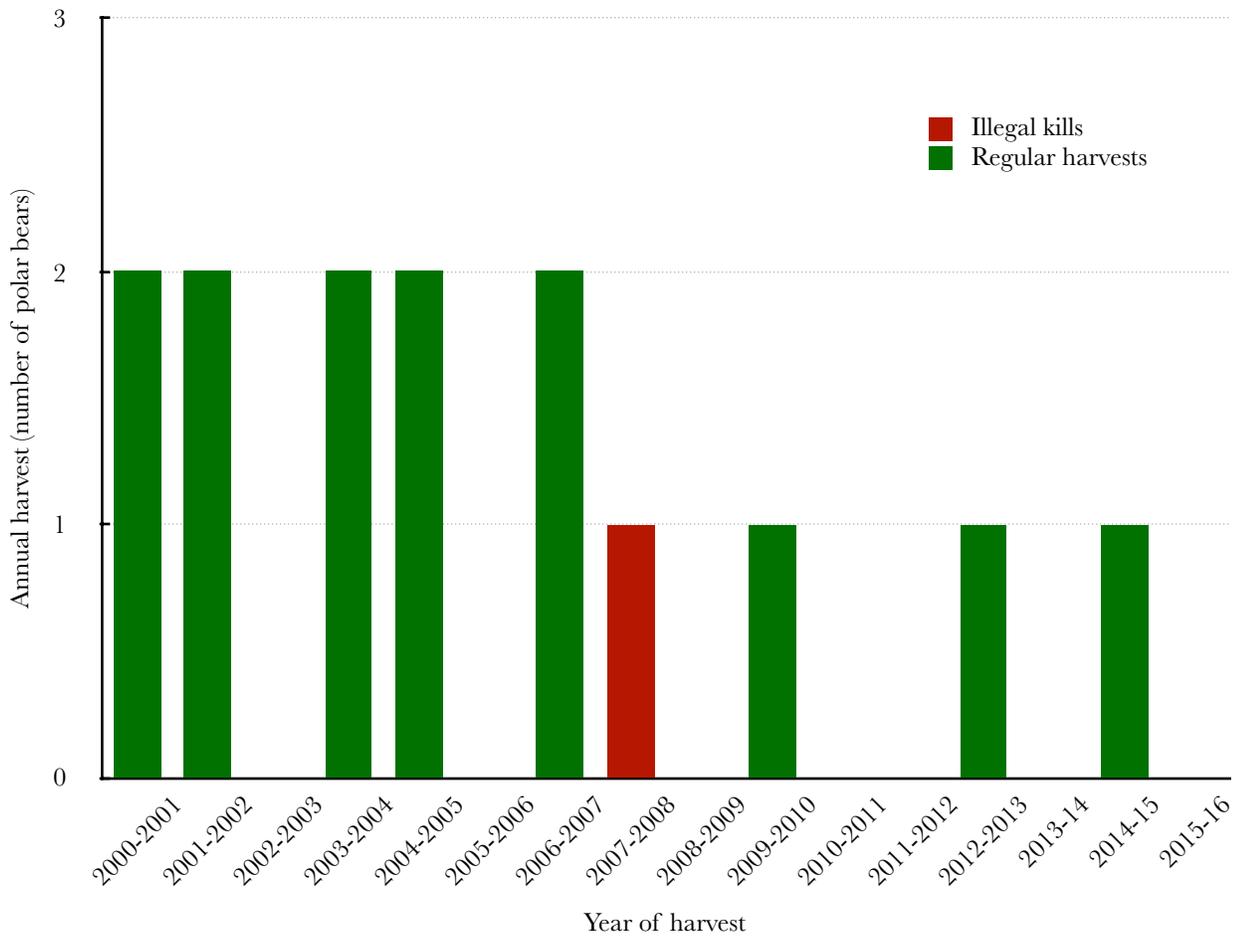
**Figure 1.** Annual polar bear harvests, from 2000-2001 to 2015-2016, of Kivalliq communities associated with the Western Hudson Bay polar bear subpopulation; polar bears harvested from the Foxe Basin subpopulation also included in totals. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)



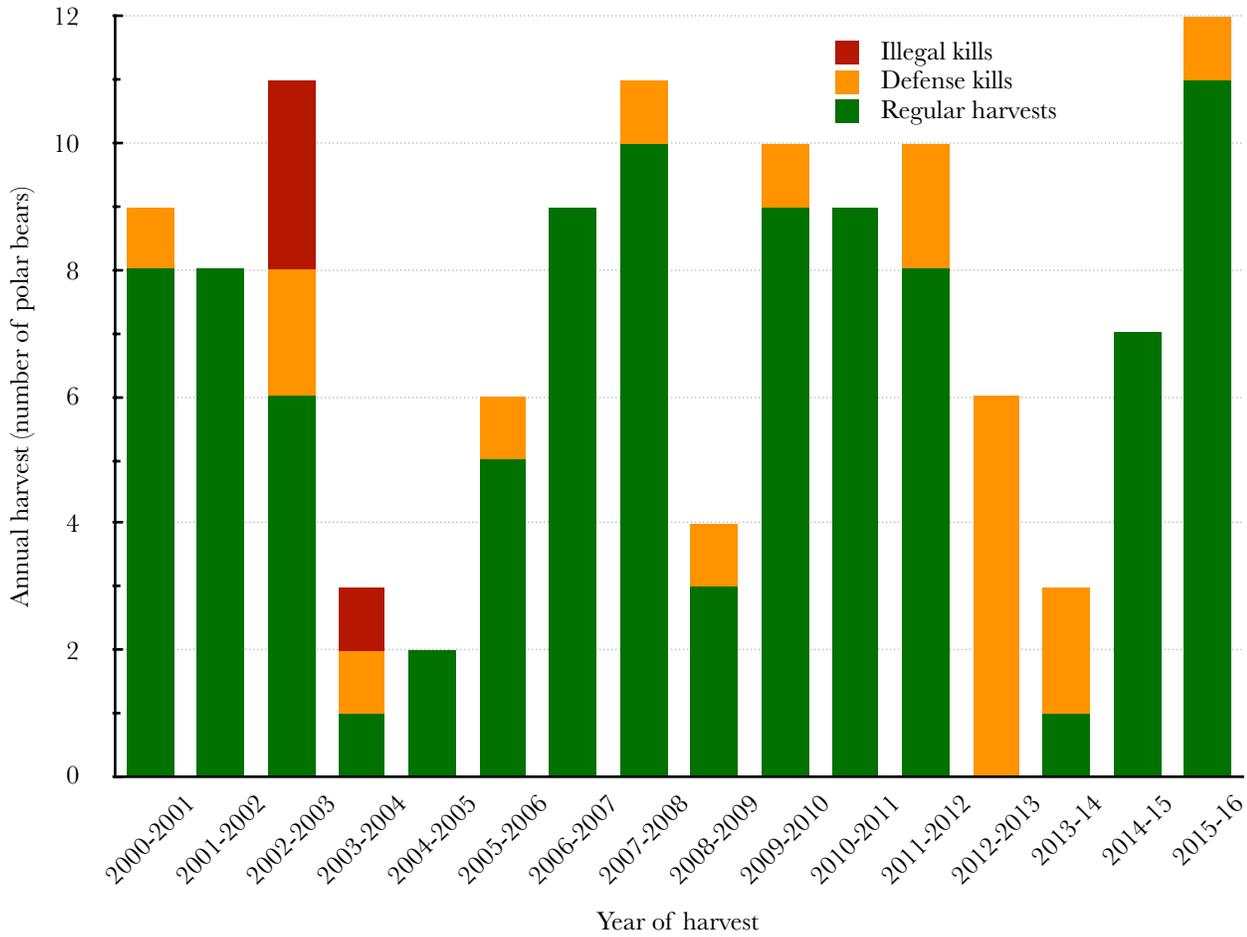
**Figure 2.** Comparison between the total annual quotas for the Western Hudson Bay (WHB) polar bear subpopulation and the combined annual harvests of WHB polar bears by Kivalliq communities, from 2000-2001 to 2015-2016. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)



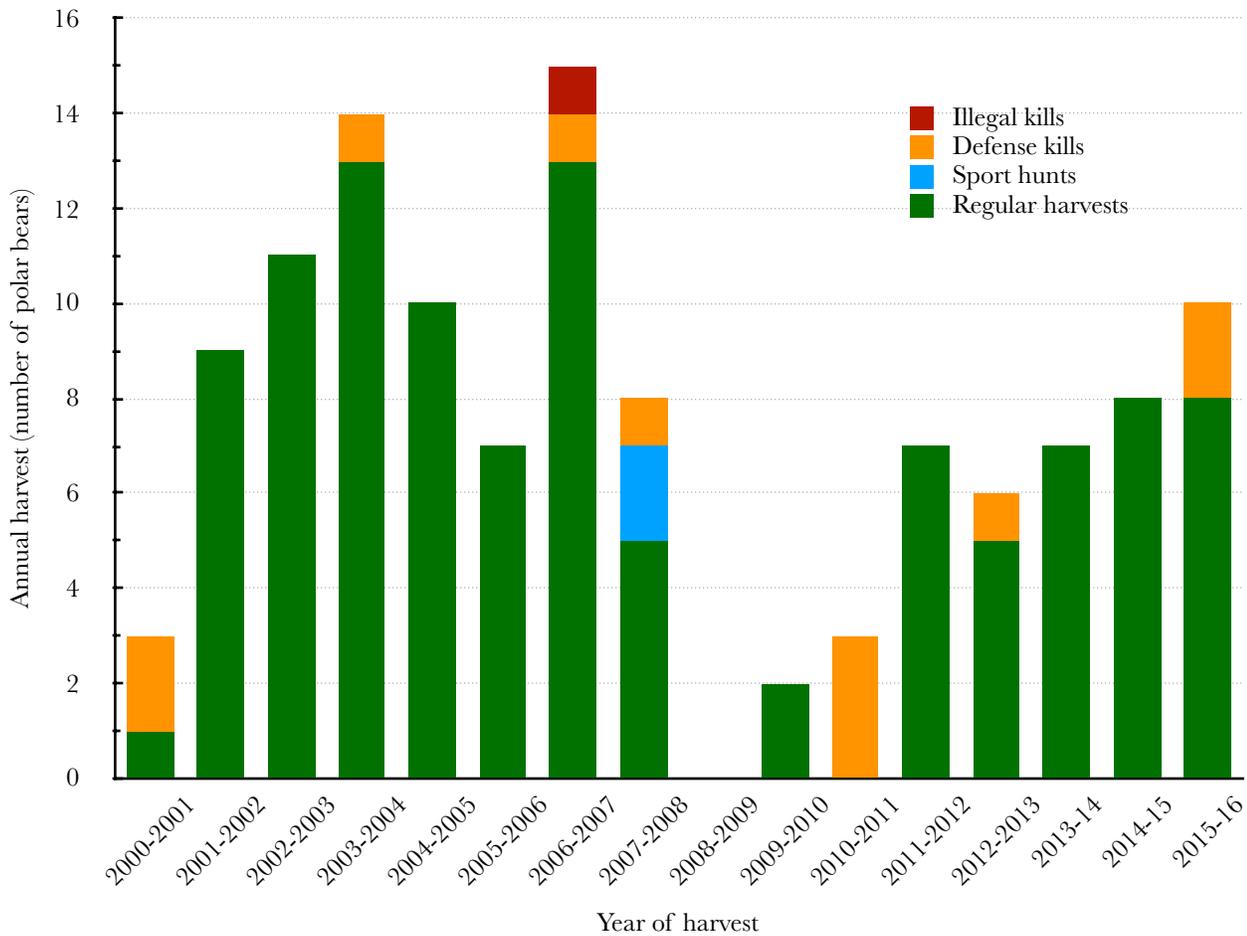
**Figure 3.** Polar bear harvests recorded in Arviat, from 2000-2001 to 2015-2016, subdivided according to harvest type. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)



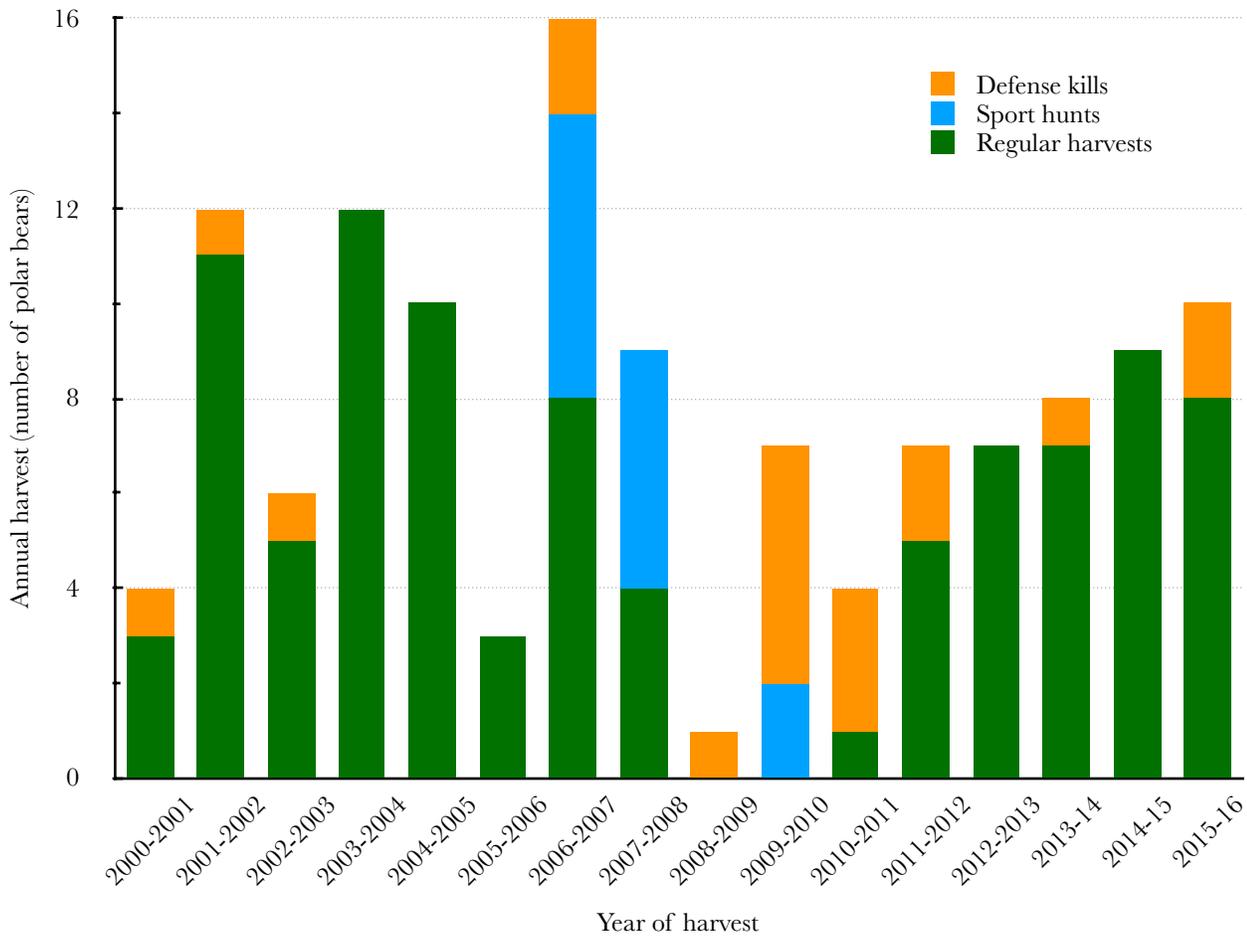
**Figure 4.** Polar bear harvests recorded in Baker Lake, from 2000-2001 to 2015-2016, subdivided according to harvest type. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)



**Figure 5.** Polar bear harvests recorded in Chesterfield Inlet, from 2000-2001 to 2015-2016, subdivided according to harvest type. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/enviromnement/information/wildlife-research-reports>)



**Figure 6.** Polar bear harvests recorded in Rankin Inlet, from 2000-2001 to 2015-2016, subdivided according to harvest type. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)



**Figure 7.** Polar bear harvests recorded in Whale Cove, from 2000-2001 to 2015-2016, subdivided according to harvest type. (Source: Adapted from annual *Polar Bear Harvest Reports* available at <http://www.gov.nu.ca/environnement/information/wildlife-research-reports>)