



# TEN GOOD REASONS NOT TO WORRY ABOUT POLAR BEARS



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Foreword by Matt Ridley

**The Global Warming Policy Foundation**

GWPF Notes



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**Dr Susan Crockford**

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## Foreword

In 1978 three friends and I spent six weeks camped in a valley in Spitsbergen. The possibility that we would meet a polar bear there, even in winter, let alone summer, was far-fetched and we slept soundly in our tents without taking any precautions. We used a nearby hut for shelter from the weather. Last year I enquired about using that hut again and was told that it was no longer habitable: 'due to damages made by polar bears'.

The west coast of Spitsbergen is now thickly inhabited by bears in summer, as it was not then. In recent years they have killed all the eggs and goslings laid by barnacle geese on offshore islands: breeding success has been near zero. Something similar has been happening on Cooper Island off Alaska, where bears have predated black guillemot nests in recent years. In both cases, scientists are attempting to explain these changes in terms of bears being stranded on land by the loss of ice, but there never was summer sea ice (and rarely winter ice) on the west coast of Spitsbergen. Nobody with local experience is in any doubt that bear numbers have boomed in the region, thanks to the cessation of hunting in the 1970s, and that this rather than any change in ice cover locally is the chief reason for their more frequent encounters with bears. Yet the Polar Bear Specialist Group calls the trend in the Barents Sea bear sub-population 'unknown'. Indeed, Dr. Susan Crockford has uncovered the astonishing fact that this entire population, which the Norwegian government has estimated as containing more than 2,000 animals, is officially listed as 'data deficient' on a new PBSG's map, as is true for several Canadian ones that have also been counted.

The same organization claims that eight of the polar bear's sub-populations are decreasing, but read its own website and you will find that this is based almost entirely on projections and mathematical models. The official data table and map says that two of these eight sub-populations are only 'thought' or 'believed' to be declining – entirely due to hunting; four are in decline only according to computer models, despite some claims by 'traditional ecological knowledge' (ie, locals) that they are thriving; one has more than doubled but is now said to be 'currently declining' because of crowding, not climate change; and only one showed a real decline. The latest data show that even that decline (in the West Hudson Bay population) has probably recently been reversed.

In other words, the claim that polar bear populations are declining at all, let alone due to climate change, is a manufactured myth, designed for media consumption and with very little basis in fact. That it works all too well is demonstrated by an episode in 2011 involving Sir David Attenborough. In a television series the brilliant television presenter, unwisely diverging from neutral natural history, had asserted that the polar bear is already in trouble. When challenged by Lord Lawson that 'the polar bear population has not been falling, but rising', Sir David responded. He was quoted by *The Daily Telegraph* as saying 'Most [polar bear populations] are in decline and just one is increasing – for a number of factors – one being they have stopped hunting... Lord Lawson is denying what the whole scientific community is accepting and working at and it is extraordinary thing for him to do'.

Much as I admire and like both men, I have to say that the evidence suggests that Lord Lawson's account is closer to the truth. The International Union for the Conservation of Nature estimated in 1966 that there were 10,000 polar bears in the world; in 2006, the same source estimated that the population had risen to 20,000-25,000 bears. Had Sir

David examined the text on the PBSG's website he would have found that all but one of the eight sub-population declines he cited were in fact based on 'beliefs' or future projections. As demonstrated by another recent mistake in another television series, this time an exaggerated claim for temperature change in Africa, Sir David is not being well served by his BBC researchers these days.

Zac Unger documents in his recent book 'Never Look a Polar Bear in the Eye', how polar bear 'decline' is now a large and lucrative industry and in places like Churchill, Manitoba, organisations like Polar Bears International cynically use the imagined plight of the bears to raise money, and push propaganda at young people about changing their lifestyles and those of their parents.

We're empowered to teach these kids how to make a difference. It's an enormous responsibility. Saving the polar bear is in their hands,

an activist explains to Unger, having flown school children by helicopter to a bear-proof camp so they can emote by video-conference to schools across America. As Attenborough once said:

All these big issues need a mascot and that's what the polar bear is.

Yet as Unger discovered and Susan Crockford confirms, increasingly the local people in places like Churchill look on the carnival of tourists, journalists and scientists with bemusement, knowing full well that even there – in one of the most southerly polar bear populations of all – the evidence of a decline in numbers, or of the health of the bears, is threadbare or non-existent. How much more threadbare that evidence is farther north, where the bears' greatest problem is usually too much ice and therefore too few seals, is poorly known. The ideal habitat for polar bears is first-year ice that lasts well into summer, when they feed on fat young seals. The fact that this ice thins or breaks up enough to allow seals to feed during the autumn keeps the seal population healthy. Four to five months of ice-free fasting in early autumn is not exceptional for polar bears and two to three months is quite normal. The recent trend in most of the Arctic – no change in winter ice extent but a decline in late summer ice extent – has been towards exactly this ideal combination.

Many scientists have grown frustrated with the domination of the polar bear story by dogmatic propagandists and have begun to speak out. Susan Crockford is one of them: a zoologist who is independent of the alarm industry and therefore free to make up her own mind. In this valuable paper, she has done a fine job of documenting the actual facts of the case as far as they are known.

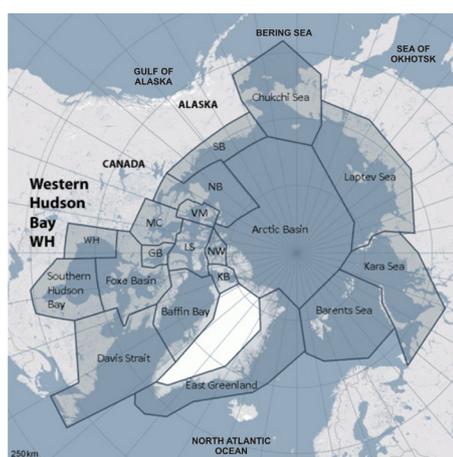
Matt Ridley

## Ten Good Reasons Not To Worry About Polar Bears

This year marks the 40th anniversary of the signing of an international agreement to protect polar bears<sup>1</sup> from commercial and unregulated sport hunting. The devastating decades of uncontrolled slaughter across the Arctic, including the Bering Sea<sup>2</sup>, finally came to an end. And so in honour of the International Polar Bear Day (February 27) – and because some activists are calling 2013 The Year of the Polar Bear – I have made a summary of reasons not to worry about polar bears, with links to supporting data. I hope you find it a useful resource for tuning out the cries of doom and gloom about the future of polar bears and celebrating their current success.

### 1) Polar bears are a conservation success story<sup>3</sup>

Their numbers have rebounded remarkably since 1973 and we can say for sure that there are more polar bears now than there were 40 years ago. Although we cannot state the precise amount that populations have increased (which is true for many species – counts are usually undertaken only after a major decline is noticeable), polar bears join a long list of other marine mammals whose populations rebounded spectacularly after unregulated hunting stopped: sea otters, all eight species of fur seals, walrus, both species of elephant seal, and whales of all kinds (including grey, right, bowhead, humpback, sei, fin, blue and sperm whales). Once surveys have been completed for the four sub-populations of polar bears whose numbers are currently listed as zero (how about funding that, WWF?<sup>4</sup>), the total world population will almost certainly rise to well above the current official estimate of 20,000-25,000 (perhaps to 27,000-32,000?).



**Figure 1.** A map of the 19 polar bear sub-populations (courtesy the Polar Bear Specialist Group (PBSG), with a few additional labels).

1 <http://pbsg.npolar.no/en/agreements/agreement1973.html>

2 <http://polarbearscience.com/2013/01/21/extirpated-polar-bears-of-st-matthew-island-spent-five-months-on-land-during-the-summer/>

3 <http://polarbearscience.com/2013/02/05/andrew-derocher-refuses-to-accept-that-polar-bears-have-been-saved/>

4 <http://polarbearscience.com/2013/02/04/why-is-the-us-pushing-to-ban-polar-bear-trade-polar-bears-have-been-saved/>

**2) The only polar bear subpopulation that has had a statistically significant decline in recent years is the one in Western Hudson Bay (WH)**

A few others have been presumed to be decreasing, based on suspicions of over-harvesting, assumed repercussions of reduced sea ice and/or statistically insignificant declines in body condition (see point 3, below) – not actual population declines.

**3) Polar bears in the US portion of the Chukchi Sea are in good condition and reproducing well, while sea ice in the Bering Sea has rebounded from record lows over the last ten years – good reasons not to be worried about polar bears in the Chukchi.**

The Chukchi subpopulation (which includes bears in the Bering Sea) was formerly assumed to be decreasing due to suspected over-harvesting and past declines in sea ice – even though no population survey had ever been done (see point 2, above) – but preliminary reports about a recent survey suggest that Chukchi polar bears are doing very well. While there is still no official population estimate for the Chukchi (currently listed as zero), sea ice coverage in the Bering Sea has been higher than average over the last ten years and 2012 did not just break the satellite-era record set in 1999, it exceeded it by almost 100,000 square kilometers.

**4) A survey by the Nunavut government in 2011 showed that polar bear numbers in Western Hudson Bay have not declined since 2004 as predicted and all available evidence indicates that Hudson Bay sea ice is not on a steadily precipitous decline – good reasons not to be worried about Hudson Bay bears.**

While polar bear biologists Ian Stirling and Andrew Derocher continue to insist that the modest decline in numbers of Western Hudson Bay polar bears recorded between 1998 and 2004 was due to earlier breakup of sea ice – and continues on that trend to this day – it turns out that much of the data used to support that claim is **either unpublished, woefully out of date, or both**. Although Stirling and colleagues have not yet published comparable dates of sea ice breakup since 2007 (they use a particular computation of satellite data), Canadian Ice Service data<sup>5</sup> suggests that over the last 10 years we have not seen another very early breakup in Hudson Bay like the one that occurred in 2003. Surprisingly, 2009 was a late breakup year: the Port of Churchill experienced the latest breakup of sea ice since 1974 (three weeks later than average). All of which suggests that in Western Hudson Bay, some years have been good for polar bears and others have been not so good, but there has not been a relentless decline in sea ice breakup dates over the last thirty years.

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<sup>5</sup> <http://dynaweb.cis.ec.gc.ca/IceGraph20/page1.jsf>

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**5) Population decreases in polar bear numbers attributed to earlier sea ice breakup in Western Hudson Bay (see 4, above) have not been anywhere near as severe as the catastrophic decline that took place in 1974<sup>6</sup> in the eastern Beaufort Sea, which was associated with exceptionally thick sea ice.**

The modest decline in the Western Hudson Bay population that took place between 1998 and 2004 (down 22%) pales in comparison to the 1974 Beaufort event, when ringed seals numbers (i.e. polar bear food) dropped by 80% or more and numbers of polar bears plummeted. Similar events took place in 1984 and 1992, which means that three precipitous population declines due to heavy ice have taken place in this polar bear population over the last 40 years – but each time, numbers rebounded a few years later. In other words, due to entirely natural causes, polar bear numbers can fluctuate quite dramatically over relatively short periods because of the highly variable sea ice habitat they live in.

**6) Polar bears need spring and early summer ice (March through June) for gorging on young, fat seals and documented declines in sea ice have rarely impinged on that critical feeding period (except for a few isolated years in Hudson Bay, see point 4, above).**

A new study<sup>7</sup> suggests that while some Western Hudson Bay bears will likely perish if the ice-free period extends to six months (from its current four-to-four+), many will survive because of their exceptional fat storage abilities.

**7) There is no plausible evidence<sup>8</sup> that regulated subsistence hunting is causing polar bear numbers to decline, despite suspicions harbored by the Polar Bear Specialist Group.**

**8) Global temperatures have not risen in a statistically-significant way in the last 16 years<sup>9</sup> (see Figure 2) – a standstill not predicted by climate models and a phenomenon even the chairman of the IPCC has acknowledged<sup>10</sup> – which suggests that the record sea ice lows of the last few years are probably not primarily due to CO<sub>2</sub>-caused increases in global temperatures.<sup>11</sup>**

Such changes in Arctic sea ice appear to be normal habitat variations that polar bears have survived before (see point 9, below) and are likely due to natural processes we do not yet fully understand.

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6 <http://polarbearsience.com/2013/02/21/where-were-the-appeals-to-feed-starving-polar-bears-in-1974/>

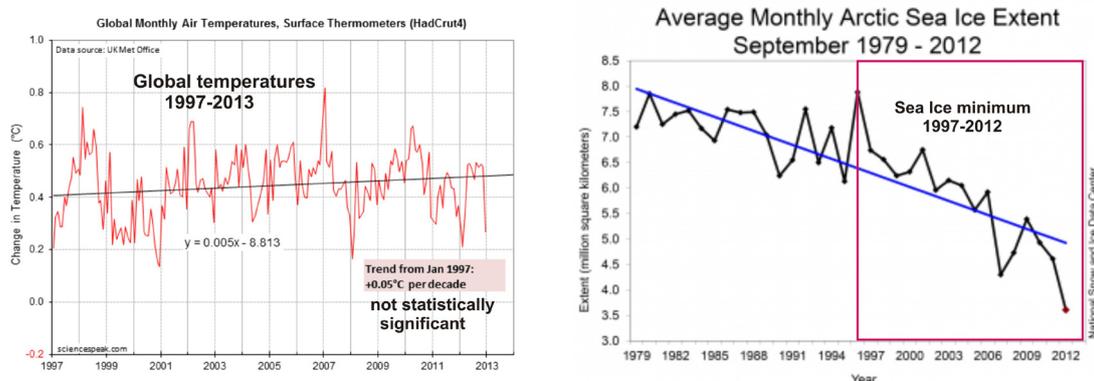
7 <http://polarbearsience.com/2013/01/29/new-study-says-western-hudson-bay-polar-bears-could-spend-2-to-4-months-longer-on-shore-than-they-do-now/>

8 <http://polarbearsience.com/2013/02/04/why-is-the-us-pushing-to-ban-polar-bear-trade-polar-bears-have-been-saved/>

9 <http://www.thegwpc.org/temperature-standstill-continues-2012-scrapes-top-ten/>

10 <http://www.theaustralian.com.au/news/nothing-off-limits-in-climate-debate/story-e6frg6n6-1226583112134>

11 <http://www.droyspencer.com/2012/08/fun-with-summer-statistics-part-2-the-northern-hemisphere-land/>



**Figure 2.** LEFT – There has not been any statistically significant increase in global temperatures over the last 16 years (1997-2013), even though CO<sub>2</sub> levels have continued to rise (Graph modified by David Evans, using Hadley UK Met Office data (HadCRUT4)). RIGHT – Sea ice extent in September (the yearly minimum) has declined quite a bit since 1997 – although nowhere near zero – while global temperatures have barely changed overall (Graph from NSIDC).

**9) Survival of polar bears over a hundred thousand years (at least) of highly variable sea ice coverage indicates that those biologists who portend a doomed future for the polar bear have grossly underestimated its ability to survive vastly different conditions than those that existed in the late 1970s when Ian Stirling began his polar bear research.**

Sea ice has varied – countless dozens of times – over the short term (decades-long climate oscillations) and the long term (glacial-to-interglacial cycles of thousands of years). Over the last 100,000 years, there have been periods of much less ice than today, but also much, much more. Polar bear population numbers probably fluctuated up and down in conjunction with some of these sea ice changes but the polar bear as a species survived – and so did all of the Arctic seal species it depends on for food. Such survival indicates that these Arctic species, in an evolutionary sense, are very well-adapted to their highly-variable habitat.

**10) Polar bears today are well distributed throughout their available territory, which is a recognized characteristic of a healthy species.**

These are all good reasons to feel good about the current status of the polar bear. It is plain to see that these ice-dwelling bears are not currently threatened with extinction due to declining sea ice<sup>12</sup>, despite the hue and cry from activist scientists and environmental organisations.<sup>13</sup> Indeed, because the polar bear is doing so well, those who would like to see polar bears listed as ‘threatened’ depend entirely upon dramatic declines in sea ice prophesied to occur decades from now to make their case.

<sup>12</sup> <http://polarbearscience.com/2013/01/26/canada-under-international-pressure-to-list-polar-bears-as-threatened-so-far-holds-out/>

<sup>13</sup> <http://polarbearscience.com/2013/01/24/pbsg-invited-wwf-and-pbi-advocates-to-its-last-polar-bear-experts-meeting/>





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Our main focus is to analyse global warming policies and their economic and other implications. Our aim is to provide the most robust and reliable economic analysis and advice.

Above all we seek to inform the media, politicians and the public, in a newsworthy way, on the subject in general and on the misinformation to which they are all too frequently being subjected at the present time.

The key to the success of the GWPF is the trust and credibility that we have earned in the eyes of a growing number of policy makers, journalists and the interested public.

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