

BIRDS AND THE BEES

MOTHERS AND CUBS

Polar Bears of Churchill: Mothers and Cubs

The reproductive process of a female polar bear is one of the most incredible achievements of any animal on this planet. It begins as receptive females enter estrous (reproductive state) and mate out on the ice in late April or early May.

Mating lasts for several days and, during this time, the male must fend off several competitors, provided he has not steered the female to their own private spot! This prolonged period of mating may be an adaptation aimed

at ensuring that the largest and most capable male bears are most likely to mate. This would, thereby, improve the likelihood of cub survival.

Testosterone is running highest at this time of year. While the male is quite gentle almost suave in his courtship, copulation is a different story, occasionally resulting in a broken baculum (the polar bear's penis bone). Ouch!

Of course, if a male cannot fend off his competition for the duration of the process, cubs born in the same litter, may not necessarily have the same father.

While the egg has been fertilized by mid-May, the pregnancy does not begin for another four months. This is the result of an adaptation called delayed implantation. Unless the female has maintained a minimum weight of 300kg (660lbs) by September, the egg will simply be reabsorbed.

She needs these excess fat stores, as from mid-July through to the following February, she will have little or no access to food. During this time, she will move inland, prepare a maternity den, give birth,

nurse her young and, in late winter, lead them to the coast. Once there, she must seek out seal birthing lairs and break into them, sometimes through one metre (3') of snow, to both feed herself and her cubs. Only then, does she begin two years of feeding, protecting and teaching her cubs.

Motherhood starts in mid-September with pregnant females nestled into an earthen maternity den and the three month pregnancy just beginning. Near Churchill, cubs are born in early to mid-December once the den has become covered and insulated by a layer of snow.

Less than one kilogram (2.2 lbs) at birth, they are blind, lightly furred and utterly helpless. While the den remains fairly comfortable, close to 0C (32F), up to thirty or forty degrees warmer than temperatures outside, she will also use her breath and body heat to keep her cubs warm.

Inside the den, the female does not eat or drink, her body absorbing its waste. From a normal rate of 70 beats per minute, her heart rate drops as low as eight beats per minute. It is in this state that she gives birth and even nurses. The cubs grow quickly, thriving on mother's high fat, high protein milk. Weighing around 9-14kg (20-30 lbs), they emerge from the den between late February and mid-March.

After spending a week or so acclimating to the temperatures and exercising, they begin the journey to the sea ice. With most dens 30-50km (20-30 miles) inland, this is no small feat for a little polar bear. Many do not make it. There seems to be less than a 50% chance of survival through the first year of life, overall. Naturally, first time mothers (about five years of age) lose the majority of their cubs while older, stronger, smarter females are much more successful

in raising their young. The chances of survival for polar bear cubs increase with the age of the mother, generally up to about fifteen years of age.

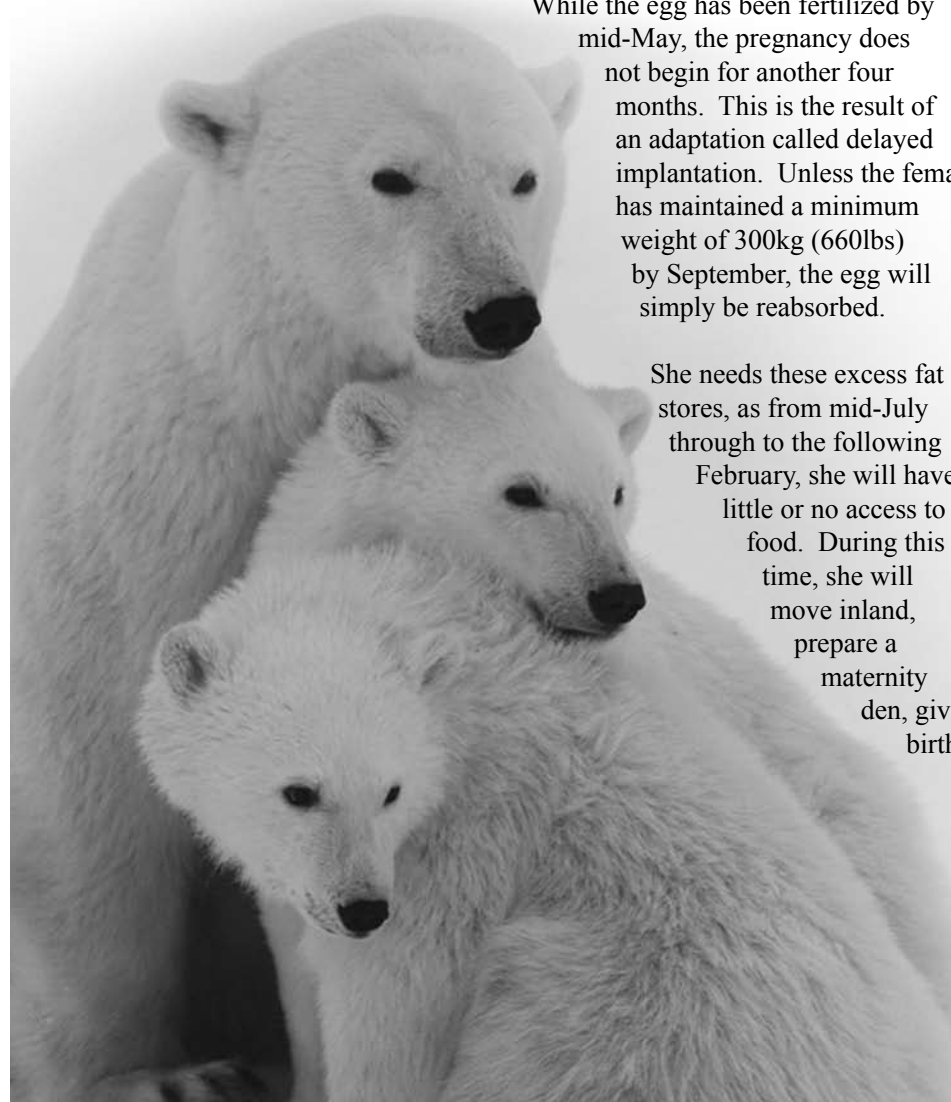
Spring is a critical time of year for mothers and cubs. The females energy is taxed by milk production and the fact that she has not eaten for up to eight or nine months, one of the longest fasting periods for any mammal.

In this tender state, she must guide her cubs to the coast and the seal birthing lairs. As well, the polar bears of Churchill are one of the few populations with active predators, some cubs are taken by the resident wolf population. The pack may work to separate the mother from one or both of her cubs.

Young mothers rarely succeed in this journey, some even abandon their cubs along the way. Older, more experienced bears, however, have a much better chance of success. They generally show an incredible bond with their young, exhibiting patience and care. Through deep snow or difficult terrain, a female may even let the cubs climb on her back, to rest as she carries them to the ice.

The incredible challenges associated with pregnancy and motherhood means that this group of bears are most likely to be negatively affected by the fluctuating weather and ice patterns associated with climate change. Remember, females need to maintain at least 200kg (440lbs) of fat reserves for their pregnancy to initiate. Without a good spring hunt, the egg will simply be reabsorbed. If this hunting season is reduced significantly, it could mean that overall cub production will be reduced to the point where it does not offset the mortality rate.

- excerpt from *Polar Bears of Churchill: A Guide to Bear Season and Beyond* by Kelsey Eliasson. (ed.note: Buy it today, I can't survive on a free newspaper alone... I need to eat!)



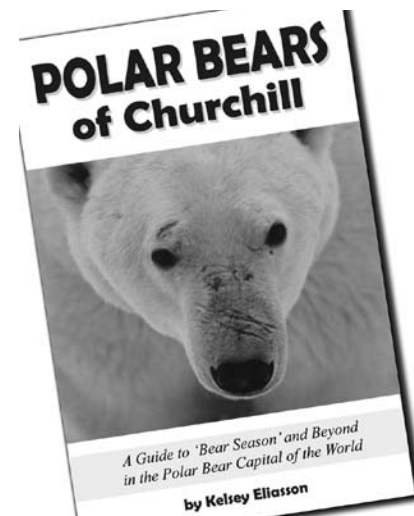
POLAR BEARS OF CHURCHILL

Scrappy One says: Buy this book! Now!!!

This full-colour guidebook follows the polar bears of western Hudson Bay through one year in the sub-arctic. Written by local author and guide, Kelsey Eliasson, Polar Bears of Churchill is a comprehensive guide to our bears.

Available at all Churchill giftshops.

Recommended by the Scrappy Brothers



www.polarbearalley.com

ART AND STUFF

ARCTIC SUB-POETRY

In Churchill, poems don't necessarily have to rhyme... or make any sense at all

Bear Season

There will be snow
in a day or two
the first of the year,
many happy and frozen returns,
confetti in the aisles

There will be bears,
yellowed by the sun,
to follow and be followed
by diesel engines and grease ice,
contrails and clouds

There will be travellers,
soup and sandwiches,
and cocktails at five.
Runny noses and bloodshot eyes
buggy driver and bear alike

And then it will end
frozen tumbleweeds
down our main street
named for a boy explorer
writing poems about the prairies

Born in a Cave

I was born in a cave
Of snow and dead bodies
Amidst decaying generations
Bark, roots and berries
I grew up in teeth and bones

It was spring almost
blizzards yet to come
We crossed the barrenlands
I held, tight
clinging to my mother's back

We lived on the sea
Breaking snowbanks
Peeling ceilings, ice and skin
Under the northern lights
We were home wreckers

I was photographed
By parka'd paparazzi
Forty five to sixty three
Years of age
That's what they say

In the spring I hunt
And fight and... well
Someday I believe I'll sink
Scarred and arthritic
To the bottom of the sea

My Lake

My lake is stormy,
moody and swirling
You have stirred her currents
raking muck
on my limestone

Clouds rumble on
rolling and gray
They fall into themselves
sometimes stumbling
showing their age

Something is brewing
its whispers starting
beyond the treeline
where there is civilization
and Wal-Mart

North winds retreat
snagged on crooked trees
black clouds hold
glancing south
momentarily

Their phalanx bends
and then breaks
Whitecaps collide
routed and scattering
across my lake

The moon is watching,
without mirth or malice,
shrinking into the sky
dripping white
into her chalice

Pacific Loons sink,
shining and silver,
lithe beneath her surface
piercing beaks
shear her waters

My lake is theirs
Red eyes territorial
they emerge beneath
unaware intruders
primordial

Long-tailed ducks dabble
waiting in the lee
reeds swaying above
praying for rainbows
and peace

Mosquitoes and mist
rise with the dawn
I am asleep on my porch
waiting for my lake
to be calm

*'Wow, that's dreamy...
Do you like Lou Reed?
I like Lou Reed!'*

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CONSERVATION THROUGH EDUCATION



www.polarbearsinternational.org