



# How can we learn more?

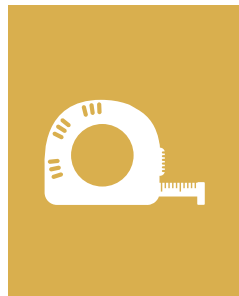
Large, natural enclosures allow the bears to exhibit natural behaviours, which can be studied without having to travel to the Arctic. This is extremely valuable to polar bear researchers.



Researchers can use special cameras attached to drones to figure out better ways to estimate the number of polar bears in the wild. Drones are also being used to figure out bears' body conditions.



Poop contains a lot of clues about a bear, like what he ate and how well he is digesting food. Poop can also help figure out how he might be feeling based on the hormones it contains.



Because the same bear can be measured repeatedly in different conditions, the Habitat can collect the most accurate measurements of a bear, including his weight, length, girth, and the size of his head.



Blood can give us information about a bear's overall health electrolyte status, and hormone levels. Each bear at the Habitat voluntarily allows blood to be taken regularly.



Polar bears are well-adapted to their environment

# Anatomy of a polar bear

## Large rumps

(Our ultrasound showed 8cm of fat!)

Polar bears' big rear ends make it extremely difficult for them to climb. Of course, there isn't much to climb in the Arctic.

## Short tails

(And ears, and limbs)

It can be advantageous for animals in cold climates to have smaller surface area to reduce loss of heat.

## Big paws

(As wide as this page!)

On ice and snow, they act like snowshoes. In water, they make excellent paddles and rudders.



## Papillae

(Little bumps on the footpads)

Help with traction on slippery ice and snow.

## Lots of fat

(More in the winter than in the summer)

Up to 10cm, all around their bodies keeps bears warm in cold air and cold water.

## Strong noses

((Look! You can see a hint of their black skin))

Polar bears are said to be able to smell seals through 1 metre of ice.

## Translucent fur

(It's not actually white)

In two layers: long, coarse guard hairs over a thick under layer. Keeps the bear warm and helps him dry quickly.

## Sharp claws

(But not as big as a grizzly's)

Useful for pulling seals out of the water. Can be used to dig dens (expectant mothers) or day beds (when the weather is bad).