
OUT OF
THE DEPTHS
THE BLUE WHALE STORY
ROM

The blue whale is the largest animal on the planet. Despite its massive size, these animals are very vulnerable. Commercial whaling devastated the populations to near extinction, with Northwestern Atlantic populations only ranging between 250 and 400 individual blue whales.

Introduction

The death of nine blue whales, caught in the ice off the coast of Newfoundland, sparked international headlines in 2014. The Royal Ontario Museum and partners recovered two whales, sharing their riveting and smelly work with thousands of people via social media. *Out of the Depths: The Blue Whale Story* features one of these animals.

Visitors will be amazed by the sheer size of the skeleton, and have the privilege of seeing the only preserved and plastinated blue whale heart in the world. Offering a once-in-a-lifetime opportunity to see firsthand the bones and heart of this endangered animal, this exhibition also tells the incredible story of the recovery mission.

Exhibition Experience

The exhibition opens with an immersive multi-screen experience. The film shows how nine blue whales became trapped in ice and perished; how researchers mobilized with Newfoundlanders to recover the skeletons of two of the animals; and how this story captivated people around the globe. This introduction tells the story of the fieldwork conducted in Newfoundland by ROM curators and Canadian researchers with the help of Newfoundland communities.

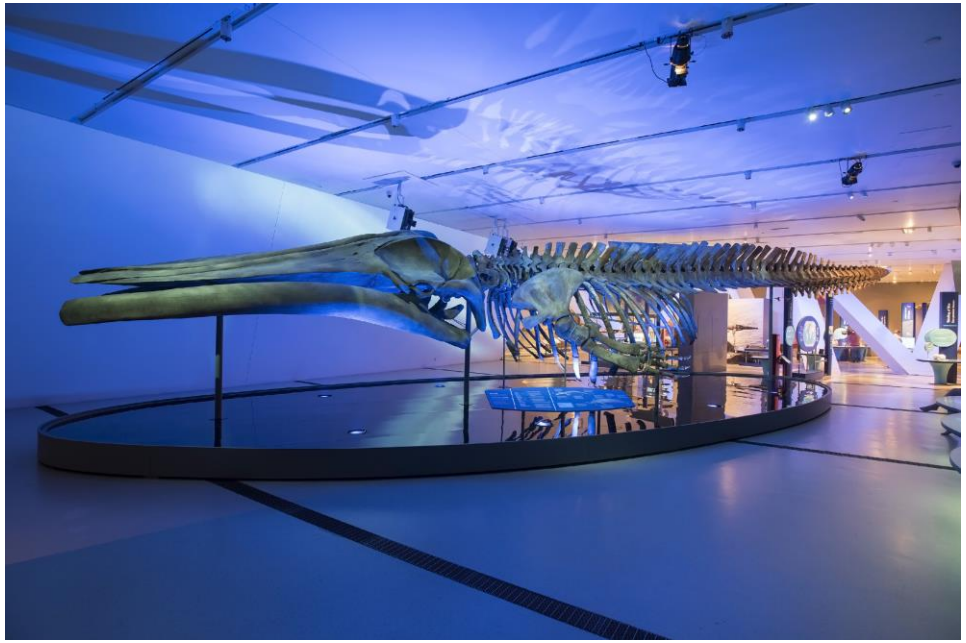
After seeing the film, visitors encounter the enormous, awe inspiring blue whale skeleton. Highly visceral, the exhibition includes interactive and multi-sensory experiences, bilingual didactics, and compelling AV content that tells the blue whale story and speaks to current scientific research and whale conservation. Developed with inclusive design principles in mind, the exhibition features various elements that address accessibility and different learning styles.

Dr. Mark Engstrom, ROM

The Exhibition Experience

SECTION 1: SIZE

The blue whale's size is amazing — and there are some biological marvels that come with being the biggest animal ever living on Earth. Visitors see the blue whale skeleton— and discover some of the evolutionary ways blue whales got so big.



SECTION 2: LIFE

What is life like for a blue whale? The biology and behaviours of the blue whale are explored, including:

- how they breathe and how deep they dive to find food
- their intelligence based on brain makeup and behaviour
- what they sound like and how they communicate
- their family structure and how they reproduce
- upon death, how whale fall supports a deep-sea ecosystem for other animals

SECTION 3: DIET

What is the diet of blue whales? Where do they find their food? By exploring their eating habits, visitors discover:

- their specialized diet of krill — tiny creatures found in massive swarms – and the role baleen plays
- how their digestive system is specialized for this diet
- the incredible mechanics of how they feed
- how their waste benefits their closed food cycle, plus the environmental impact

SECTION 4: HEART

The blue whale's heart is the size of a Smart car! Plastinated in Germany by the creators of Bodyworlds, and a highlight of the exhibition**,** visitors will learn:

- how much blood a blue whale's heart pumps and how many times it beats per minute
- how it compares with other mammals' hearts, including humans
- the potential for new scientific discoveries from its study

SECTION 5: EVOLUTION

How did a fully aquatic animal evolve from a terrestrial ancestor? Tracing the transition from land to sea, this section explores evolutionary change via five cast specimens of ancestral whales, and illustrates:

- how scientists figured out where whales fit on the mammal tree of life
- how various features evolved through whales' ancestral lineage
- briefly, how evolution works, using whales as an example

SECTION 6: GENOME

This introduction to DNA sequencing explains genomes: what they are; what they tell us; and why it's important to have the blue whale genome fully sequenced for the first time. Visitors learn how genomics can help us understand blue whales, including:

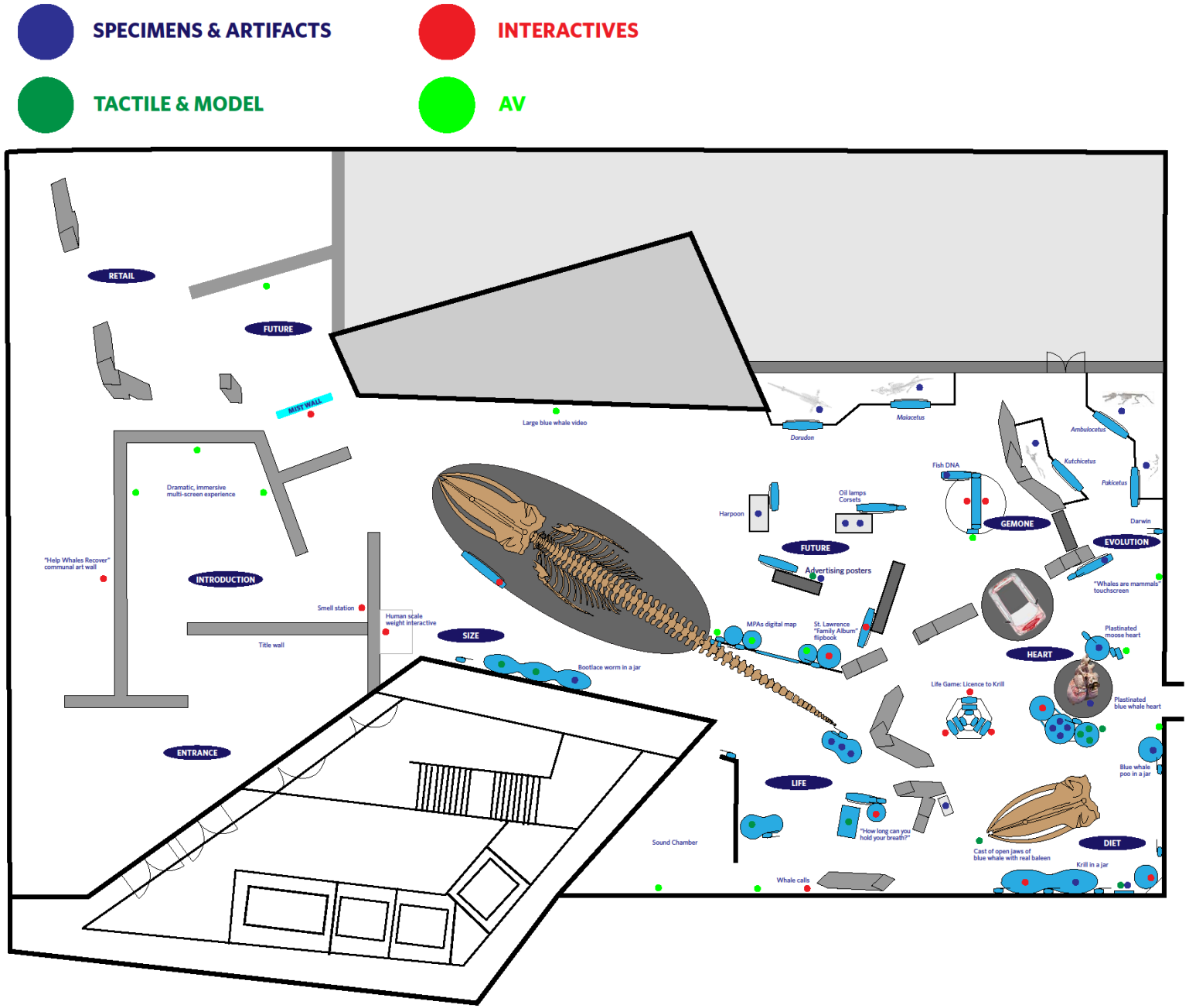
- their vision, taste, and smell
- how whales evolved
- mapping out ancestral blue whale population sizes to better understand and predict the future of existing populations

SECTION 7: FUTURE

Visitors are inspired to learn about whale populations protection.

- How did the whaling industry impact blue whale populations before it was banned?
- Why are there so few blue whales left and what are its current threats?
- What can we do?
- What are scientists doing to investigate the ecology and conservation biology of whales in a rapidly changing environment?
- What is being done to protect our oceans and marine ecosystems?

Floorplan (as installed at the Royal Ontario Museum)



At a Glance

Out of the Depths contains the following components:

OBJECTS:

- approximately 40 objects. Amongst the highlights:
  - 1 fully-articulated blue whale skeleton (23.71 m long) – one of the largest and most complete in the world
  - the only plastinated blue whale heart in the world
  - plastinated hearts of other mammals for comparison
  - a cast blue whale skull with baleen – *for the perfect photo opportunity!*
  - 5 articulated casts of ancestral whales showing the evolution of the animal over time
  - whale fall model and associated specimens
- props and touchable models

EXPERIENCES:

- 10+ interactive experiences (mechanical + digital), including a custom-created game by Emmy award-winning digital agency Blue Cadet
- 17 audio-visual experiences

SIZE: 10,000-11,000 sq. ft. with 15'-0" min. ceiling height (16'-0" ideal)

SCHEDULE: Please contact for latest availability

LOAN FEE: Available upon request

CONTACT: e: travellingexh@rom.on.ca
t: 416.586.5539

FEE INCLUDES:

- objects, props, and exhibition furniture
- mounts, mannequins, and armatures
- integrated bilingual didactics (English/French)
- audio-visual content (English/French), captioned, rights secured
- AV equipment
- ROM courier costs for installation and deinstallation (travel, accommodation, per diem)
- Research Casting International (RCI) staff costs to install and deinstall all skeletal material (labour, travel, accommodation, per diem)
- crating and packing

ADDITIONAL COSTS TO TOUR VENUES:

- inbound shipping
- insurance: onsite + in-transit
- equipment for installation/deinstallation
- installation and deinstallation team (approx. 6-8 people)
- AV installer to install, maintain, deinstall digital elements
- fabrication of select graphics
- crate storage
- costs for 1 ROM VIP for opening (business class airfare, 4-star hotel, ground transportation)
- all venue-specific costs