

Immediate and transformative actions may still prevent many species – including us from being **LOST AT SEA**. But it can be hard to care for a place we've never experienced.

This Gallery invites you to *sea more*.  
*Make waves* by **DISCOVERING THE DEEP**.  
*Dive* for species which show the way by **TURNING THE TIDE** and staging a **CORAL COMEBACK**.  
*Stay current* with modern approaches of **FARMING FOR FISH**.  
 All because, our **OCEANS** are **WORTH** it – and more.  
 'Lost at Sea' remains open for exploration.

**Visiting Hours to the Museum**  
 9:30 am to 6:00 pm  
 Museum is open every day, except **Holi & Diwali**  
 Special concession for school students in groups

**Venue**  
**Birla Industrial & Technological Museum**  
 19A, Gurusaday Road, Kolkata – 700019  
 Phone: 9477345291/2

www.bitm.gov.in | @BITMKolkata | @BirlaMuseum

In the mid-1800s, long before photography, Japanese fishermen devised a creative way to record their most prized catches. Using rice paper, sumi-e ink, and delicate brushwork, they captured the shape, size, and detail of fish by making an impression directly from the creature itself. This imprint was their proof, their pride—and sometimes their keepsake before releasing the fish back into the water or selling it off.



LINE to LIFE

**From Art to Conservation**

Today, Gyotaku serves science as much as art. Researchers use these old prints to study historical fish populations, track biodiversity changes, and even explore the potential of DNA traces left behind in the inked impressions.



**Your Turn**

This exhibit lets you become a 21st-century Gyotaku artist. With just your mobile phone, you select and release your own digital fish. You're not just choosing a creature—you're creating a memory, a moment, and a living image of nature that swims on, just like the real ocean dwellers do.

This blend of natural behaviour and artistic interactivity connects you to the living sea—and to the long human tradition of honouring it through art.

Nature provides the fish - you create the artistic story in motion.

**AR-enabled Extinct Marine Species Wall**

Meet the species – mammals, birds, fishes, lichen, sea shells – that have vanished forever from our oceans. Scan and see them come alive in this augmented-reality based exhibit – our only chance to experience them now.



**SEE the SEA**



Oceanography - the study of the world's oceans, is essential for understanding climate patterns, marine life, and the planet's health.

Remote sensing has opened up new avenues for oceanographers - tracking sea surface temperatures, monitoring currents, and identifying marine ecosystems.

Create your imagination with different sized hills and valleys on the sand bed and see the topographical elevation map generated over it. This exhibit is a realistic ecosystem projected on top of a material surface emphasizing the variation in depth to recreate a real-time model of a topological elevation map, much like remote sensing.

**LOST at SEA**

Ministry of Culture, Government of India  
**Birla Industrial & Technological Museum**  
 A Unit of National Council of Science Museums  
 Ministry of Culture, Government of India

# SEA MORE



The oceans are the origin and engine of all life on this planet. About 44% of the world's population lives within 150 km of the sea. 90% global warming since the 1970s has been absorbed by the marine waters. 3 out of every 7 people in the world depend on seafood.

And this sea is **EXISTING on the EDGE** today.

So is marine life, our climate and the food security of billions. Unprecedented sea-level rise combined with warming waters due to climate change, pollution, overfishing – all leave the oceans hot, acidic and lifeless. But even if you live hundreds of miles from shore, you need a healthy ocean.

**We all do.**

## Ocean Economy

CONTROL THE DEEP BLUE  
02-05-2015

ITEM	QUANTITY	PRICE
SEAFOOD	1000	\$1.50
WATER	1000	\$0.50
ENERGY	1000	\$0.50
TRANSPORTATION	1000	\$0.50
TELECOMMUNICATIONS	1000	\$0.50
TOTAL		\$4.00

- Lifeblood of our planet
- 90% of our biosphere
- Covers about 71% of Earth's surface
- Provide over half of our oxygen
- Food security for over 3 billion people
- Transportation of over 80% global goods
- Sea cables carry 98% of international Internet traffic

Marine domains are a powerhouse of economic activity, sustaining millions of jobs, ensuring food security, and supporting global development.

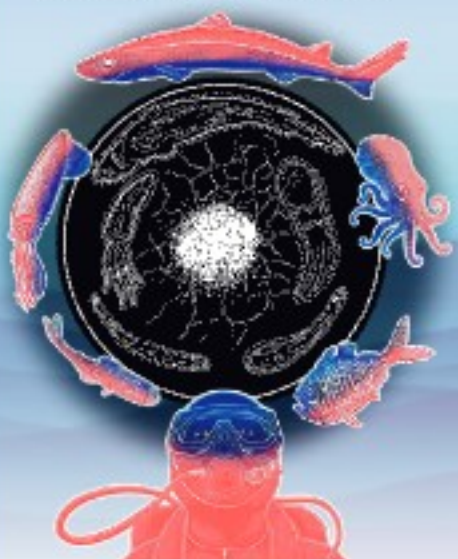
If the ocean were a country, it would be the eighth largest economy in the world.

## What's the OCEAN WORTH?



## LIVING LIGHTS

The abundant life in the twilight zone is specially adapted to just-above-freezing temperatures, crushing pressure and near-complete darkness. They glow and flash for a variety of purposes—repelling predators, attracting predators of their predators, seducing potential mates, and luring prey.



## MARINE MEGAFAUNA

What is the secret to living a long life?

Marine megafauna share that their secret is metabolism, size and habitat.

Bigger animals tend to have a slower metabolism.

And creatures that live in deep, dark and frigid, cold waters also tend to have a slower metabolism.

Metabolic rate is thought to be inversely proportional to maximum lifespan, which means that species that live fast will die young while those that have a slower metabolic rate live slower and longer.

## EXISTING amidst EXTINCTION

Polluting, poisoning, plundering – we are driving the sixth mass extinction on Earth today.

With an unprecedented loss of marine giants - hunting and killing larger species in a way that threatens the disruption of ocean ecosystems for millions of years to come – humanity is taking from the seas more than it can give back.

**Much more.**

MARINE MEGAFAUNA is critical to ecosystem function because of their preferential position at the top of food webs and importance to nutrient cycling and bioturbation of sediments.

CORAL CONSERVATION efforts - amidst ocean acidification and rising ocean temperatures - benefit humanity more than it benefits the oceans.

Bioluminescent LIVING LIGHTS brightly show that no matter how deep or dark - our oceans are alive.

Let us not leave them **silent, static, shadowed.**

