



# Enjoying Goa's beaches safely

## A friendly guide to marine life



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## **Patron**

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Under the outreach activity of the CSIR niche creating project  
**“Exploring the biodiversity and chemodiversity of venomous marine invertebrates from the Goa coast”**

CSIR Project No. NCP050301

## **Project Investigator**

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## **Disclaimer:**

*The information provided in this booklet is for educational and awareness purposes.*

*Collection of marine organisms without appropriate permissions is prohibited under Indian law.*



Hello friends!, Welcome to Goa!  
My name is 'Kaju', and I'm your tour guide.  
I will help you explore the venomous marine  
life of Goa.!





**Some of the envenomation scenarios that can occur**



**Jellyfish Stings (most common)**



**Touching venomous creatures**



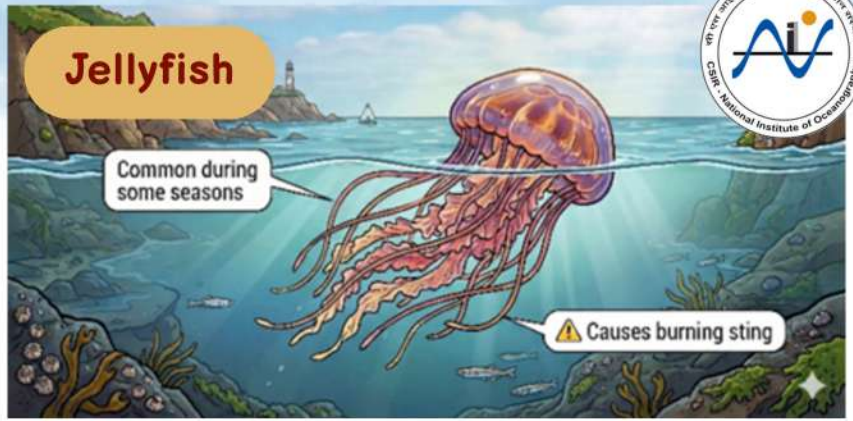
**Getting stung by cone snails**



**Stepping on sea urchin**



## Jellyfish



## Sea anemones



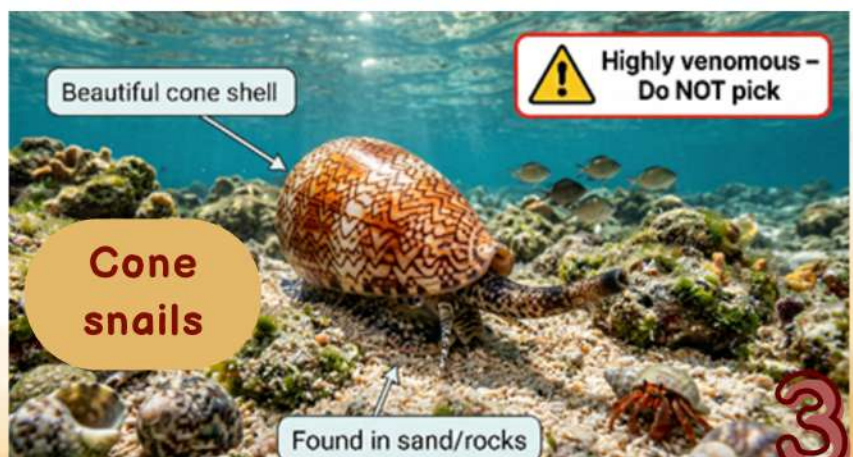
## Zoanths



## Sea urchins



## Cone snails



Be aware about these animals.



## DOs & DON'Ts GUIDE: Beach & Marine Safety

✓ WEAR FOOTWEAR ON ROCKY BEACHES



✓ LOOK BEFORE YOU STEP



✓ FOLLOW LIFEGUARD INSTRUCTIONS



## DON'Ts

✗ DO NOT TOUCH MARINE ANIMALS



✗ DO NOT PICK UP OR COLLECT SHELLS  
(Cone Snail Risk!)



✗ DO NOT REACH INTO ROCK CREVICES



✗ DO NOT PANIC IF STUNG





Jellyfish incidents are most common. Follow safety guide if get stung

# General First Aid for Jellyfish Stings

## ★ What You Should Do



**Most jellyfish stings** (e.g. *Chrysaora*, *Lychnorhiza*, *Aurelia*, *Porpita porpita*, *Acromitus*, *Rhizostoma*) are **not life-threatening** and can be managed with common **vinegar**.



**Rinse with vinegar** to help reduce further venom discharge.

- **Stay calm** and observe the affected area.



**Seek medical help immediately** if you notice:

- Difficulty breathing
- Chest pain
- Severe or spreading rash



**Children should always receive medical attention**, even for mild stings.



## ✗ What You Should NOT Do



**Do NOT rub the sting area.**  
This triggers more nematocyst discharge.



**Do NOT use freshwater or ice.**  
It worsens the sting.



**Do NOT use vinegar for Portuguese man-of-war stings** (*Physalia physalis*)

- Use **hot water** instead.



## ⚠ High-Risk Cases



**Box jellyfish & Portuguese man-of-war stings** Require **immediate hospital treatment**



**Quick Tip:** Always follow local lifeguard instructions and be cautious in jellyfish-prone areas.



These animals are part  
Goa's ocean life—  
Respect them—  
don't harm them.



**JELLYFISH**  
Painful sting



**CONE SNAIL**  
Venomous bite



**SEA URCHIN**  
Painful prickles



**BLUE-RINGED  
OCTOPUS**  
Tiny but deadly bite



**SEA ANEMONES**  
Stinging tentacles

Enjoy the ocean, but leave  
its life undisturbed.



# Venomous species found along Goa coast

## Cone snails

Can be differentiated from the other sea snails by their distinctive cone-shaped shell.



Some of the Species reported in Goa



*Conus biliosus*



*Conus coronatus*



*Conus textile*



*Conus ebraeus*



*Conus achatinus*



*Conus tessulatus*

Found in rocky shores, coral reefs, depth waters.



# Jellyfish

They are like umbrella with tentacles.



**Portuguese-man-of war**  
*(Physalia physalis)*  
Stings are very painful



**Blue button Jellyfish**  
*(Porpita porpita)*  
Stings cause irritation



**Acromitus sp.**  
Stings cause irritation



**Chyrsaora sp.**  
Sting can be strong.



**Lynchorhiza cf. malayensis**  
Stings can be mild to moderate.



**Aurelia sp.**  
Stings are mild to moderate



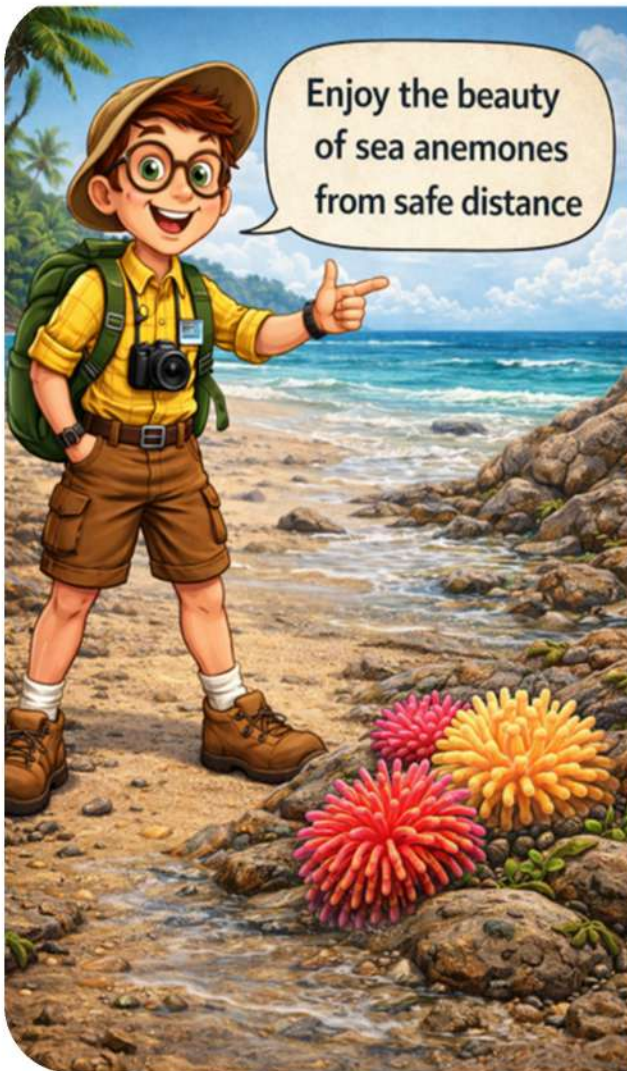
**Inhabits open to coastal marine waters.**  
**Found stranded, caught in fishing nets.**

# Sea anemones

Sea anemones are colourful animals called as 'flowers of the sea'  
Common in rocky shores, coral reef.



They are many species found along Goa Coast.



## FACT BOX

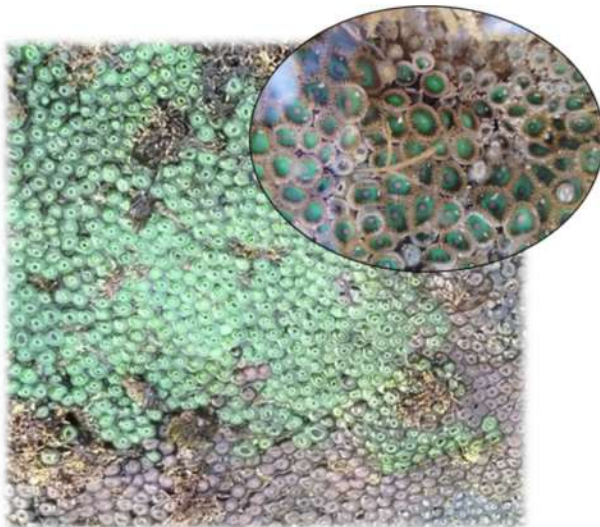
Most of anemones can live for 15 plus years in aquarium or wild, with longest living one being 150+ years old

# Zoanthids

Small, colorful button-like coral colonies on rocks.



Two species are found in the rocky shores of Goa



*Zoanthus sansibaricus*



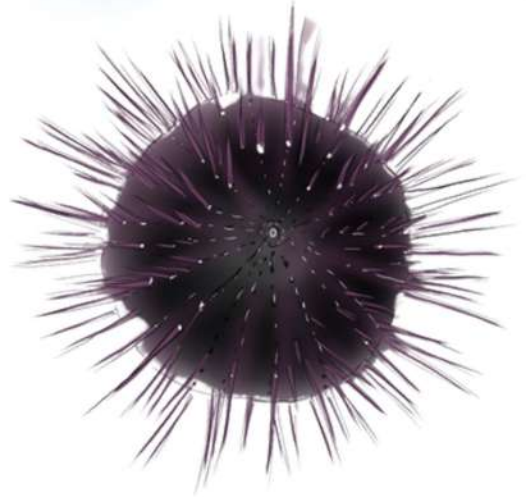
*Palythoa mutukii*

## FACT BOX

Zoanthids are corals without a calcium skeleton. Instead, they borrow sand particles from sea to fortify thier colonies

# Sea urchins

A sea urchin is a round sea animal that looks like a spiky ball.



**Slate pencil sea urchin**

*Stomopeustes variolaris*

**Temnopleurus sp.**

### Fact Box

No reported fatality from sea urchin.  
Out of 600 species roughly 28  
species may be venomous to  
humans

# THANK YOU...!!



Have a  
splendid  
and safe  
vacation..!



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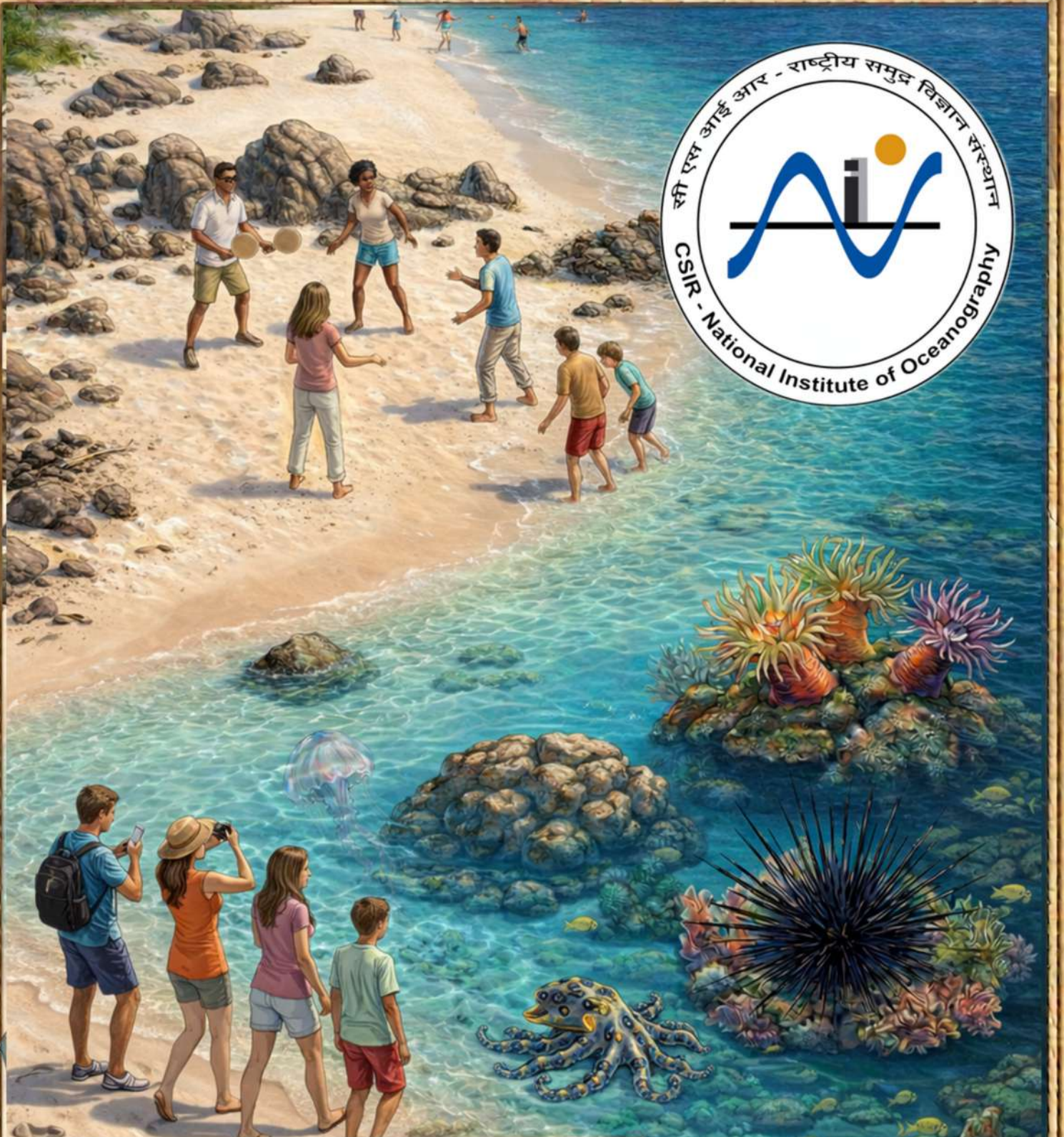
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