

INTERNATIONAL SUSTAINABILITY CONFERENCE 2021

Documenting Marine Biodiversity along Chennai's Coastline (2019-2021)

Presenter: B.Samuel Prakash,
YP-1 in CMFRI,
bsamuelprakash@gmail.com, +918826830042

REFERENCES

1. Apte, D., 2012: Field Guide to the Marine Life of India. Publ. Deepak Apte, 1 st edn
2. Chhapgar, B.F., 2006: Marine Life In India. New Delhi: Oxford University Press
3. Inaturalist.org

ACKNOWLEDGEMENTS

1. BAY OF LIFE
2. ECO SOCIETY INDIA
3. Dr.Joe K. Kizhakudan (Chief Scientist, CMFRI)
4. Anand Pendharkar (Ecologist and CEO, SPROUTS).

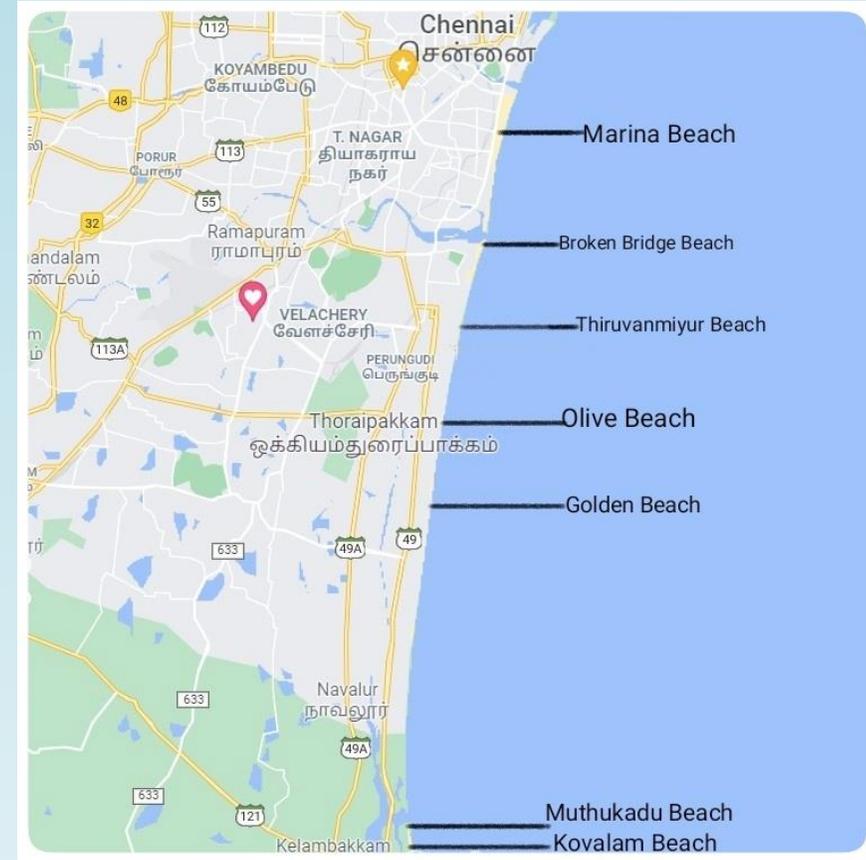
INTRODUCTION

Marine Biodiversity of Chennai is camouflaged on the top of sandy shores because the city is full of sandy shores. It is having the longest natural urban beach in the country. Chennai is also called as heavens of water bodies (4,100) and three rivers flow through Chennai and ends, in Bay of Bengal. In the country, Chennai is the first to start building the Artificial Reefs. But citizens are unaware of the vast biodiversity found in its River mouths, marshes, beaches and seas. This marine life thrives in spite of constant impact of urbanization, sewage and large-scale pollution caused by industries.

STUDY AREA

All 7 survey locations are along Chennai east coast.

1. Marina beach,
2. Broken bridge beach,
3. Thiruvanmiyur beach,
4. Olive beach,
5. Golden beach,
6. Muthukadu beach,
7. Kovalam beach.



MATERIALS & METHODS

The survey starts Half an hour before low tide, 3km long transects in the intertidal zone. Non-invasive data recording methods such as direct observations, photographic ID, scanning of fishing nets are used to record marine biodiversity.

OBJECTIVES

In this study I, aim to map the marine biodiversity along Chennai's coastline and compare it with historically available information. The purpose of this study is to create a documentation of the marine biodiversity along Chennai's coast. Another objective is to create awareness (trails and lectures) to kids and general public about marine biodiversity of Chennai and to excite the kids about documenting the diverse flora and fauna on their coasts.



OBSERVATIONS



Number of Varieties in Species

Siphonophers 3 (sps)	Corals 5 (sps)	Sea stars 11 (sps)	Sea slugs 4 (sps)
Sea worms 4 (sps)	crabs 13 (sps)	Shrimps 4 (sps)	Hermit crab 5 (sps)
Gastropods 83 (sps)	Bivalves 34 (sps)	Sea anemones 04 (sps)	Sea jellies 07 (sps)
Fish 20 (sps)	Sea snakes 03(sps)	Sea horse 01 (sps)	Sea spider 1 (sps)
Limpets 03 (sps)	Dolphins 01 (sps)	Rays 03 (sps)	Lobsters 03 (sps)
Tubulariide 01 (sps)			

RESULTS & DISCUSSIONS

These beaches of Chennai are filled with plastic and religious pollution. Sea snakes recorded were caught in fishing nets and are usually left to die on the beaches with the by-catch. Bottom trawling nets and smaller boats with non-specific nets and hook nets cause much damage to marine biodiversity. During Monsoon by-catch, I observed many varieties of Sponges, Corals, molluscs and snakes, etc.

Chennai has three main rivers –The Kosasthalaiyar to the north, the Adyar river to the south, and the Cooum flowing between them across central Chennai. They are highly polluted with sewage and industrial chemical pollutions and these three river mouths will be closed by sand in the months of August to November due to tide change. It was observed that after November the stagnant water with chemical pollution and sewage was released in coastal water and pollutes the marine biodiversity of coastline.

