

Hypercapnic Hypoxia in Mangroves

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Hypercapnic Hypoxia in Mangroves Latest News

A new study revealed that most mangrove sites are already experiencing mild or severe hypercapnic hypoxia.

About Hypercapnic Hypoxia in Mangroves

- **Hypercapnic Hypoxia** is a high CO₂ and **low oxygen state**.
- It pushes estuaries into a **stressful chemical state**.
- It mostly **occurs during low tide**, at low-salinity sites and in warm tropical regions.
- **Causes:** Rising **Co2 level** due to climate change **and Temperature Increase**
- **Impact Hypercapnic Hypoxia on Biodiversity**
 - It **threatens fish nurseries** in mangrove ecosystems
 - It **reduces biodiversity** and habitat quality for fish
 - Impacts fisheries and livelihoods of millions
 - It **shifts mangrove species composition** away from large reef-associated species.

What are Mangroves?

- Mangroves are **salt-tolerant trees and shrubs** that grow in coastal intertidal zones, primarily in **tropical and subtropical regions**.
- These unique ecosystems thrive in saline or brackish waters, withstanding harsh environmental conditions such as tidal fluctuations, high salinity, and low oxygen levels in the soil.
- Mangrove forests act as a crucial buffer between land and sea, providing habitat for various marine and terrestrial species.

Source: **DTE**

Source: <https://vajiramandravi.com/current-affairs/hypercapnic-hypoxia-in-mangroves/>

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