

Loss of Great Barrier Reef Coral

Prelims - Current events of national and international importance | General issues on Environmental ecology, Bio-diversity and Climate Change.

Why in News?

Recently, Australian authorities reports that the Great [Barrier Reef](#) has experienced its greatest annual loss of live coral across most of its expanse in four decades.

Great Barrier Reef

- It is located in the Coral Sea off the coast of Queensland, Australia.
- It is the **world's largest and longest coral reef system**.
- This complex ecosystem built over millions of years from the calcium carbonate skeletons of coral polyps and hydrocorals.
- It is a **UNESCO World Heritage site** and a significant tourist attraction.
- **Divisions** - They extend 1,500 kilometres along the Queensland state coast, into three similarly-sized regions.
 - Northern, Central and Southern.

Recent findings

- Living coral cover shrunk by almost a third in the south in a year, a quarter in the north and by 14% in the central region.
- It shows that more than 30% were bleached across the Torres Strait and the entire northern Great Barrier Reef.
- Nearly 84% of the **world's coral reef area** has been affected because of heat stress, at least 83 countries are impacted.
- Coral bleaching has been intensified by back-to-back record global heat years.
- The report highlighted that coral reefs are especially at risk if global warming exceeds 1.5°C (2.7°F) above pre-industrial levels.
- Warm water (tropical) coral reefs are projected to reach a very high risk of impact at 1.2°C, evidence suggesting that coral-dominated ecosystems will be non-existent at this temperature or higher.
- At this point, coral abundance will be near zero at many locations.

Quick Facts

Corals

- Corals are animals from the ***phylum Cnidaria***, typically found along tropical coastlines.
 - They comprise hundreds to thousands of living organisms called polyps, each only a few millimeters in diameter.
 - Each polyp has its own body and a mouth with stinging tentacles to capture food such as plankton and small fish.
 - The polyps grow together until they form a colony, and it is this colony that we recognize as a coral.
 - **Types of coral** - hard corals and soft corals.
 - **Coral bleaching** - Occurs when corals become stressed by changes in environmental conditions such as temperature, light, or nutrient levels and expel the symbiotic algae living in their tissues.
 - This loss causes the corals to turn completely white. Bleached corals are not dead, but they are weaker and more vulnerable to disease.
- Coral reefs cover only 1% of the ocean floor, but support an estimated 25% of all marine life in the ocean, earning them the moniker 'rainforest of the sea.'*

Reference

[The Hindu| Great barrier reef loss](#)

