Heron Island

CORALWATCH



CoralWatch data overview: 2002 - November 2021

CoralWatch uses the Coral Health Chart to measure changes in coral colour associated with coral bleaching. The chart is easy to use, anyone can help collect data and contribute to the CoralWatch global database.



WWW.CORALWATCH.ORG

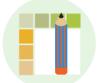
HERON ISLAND JANUARY 2003 - NOVEMBER 2021



Highest data contributor Remote Sensing Research Centre, The University of Queensland



61 reef locations



643 surveys



13,028 corals

CORAL TYPE

■ Plate Branching

■ Boulder

Coral surveys: 890

60%

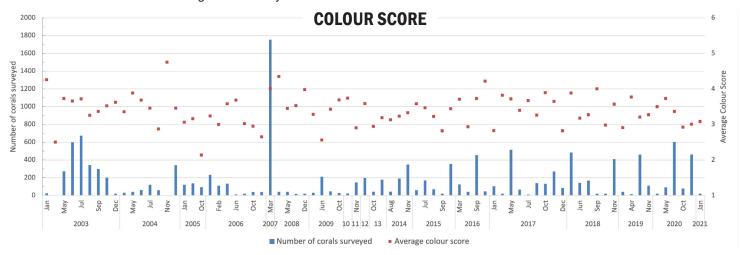
40%

30%

10%

What does the data tell us?

At Heron Island, 76% of the data is collected by schools and universities followed by conservation groups (24%). The graph on the left shows that the dominant coral types monitored are branching and boulder. The graph below shows an average coral score of around 3 indicating healthy reefs. Lower colour scores could indicate potential bleaching. When interpreting the data, keep in mind that some corals are naturally lighter than others. One survey is just a snapshot in time and regular CoralWatch surveys are needed to look at coral health over time to pick up trends in bleaching and recovery.



Branching coral, Acropora sp.

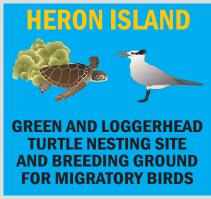


Plate coral, Acropora sp.



Soft coral, Sinularia sp.











Heron Island is located 70 kilometres (km) off the coast of Gladstone, QLD, and it is actually a coral cay, made up almost entirely of coral skeletons. Heron Reef, upon which Heron Island sits, is 11 km by 5 km, whilst the coral cay is only 800 metres long by 300 metres wide encompassing 16 hectares (40 acres).

Heron Island is approximately 6000 years old. The Gooreng Gooreng, Gurang, Bailai and Taribelang Bunda peoples are the traditional custodians of the Land and Sea Country around the island.

Heron Island is in the southern part of the Great Barrier Reef, and is one of 13 islands comprising the Capricorn Bunker Group of Islands. These islands are the most important and protected islands on the GBR as they are home to true sea faring birds and endangered green and loggerhead sea turtles that breed and nest on the island. The island's waters are zoned as marine national park, conservation park and scientific research zones, each of which have their own restrictions. There is a 'no touch, no take' policy enforced for the protection of the abundance of marine species in the surrounding ocean, and the flora on the Island, while other sections allow research and education but you do need to apply for a permit.

The island incorporates the Heron Island resort, as well as the Heron Island Research Station, the largest island-based research station in the southern hemisphere which is owned and managed by The University of Queensland. Since the 1950's, scientists have been tackling big questions about the biology, geology and ecology of Heron Island reefs. Resort guests can visit the station and hear about the research conducted during a weekly tour. Citizen science groups such as CoralWatch also visit the station to run regular workshops.

Visit Heron Island and help collect CoralWatch data

The best way to understand the importance, value and beauty of the reef is through your own experience. Visiting the reef is an experience you will never forget. Visit www.coralwatch.org to get your free initial Coral Health Chart and find out how to collect and upload your data.



Citizen scientist collecting CoralWatch data.



Heron Island reef showing various coral growth forms.

Read more

- Look after the reef and find out what activities are permitted in which zone https://elibrary.gbrmpa.gov.au/jspui/bitstream/11017/609/4/Map17-EditionV-Capricorn.pdf
- The Coral Health Chart developed on Heron Island in 2002. <u>Siebeck, U. E., Marshall, N. J., Kluter, A. and Hoegh-Guldberg, O. (2006)</u>
 Monitoring coral bleaching using a colour reference card. Coral Reefs 25:453-460
- Coral cover has increased over time Roelfsema, C., Kovacs, E.M., Vercelloni, J. et al. Fine-scale time series surveys reveal new insights into spatio-temporal trends in coral cover (2002–2018), of a coral reef on the Southern Great Barrier Reef. Coral Reefs 40, 1055–1067 (2021).
- Coral Reefs and Climate Change book https://coralwatch.org/index.php/product/coral-reefs-and-climate-change-the-guide-for-education-and-awareness/



CoralWatch is a global citizen science organisation working with volunteers worldwide to increase understanding of coral reefs, coral bleaching and climate change. www.coralwatch.org



