## Lady Musgrave Island

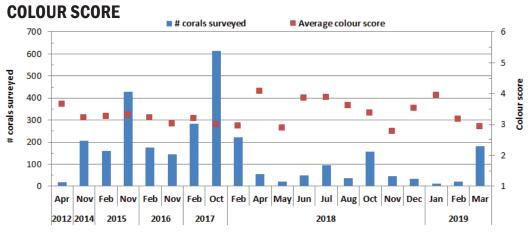
CORALWATCH



CoralWatch data overview: April 2012 - June 2019

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





WWW.CORALWATCH.ORG

LADY MUSGRAVE ISLAND April 2012 - June 2019



Highest data contributor Mountain Creek SHS



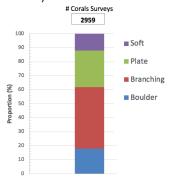
3 reefs



258 surveys



2,959 corals



**CORAL TYPE** 

The graph above shows an average coral score between 3-4, indicating healthy reefs. The graph at the rights shows that the dominant coral type being monitored at Lady Musgrave is branching. Branching corals are fragile and form an important habitat for reef fish and invertebrates, hence why it's important to monitor. When interpreting the data, keep in mind that some corals are naturally lighter than others. One survey is just a snapshot in time. Regular CoralWatch surveys are needed to look at health over time or pick up trends of bleaching and recovery.

# E E

What does the data tell us?

Branching coral, Acropora sp.



Boulder coral.



Plate coral, Acropora sp



Soft coral, Sinularia sp.

### Lady Musgrave Island



#### **IMPORTANCE**

TOURISM RECREATIONAL AND COMMERCIAL FISHING





#### **MAIN THREATS**

ILLEGAL FISHING CROWN OF THORN STARFISH STORMS CLIMATE CHANGE







#### **SOLUTIONS**

REPORT ILLEGAL FISHING & COTS SIGHTINGS

REDUCE CARBON EMISSIONS







The Island is located 96 kilometres north-east of Bundaberg, 59 kilometres east of the Town of 1770. It is the second most southerly cay of the Great Barrier Reef in the Capricornia Cays National Park. The island - about 19 hectares - is a coral cay, which means it is made up almost entirely of coral skeletons. Coral is a living animal that builds a hard structure, and both the animal (the coral polyp) and skeleton are very delicate and susceptible to changes. Threats to Lady Musgrave reef include storms, climate change, illegal fishing (fishers fishing in green zone or taking protected species important to reef health), and probably the biggest one currently - crown of thorns starfish. Certain chemicals in sunscreens (Oxybenzone, Benzophenone-3) can also cause the corals to become stressed and bleach, so you can do your part by using a zinc or covering up with a hat and wetsuit or rash shirt. The more eyes we have keeping a watch on changes to reef health, the better we'll be able to identify and respond to potential threats.

Lady Musgrave Reef - about 2930 hectares- includes a large lagoon, which is an attraction for visitors and other users because of its diverse coral cover. Recreational users and tourist operators access Lady Musgrave Reef and Island to snorkel, dive, fish in appropriate zones and camp. The commercial fishing industry also uses the site as an anchorage. The island supports a major breeding population of vulnerable green turtles and endangered loggerhead turtles. It is also a significant breeding site for coastal birds.

The area is culturally significant to the Tarebilang Bunda, Bailai, Gooreng Gooreng, and Gurang Traditional Owner groups and is accessed for traditional use.

#### Visit Lady Musgrave and help collect CoralWatch data

The best way to understand the importance and value the beauty of the reef is through your own experience. Visit the reef, it is an experience you will never forget. Lady Musgrave Experience offers amazing day tours and can provide you with CoralWatch materials. <a href="https://ladymusgraveexperience.com.au">https://ladymusgraveexperience.com.au</a>







Musgrave reef showing various coral species.

#### **Read more**

- Lady Musgrave has been surveyed by the AIMS (Australian Institute of Marine Science) Long-term Monitoring Program (LTMP) and the Marine Monitoring Program (MMP), checking for coral cover using a manta tow technique. <a href="http://apps.aims.gov.au/reef-monitoring/reef/23082S">http://apps.aims.gov.au/reef-monitoring/reef/23082S</a>
- Look after the reef and find out what activities are permitted in which zone http://elibrary.gbrmpa.gov.au/ispui/bitstream/11017/960/4/Map18-EditionV-Capricorn-Bunker-Group.pdf
- Help collect valuable reef data, there is a citizen science project for everyone <a href="http://greatbarrierreefcitizenscience.org.au/">http://greatbarrierreefcitizenscience.org.au/</a>



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





