



# MAP THE GIANTS

## HOW TO SURVEY CORAL COLONIES

### Help us locate a Giant Coral!

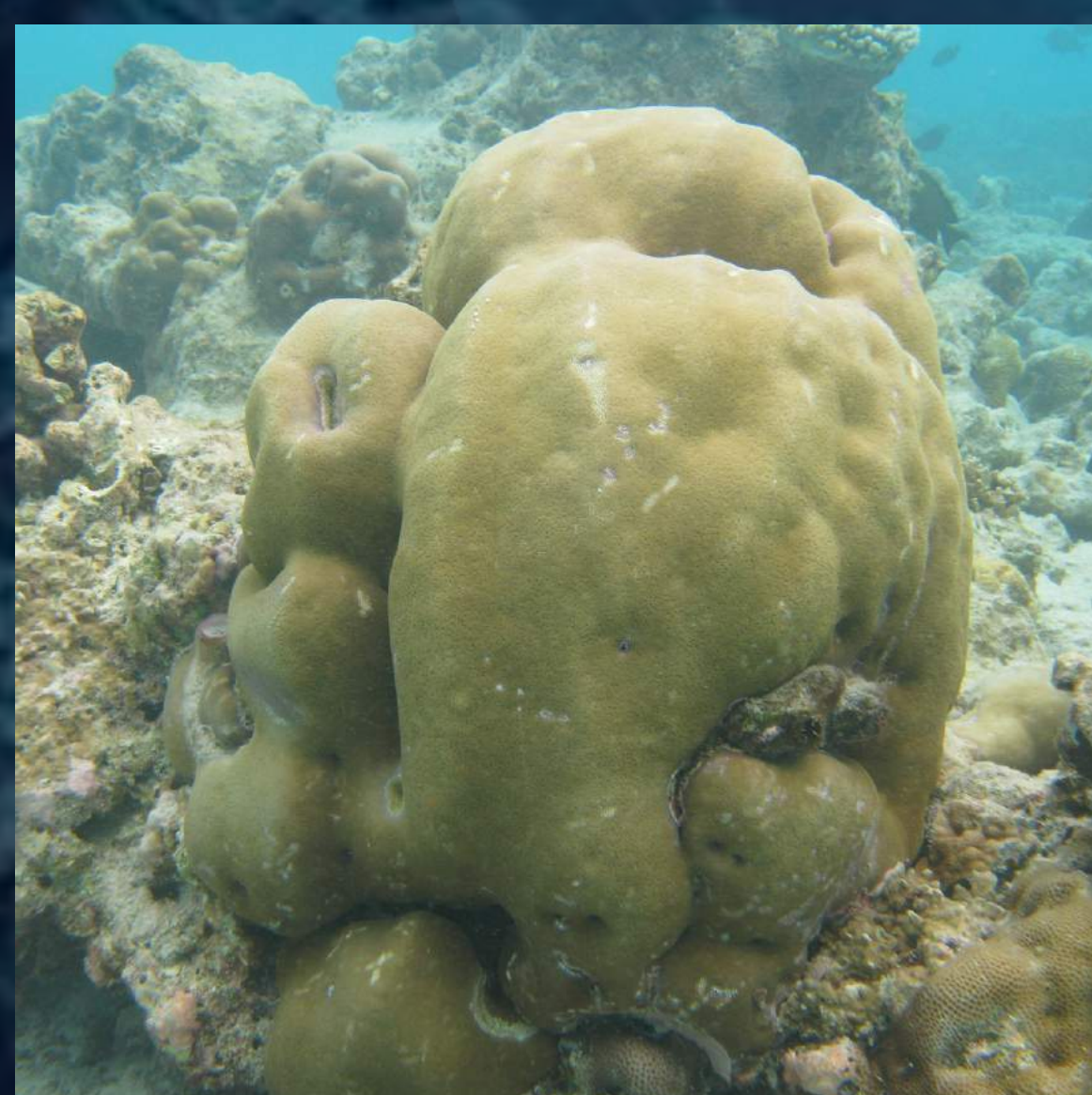
Please choose the type of survey that best suits you: simple, advanced or with a drone.

#### ADVANCED SURVEY. Diving or snorkelling

This type of survey is advisable for more experienced participants and can also be used to provide additional information on colonies which have been identified with a simple survey.

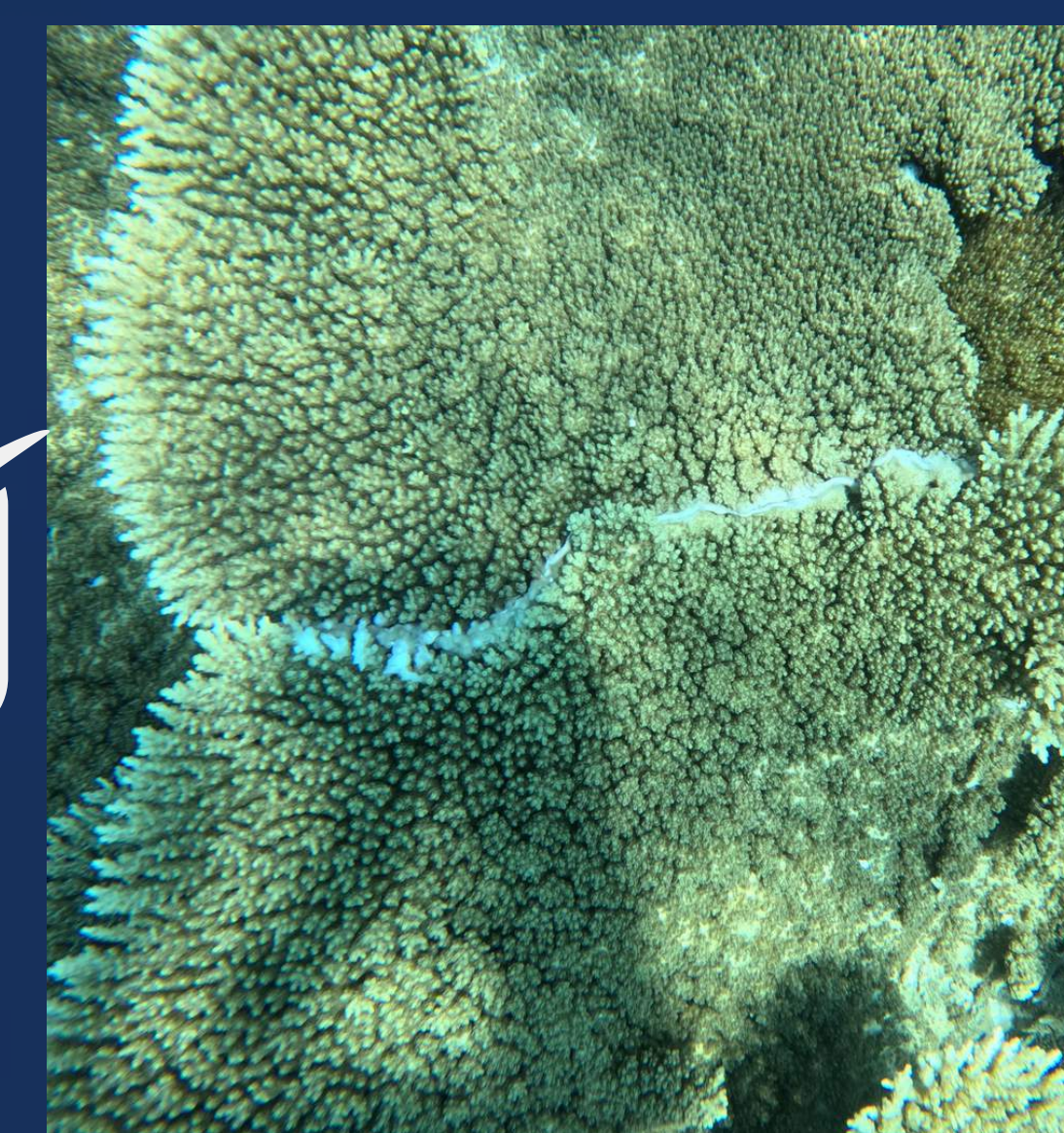
#### Steps to take:

- **Grab** your diving or snorkelling equipment and any safety tool you may require. If you have a waterproof camera, we highly recommend you to carry it along;
- **Head out** to the chosen reef;
- **Look out** for any large coral colony. Remember: a giant coral is considered a colony **over 5 metres** in size and presenting a **continuous living surface**.



This colony originates from a single polyp and can grow in size indefinitely.  
**This is ONE colony.**

The white mark is a scar, typical of two different colonies fighting and **growing side by side**. This is **NOT a colony but two**.



- **Identify** the genus or species or take wide-angle and close-up photos (possibly with a scale bar within the photo) and send it to us. Please see below the most likely genera:



*Porites* sp.



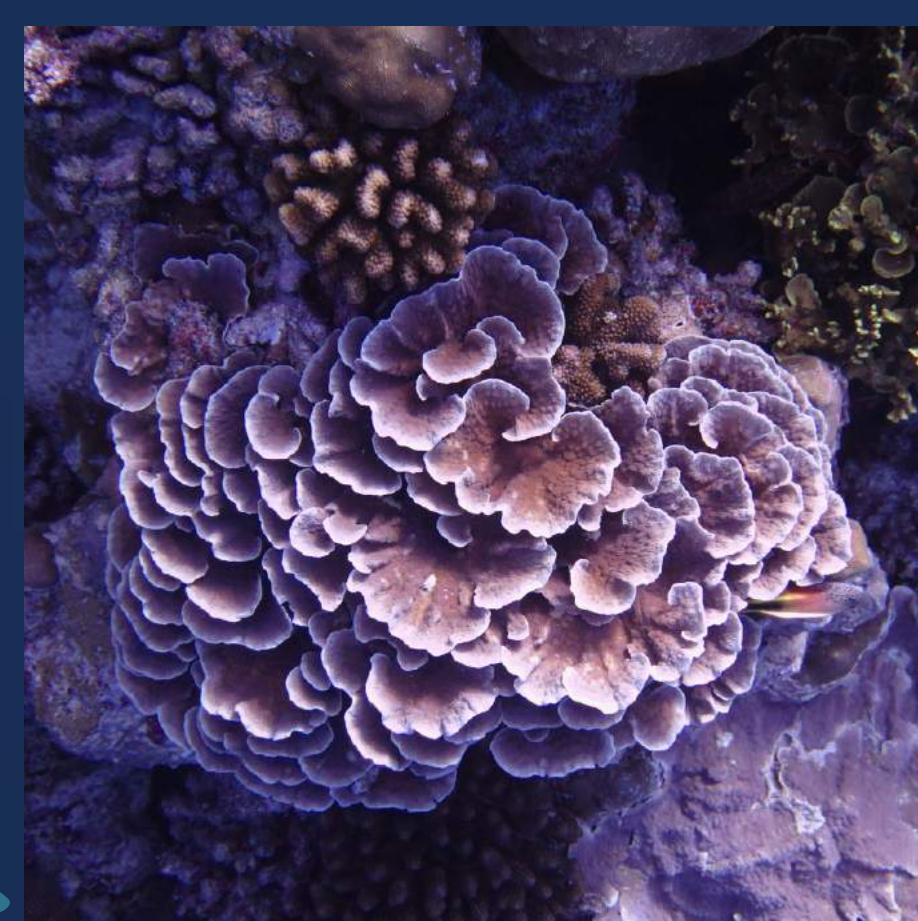
*Goniopora* sp.



*Diploastrea heliopora*



*Echinopora lamellosa*



*Heliopora coerulea*



# GIANT CORALS. FUTURE MARINE MONUMENTS.

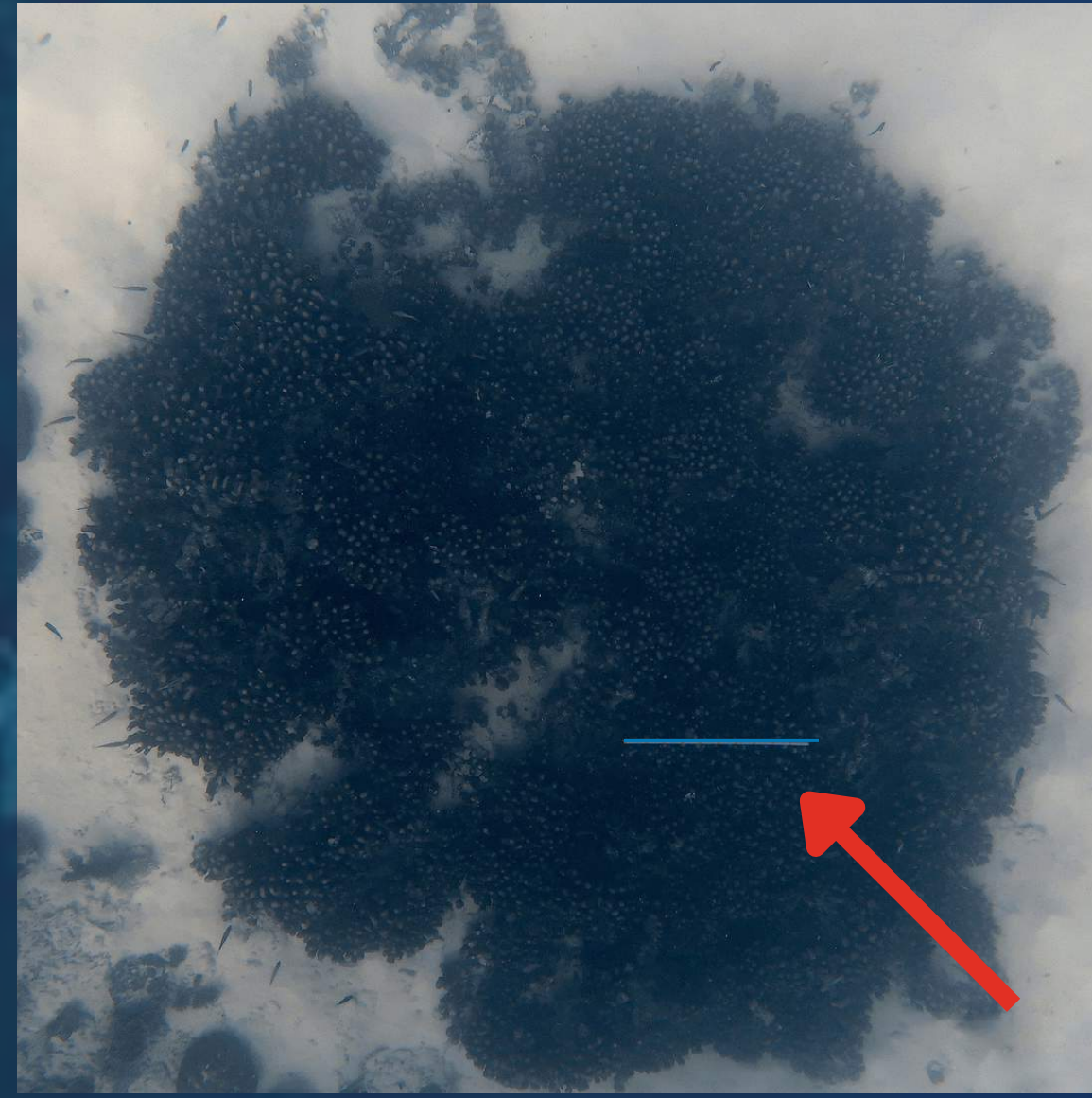
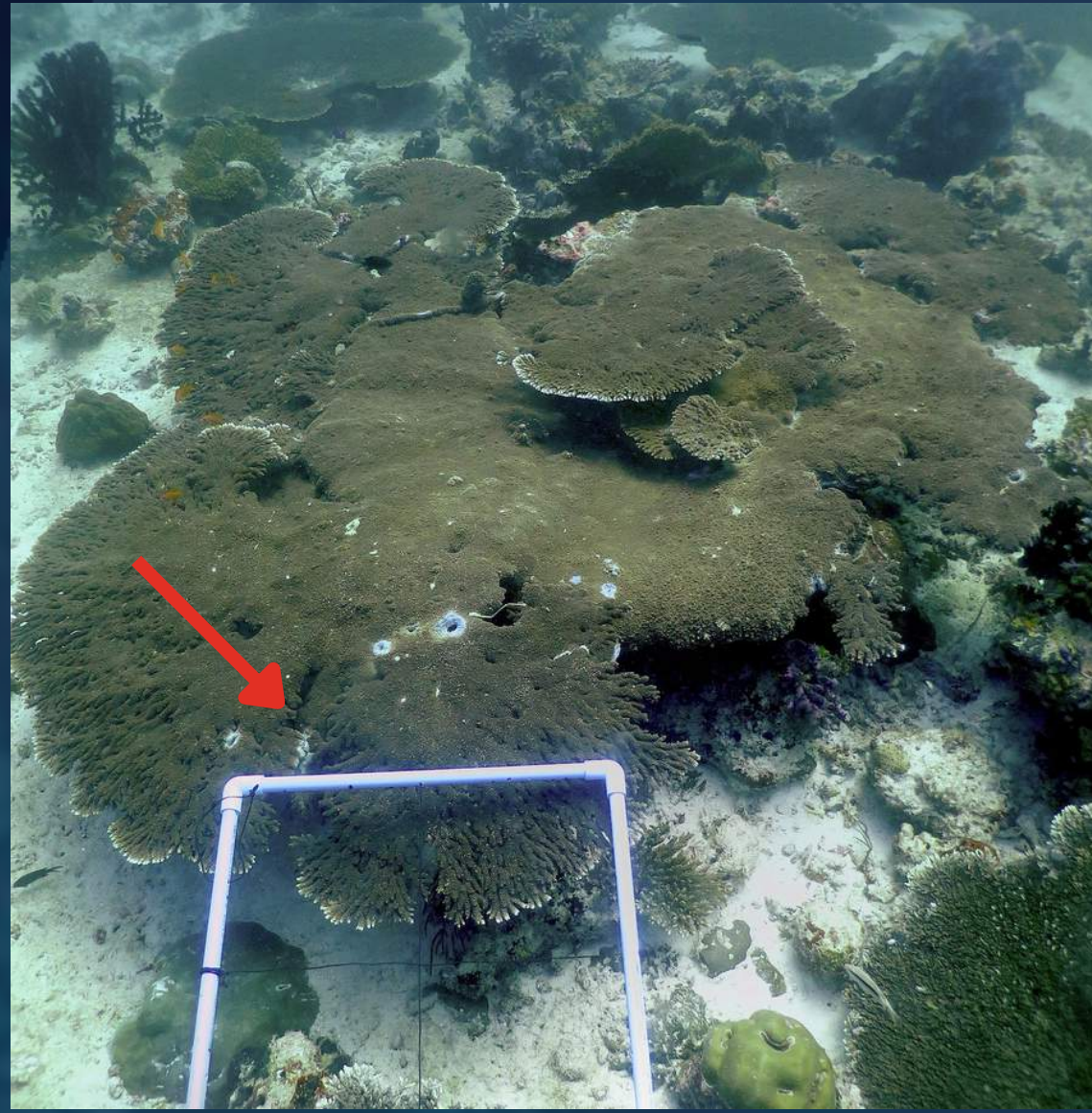
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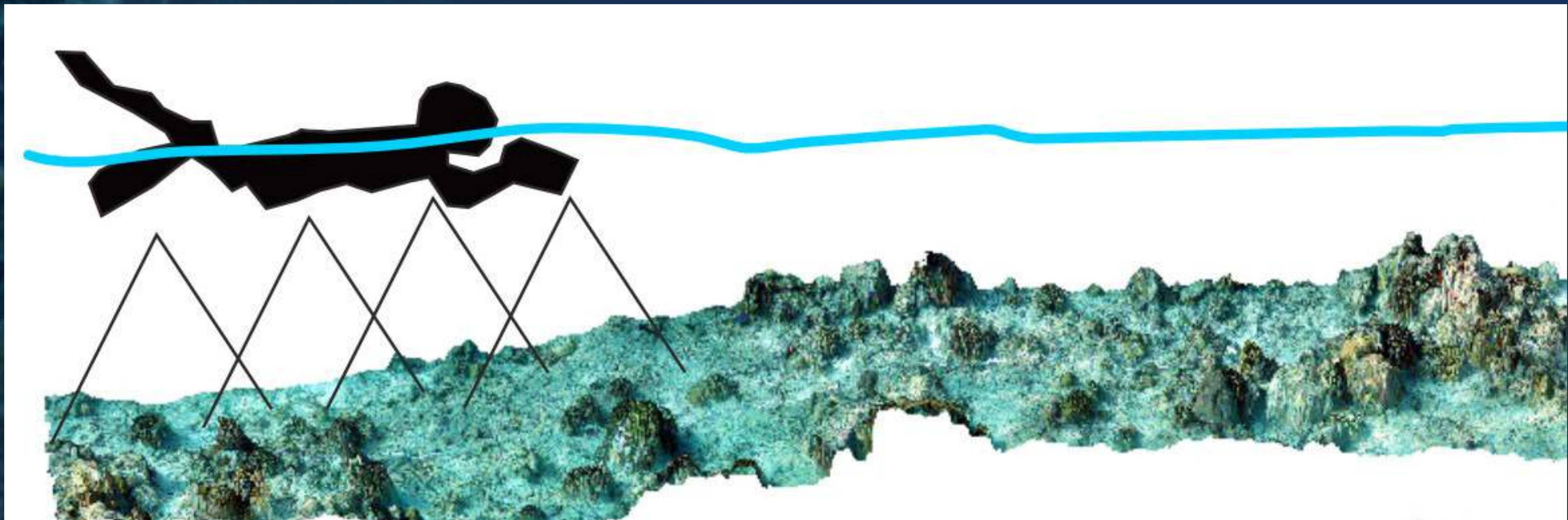
- Collect **measurements** following the chosen methodology:

**Measuring tapes:** measure length, width and height of the colony perpendicular to it in the largest points, and circumference in the widest spot;

**Scalable photos:** take one or multiple photos that include an object of known size (as close as possible to the colony without physical contact) such as a diver, a SCUBA tank, or a scaled bar to allow for size extrapolation;



**Photogrammetry:** shoot a every 2 seconds or set the camera with a self-timer of 2 seconds to cover the entire surface. Photos should have a 70% of horizontal and vertical overlap. Shoot then photos at different angles to capture all the features of the colony and prevent gaps in the final model. Try to cover the whole colony or at least the widest side of the colony. Please remember to include an object of known size to extrapolate the size of the colony.



- **Location:** Indicate the Atoll, name of the reef and provide us with the **GPS coordinates**. Seek help from your guide to define the location with the best approximation;
- **Depth:** Estimate the depth at which the coral was sitting (meters);



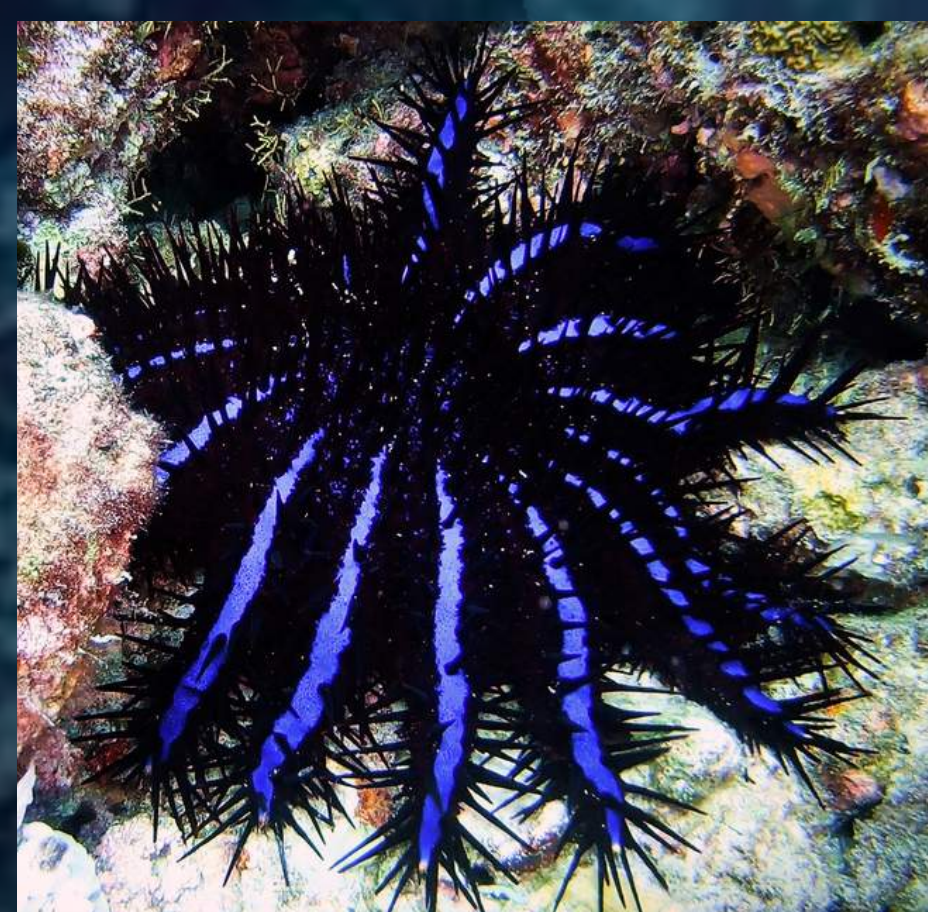
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- What was the **water temperature?** (degrees Celsius)
- **Colony conditions:** estimate the percentage of live coral tissue based on the following size classes:
  - <25% alive tissue;
  - 26–50% alive tissue;
  - 51–75% alive tissue;
  - 76–99% alive tissue;
  - 100% alive tissue (alive);
- Did the colony present any sign of **bleaching?**



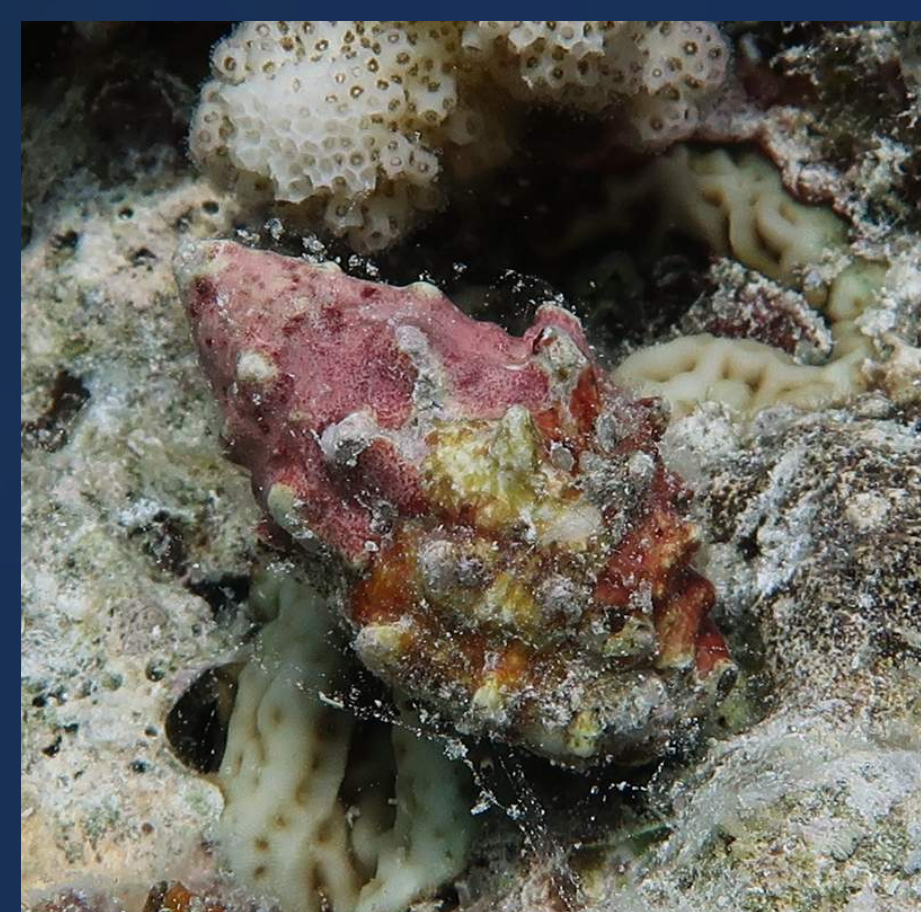
- Did you see any **abnormality on the tissue?**
- **Competing organisms:** did you see any of these organism on or near the colony?



Crown of Thorns



Cushion Seastar



*Drupella* sp.



*Terpios hoshinota*



*Dendropoma* sp.

- Add any **note** on the colony or the surrounding environment.

## MAKE AN ENTRY

Submit your data by scanning the **QR code** on the right or navigating to **[www.mapthegiants.com](http://www.mapthegiants.com)** under the section **Get Involved** → **Share**



Get in touch:



[mapthegiants@unimib.it](mailto:mapthegiants@unimib.it)



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