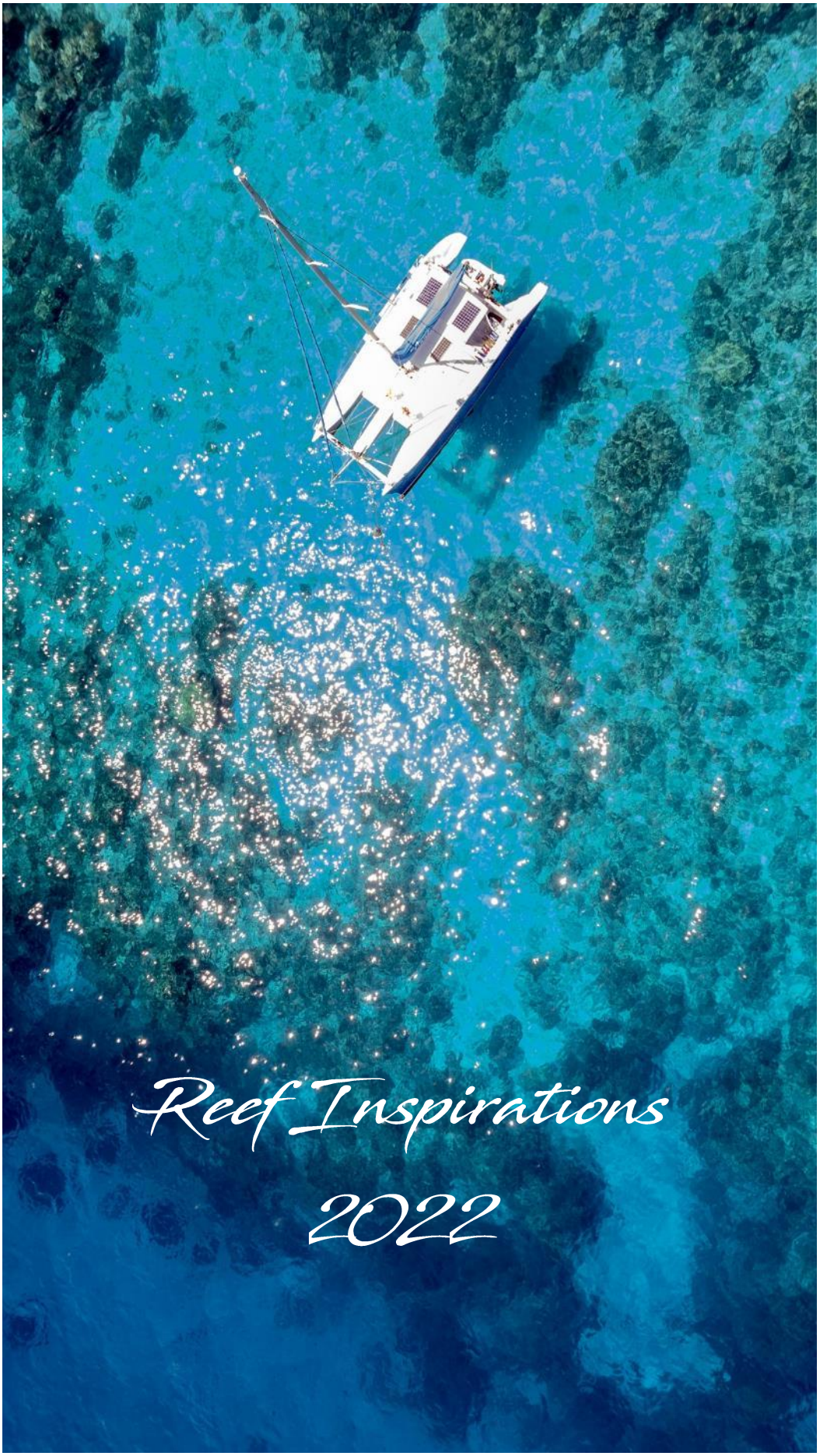


# Reef Inspirations

# 2022

If you have read our cruise stories from previous years you will be aware that we are a wee bit addicted to cruising the Great Barrier Reef. As soon as the weather allows, we head off, intent on exploring new reef anchorages but also going back to familiar spots.

We both have a passion for the wilderness and for adventure. Novelty inspires us. In 2022 we pushed the boundaries a little further and did more exploring of new to us regions than we had before. We spent three weeks in the Coral Sea, which gave us a taste for more in future seasons. You can read about this in a separate cruise story already published on our website. We then spent five weeks reef hopping in Far North Queensland, starting at familiar reefs offshore of Cairns then along the Ribbon Reefs all the way to Lizard Island. We discovered a few inner reefs on the way back down to Cairns, and as we headed back south, we had opportunities to reef hop. So it has been a big year for us.

## Out of the comfort zone

Try this: draw a set of concentric circles in the sand. Where is the most comfortable place to be when it comes to cruising? For most of us it is in the centre. The interior circles represent our comfort zone, the place where we are content, and life is generally easy. Think of the outermost circle as the most challenging environment you have ever experienced. In the outer circles, things get harder. The further we venture from the centre, the more emotionally and/or physically difficult our experience becomes. But then a funny thing happens. If we dare to add more rings to our experience by taking on challenging adventures, it puts the rest of our lives in a new perspective. What used to be demanding or scary, becomes more accessible, more feasible, kind of the new normal.

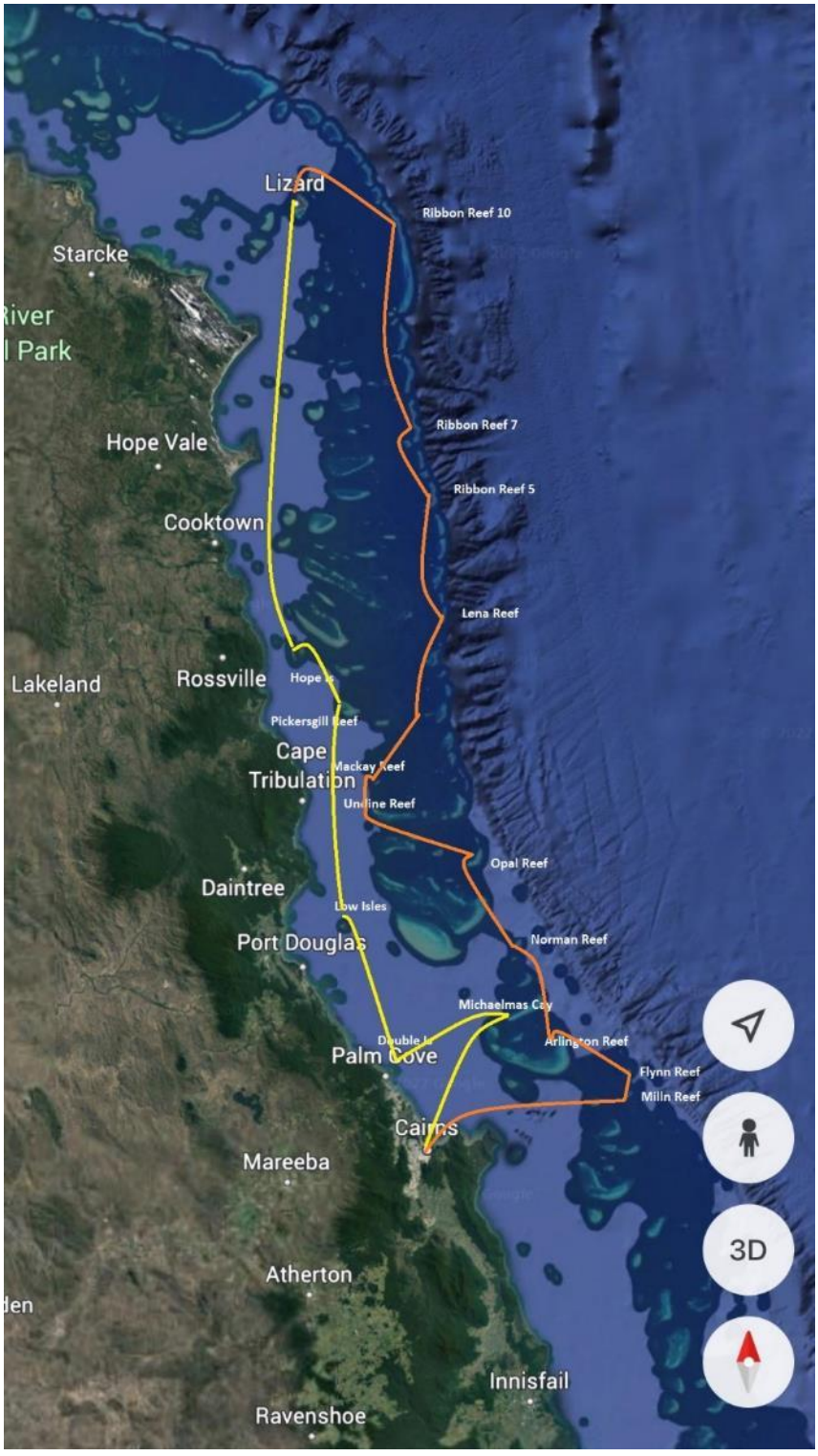
This applies to sailing to remote places of course, but also to other activities that we are equally passionate about like snorkeling, photography, drone flying. We achieve our best experiences when we are in the middle to outer rings of our comfort zone. The inner rings are too easy, too familiar, and do not stretch us. But they are often the places where we catch our breath and rest. At the other end of the spectrum, the outermost rings require a lot of mental or physical energy and leave little room for anything else. But the outer two thirds of the zone, that's where the magic happens for us. There is novelty, there is adventure, there is a sense of achievement, a feeling of doing something at the extraordinary end of the spectrum.

When we push ourselves beyond what we would normally consider comfortable, we also find the inspiration for more. Sailing to new environments, navigating through new reefs, going further offshore forces our minds to work double time and with that effort comes a level of excitement and satisfaction you are unlikely to experience within your own 'normal'.

The benefit continues after we get back too. We find that upon a return from an inspiring trip, we are on a high for a long period after. For instance, Chris remains enthusiastic to create images, edit and write well after we return from an exploration. We both relive the highlights as we document our cruise stories and it also motivates us to plot the next adventure.

This story shares our exploration among the reefs of Far North Queensland, half of which were new to us. We also discuss at the end our observations of something very dear to us: the state of the Great Barrier Reef. Spending time at the Reef is a double-edged sword. The accelerating climate change damage we witness can be downright depressing. But it can also give us a reason to focus. In 2022, we felt we needed to share the extremes of what we saw through our photography and writing, to document both the deterioration and the nature of some of the amazing coral regrowth.

# Our Itinerary:



**On the way North to Lizard Island, here are the outer reefs we stopped at:**

- Milln Reef
- Flynn Reef
- Arlington Reef *
- Norman Reef
- Opal Reef
- Undine Reef
- Mackay Reef
- Lena Reef *
- Ribbon Reef 5 *
- Ribbon Reef 7 *
- Ribbon Reef 10 *
- Lizard Island *

**On the way South back to Cairns, the inner route took us to:**

- Hope Island *
- Pickersgill Reef *
- Low Isles
- Michaelmas Cay

The spots we had not been to before are marked with a *

# Reefs Near Cairns

We had spent time in previous years at the Outer Reefs offshore of Cairns but were curious to return to see their state.  With the amount of talk about coral bleaching in the northern reefs, we wanted to see for ourselves what they were like. We were actually pleasantly surprised. In fact the reefs offshore of Cairns were the best we saw during this trip which is a sad thing to have to say.

We spent the first week of this trip in the company of friends, then returned to Cairns to pick up Wade's brother Murray and his wife Maree who were then with us for the following four weeks and in fact shared the experience of most of this Far North Queensland trip.

# Milln Reef

We had the pleasure of going there in the company of the owners of our old boat *Take It Easy*. We met up with Cecile and Yann who had been beavering away at repairs and improvements to *Take It Easy* after two years of absence due to Covid. They needed a break and we convinced them to come with us for a week.

Here we are sailing from Cairns, both quite distinctive!

Milln Reef was in recovery. There was some evidence of coral bleaching but the regrowth was strong, cover good and fish life abundant. The water clarity was excellent, being right on the outer line of reefs with the edge of Continental Shelf just a couple of miles away.



We stayed at Milln Reef for several days in conditions varying from 15-20 knots SE initially, then gradually dropping to below 10 knots. We snorkeled at several spots along the reef.

We got to see our favourites: the Pink Anemonefish in their host, and the schools of Blackaxil Pullers.


The bigger fish were also about like the elusive but feisty Titan Triggerfish, the colourful schools of Oblique-Banded Sweetlips, the Steephead and the Bicolor Parrotfish.



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Of course the usual suspects were around: always curious yet shy Whitetip Sharks. This one was coming to check out what Wade was doing at the bottom. Chris thought “oh that’s going to be interesting” but the shark quickly moved away as it realised it had been spotted!

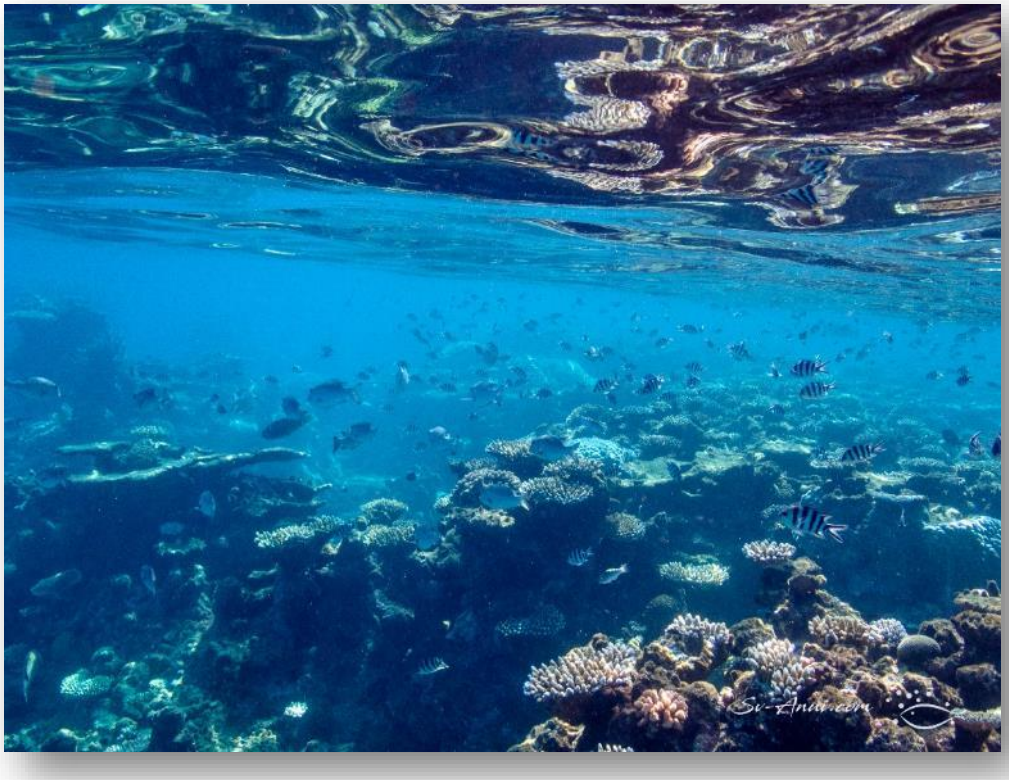
We saw large schools of Paddletail fish being corralled by a Grey Shark. The Paddletail is one of the species that you should never eat as it is the sure way to ciguatera poisoning! When we first came across the school our immediate thought was “where is the shark?” We did not have to look very hard! Grey Sharks are larger than your average white or black tip sharks, so we took photos then made ourselves scarce!

There was a good mix of colourful soft and hard coral and while the ocean was calm, we could capture some reflection and ‘over/under’ shots.


# Flynn Reef

We were familiar with Flynn Reef but enjoyed revisiting this reef on the outer edge of the Great Barrier Reef. We were lucky to be there in very calm weather, which is magical for drone flights, underwater clarity, over/under images, all types of photography! We picked up the one and only public mooring kindly vacated by a commercial dive boat and enjoyed!

Calm waters and 30m+ visibility means magic conditions. There is a feeling of freedom, nothing holds you back. You can see what is around, what is coming at you and as a result it feels safer and more enjoyable.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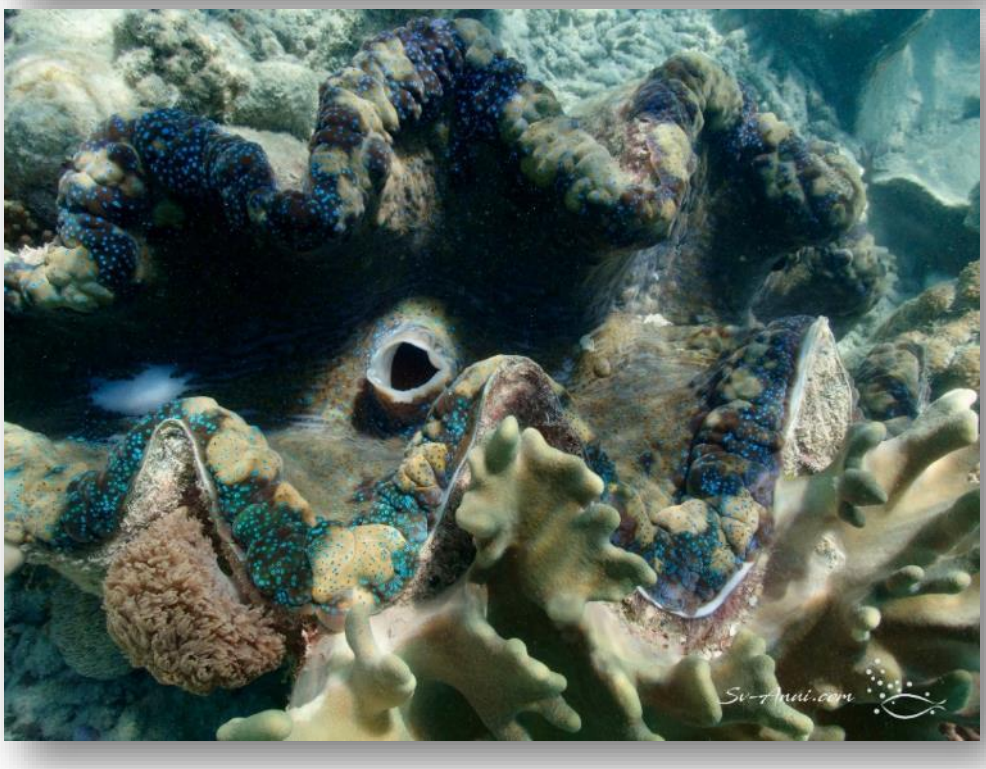
Luminosity, clarity and flat water meant we had ideal conditions to play with a new toy: the AxisGo Over Under Kit for the Iphone 12. It is a bit scary going down with your phone in a housing, but the results were good. Avoiding the water droplets on the dome is the hardest thing.

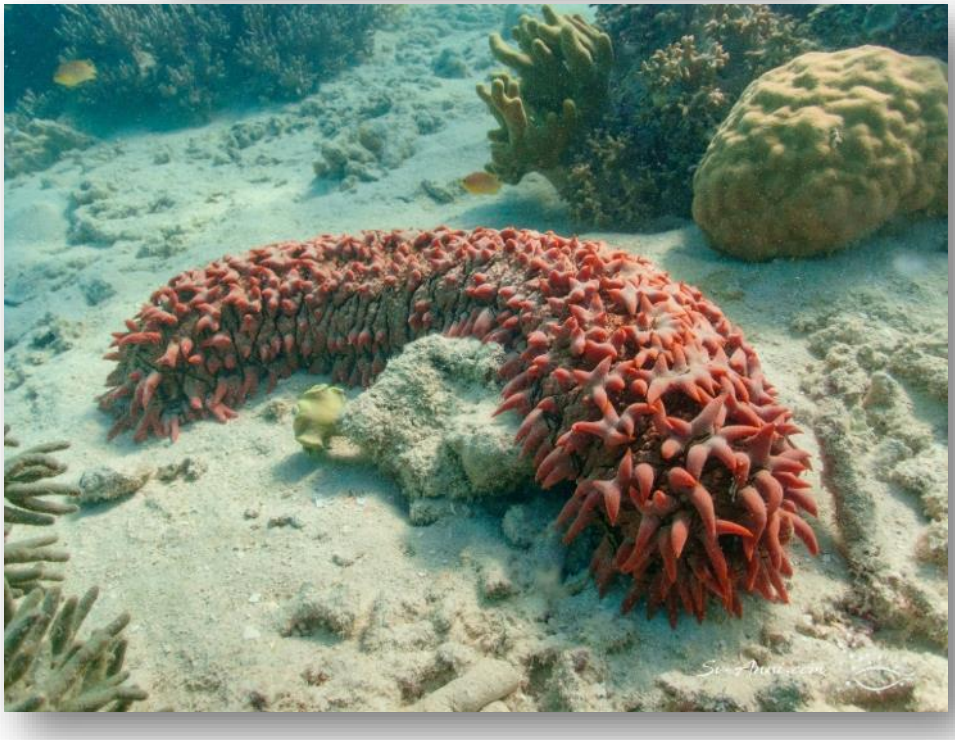

# Arlington Reef

We were not sure what to expect given the central position of this very large reef, having never visited it before. We were there with *Take It Easy*, looking tiny in the vast horseshoe. We anchored near the northeastern end of the reef in 5m over sand.

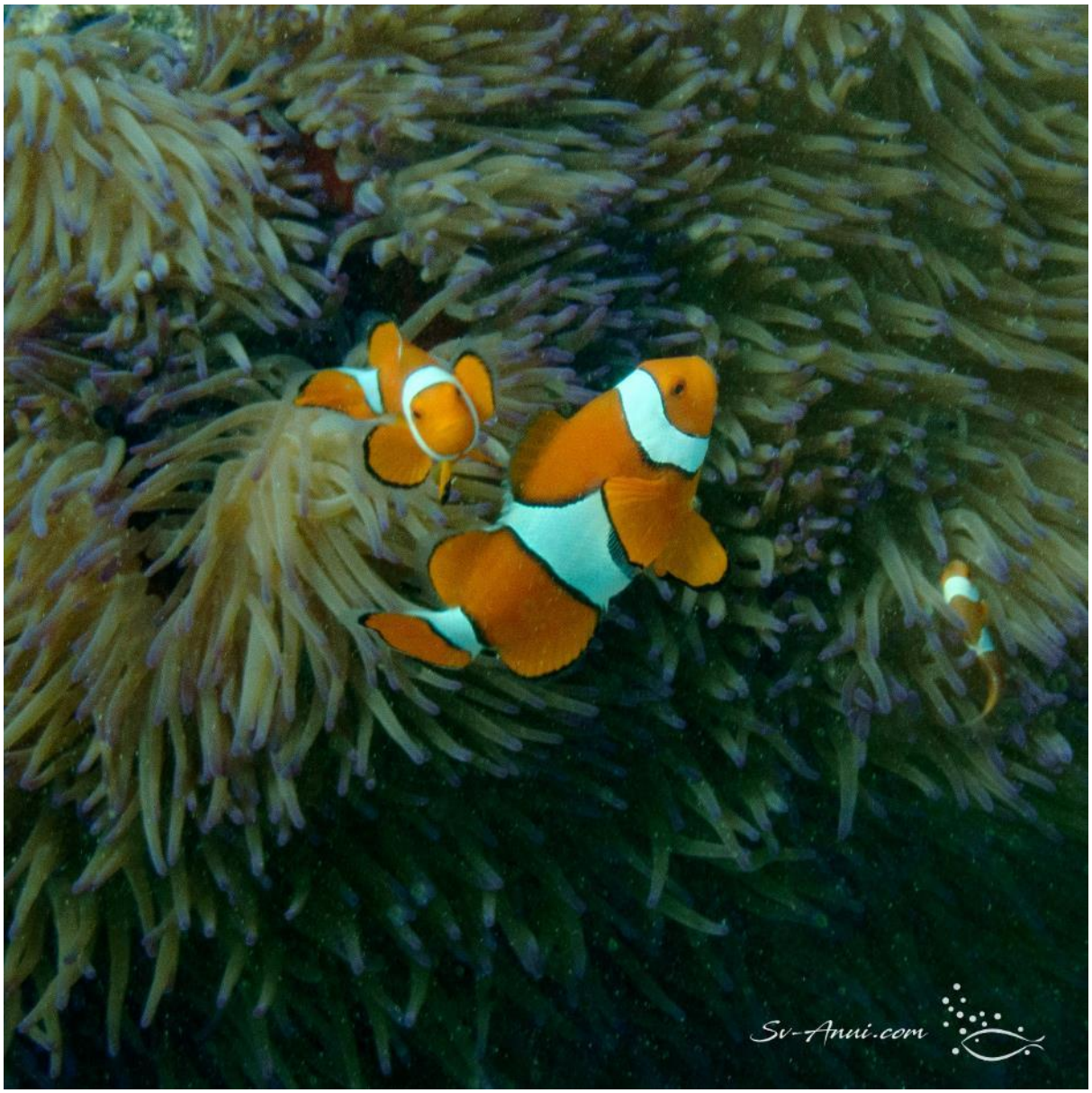

We snorkeled in a few places, initially just in front of the boats, but later explored isolated bommies. The water was cloudy and it did not augur well for enjoyable snorkeling or spearfishing, but in our usual way we tried to find treasures to focus on.

Sometimes it is all about the slugs: a nudibranch Phyllidia varicosa and a Thelenota ananas (prickly redfish) Sea Cucumber.



Any day you spot a family of Pink Anemonefish is a great day, especially when despite the lack of water clarity you get some sharp shots!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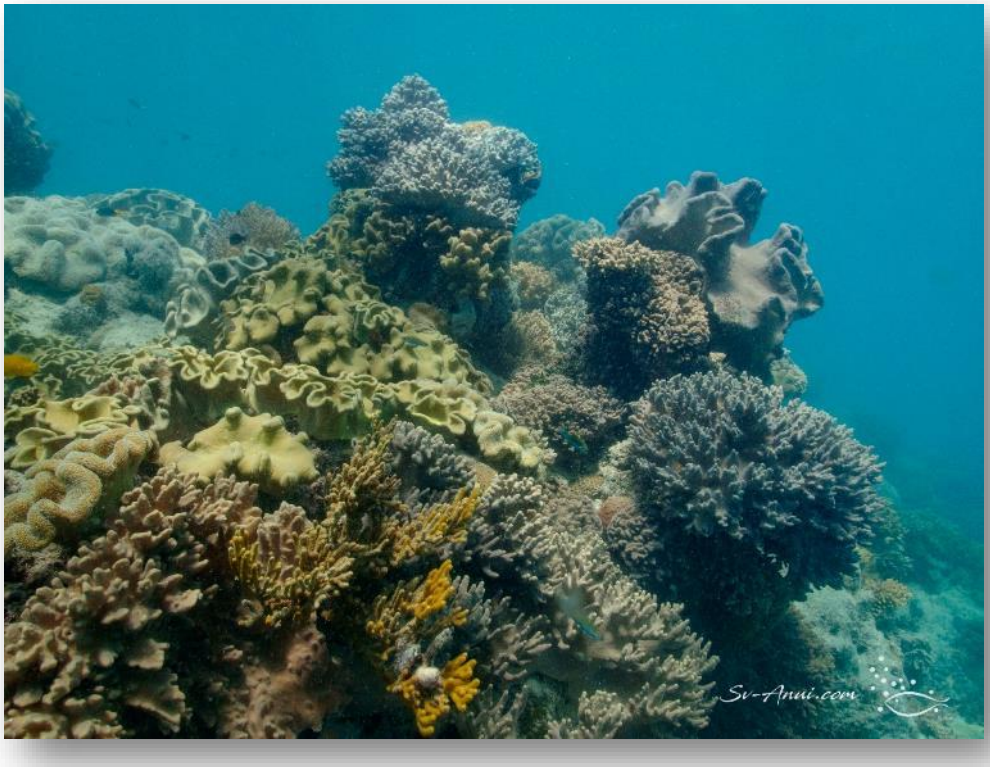
Most of the coral we saw at Arlington Reef was soft coral: Sarcophyton (the toadstool looking ones) and Sinularia (the finger ones). They are not coral building, but they are often the first to recolonize a damaged reef. They are textural as their polyps sway in the current and it beats seeing bare substrate.




# Norman Reef

Norman Reef has a public mooring at the southern end which was taken. We looked for a spot to anchor but it all was quite deep. We ended up anchoring in a less than ideal location with our stern to the reef. The next morning we went for a snorkel around the long bommie between us and the commercial boat you can see in the aerial shot, but did not feel comfortable staying any longer, so moved on.

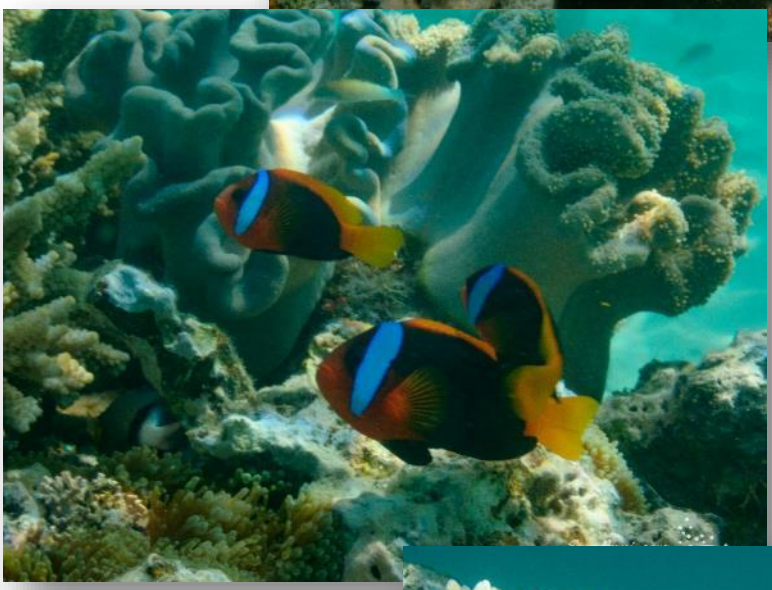
The visibility underwater was excellent, coral life quite good, fish life great with lots of larger species enjoying the current at the northern end of the bommie.

# Opal Reef

We had been to Opal Reef before and it was a pleasure to sail straight to our marked anchor point on the satellite map. It is an easy access with few but obvious bommies to avoid and you anchor in sand in 6m of water… bliss!

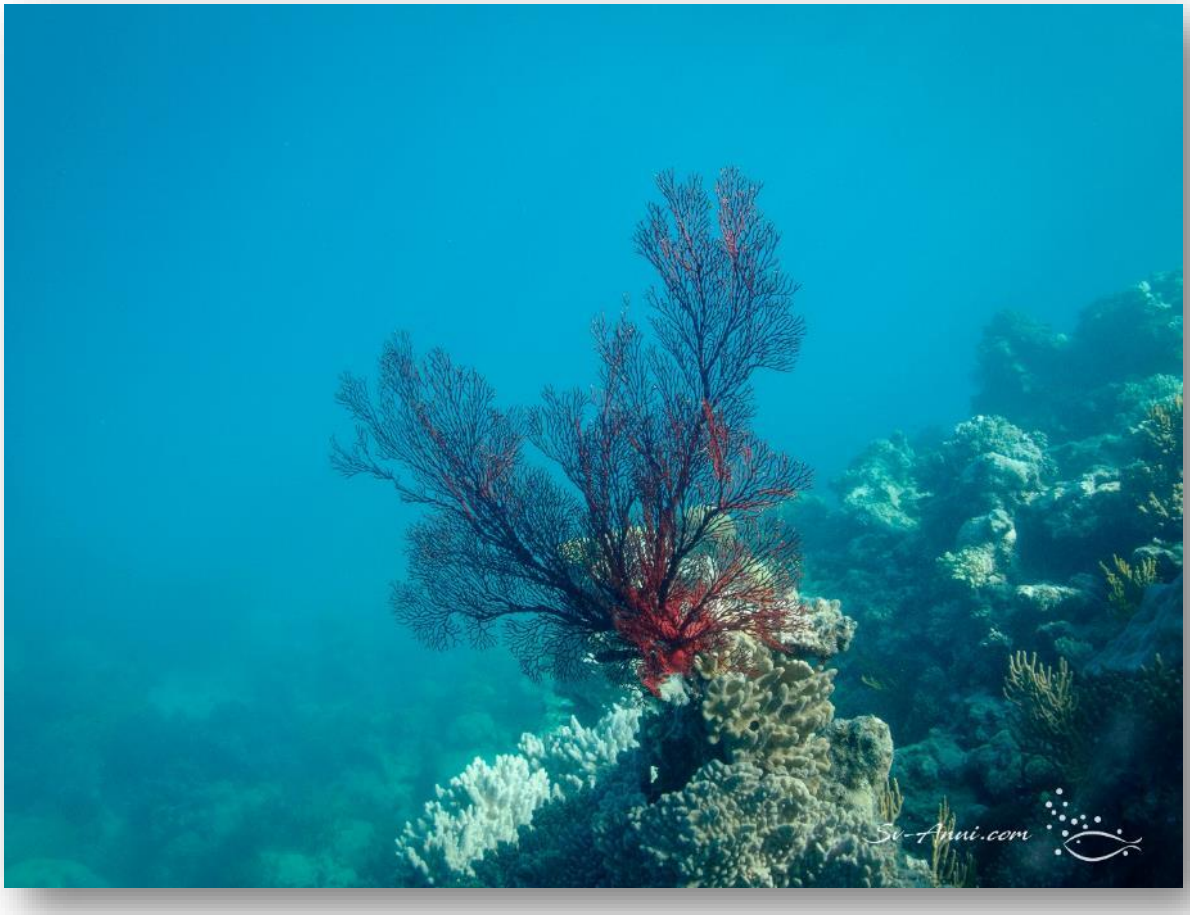
There is an obvious large bommie along the edge of the reef platform which harbours a lovely soft coral garden, with multiple families of anemonefish and other small critters.

We first investigated the reef edge. We do enjoy swimming to snorkeling sites from the boat. Moorish Idols were real attention grabbers with their trailing fin, mask like face and crisp colours, the Blue Demoiselles were rather stunning too and we saw several families of Orangefin and Blackback Anemonefish.

But our best finds were along the isolated bommies away from the reef edge, a distance from the boat. Although we needed to put the dinghy in the water to get there, it was well worth the effort for the added coral and fish life. The bommies were surrounded by deep water.

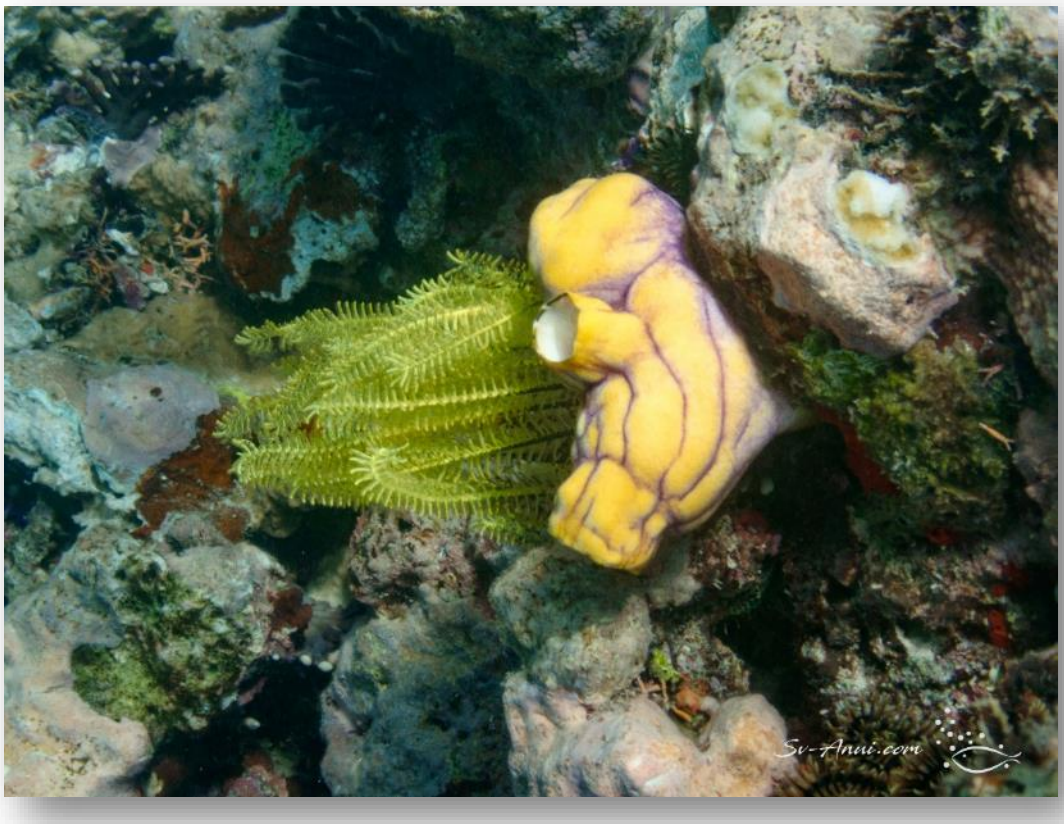
Our favourite soft corals were the red Gorgonian Fans and Black Sun Coral, even more pleasing for having to dive deep for them.

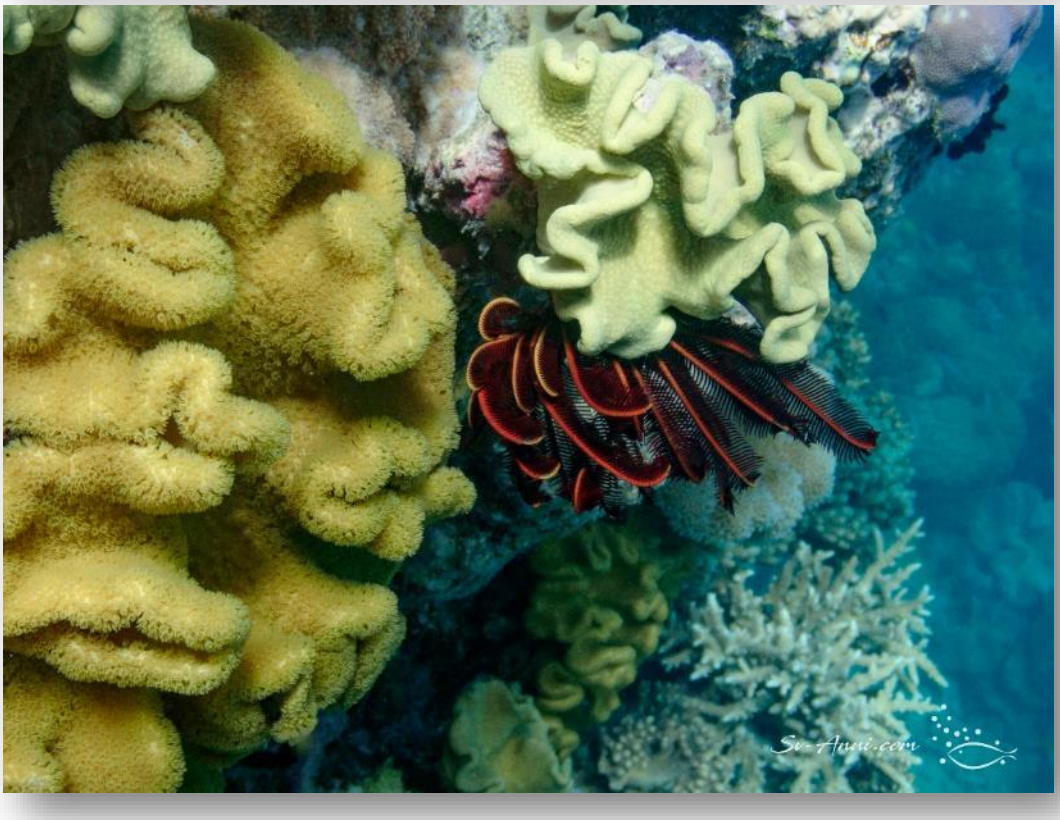


We also found out some interesting information about the Black Sun Coral (Tubastrea micrantha). It is apparently immune to bleaching. Unlike other corals it is not photosynthetic, but heterotrophic. This means that instead of receiving most of the energy from the symbiotic algae within its tissues, it eats other plants or animals for energy and nutrients. It extends long tentacles at night to catch passing zooplankton. Black Coral will therefore not bleach when temperatures get too high. It may well be the coral of the future!

Black Sun Coral is often found a bit deeper down, in 5 to 10m of water, so you have to work a little harder for your photo. But when you get close you realise that it may look black at a distance and be named 'black coral' but it is actually a shade of dark green – another nice surprise.

Other interesting critters included the red and green Crinoids and the Tunicate.



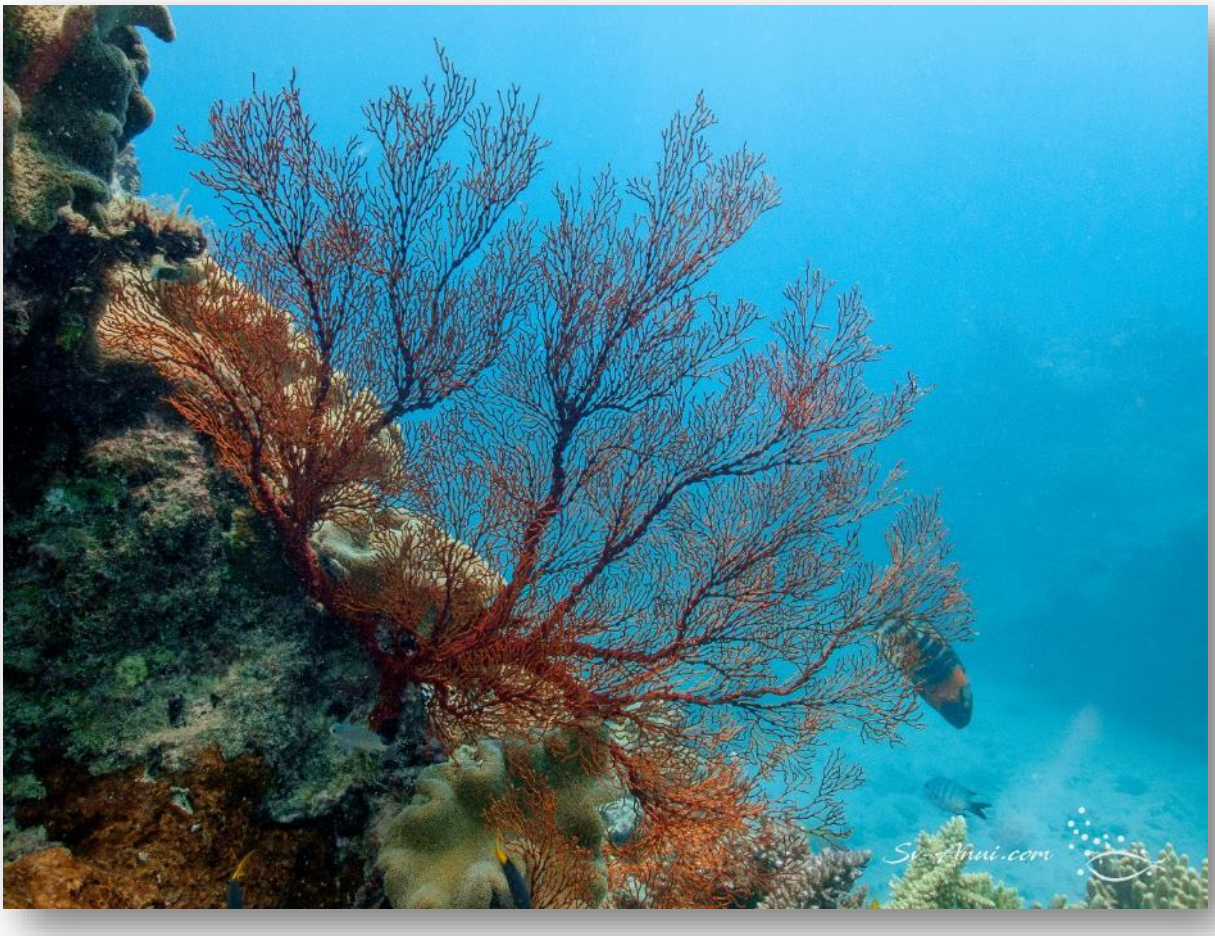



And what about this school of Yellowstripe Goatfish which you can't miss, and the camouflaged Stonefish which was hard to see!

# Undine Reef & Cay

The Undine Reef is spectacular as you approach and from the air. It is a very long skinny reef, with a sand cay at the western end. Access is straight forward. We anchored in 8m of water over clear sand in front of the cay. It was also particularly nice to have this place to yourself when just a few miles away you can see neighbouring Mackay Reef with lots of boats around it! Access to the cay at low tide requires a bit of meandering in the dinghy, but worth the effort for that castaway feeling. These two images show the reef and cay looking east.

We snorkeled on the northwestern side of the reef and there are probably other sites to explore on the northern flank if the weather allows. We found the visibility lacking, but we still had fun exploring underwater. When water clarity is not wonderful, we find focusing on textural subjects such as Gorgonian Fans or the juxtaposition of soft and hard corals work well, as does switching to a macro lens. Here are a few of our better shots:

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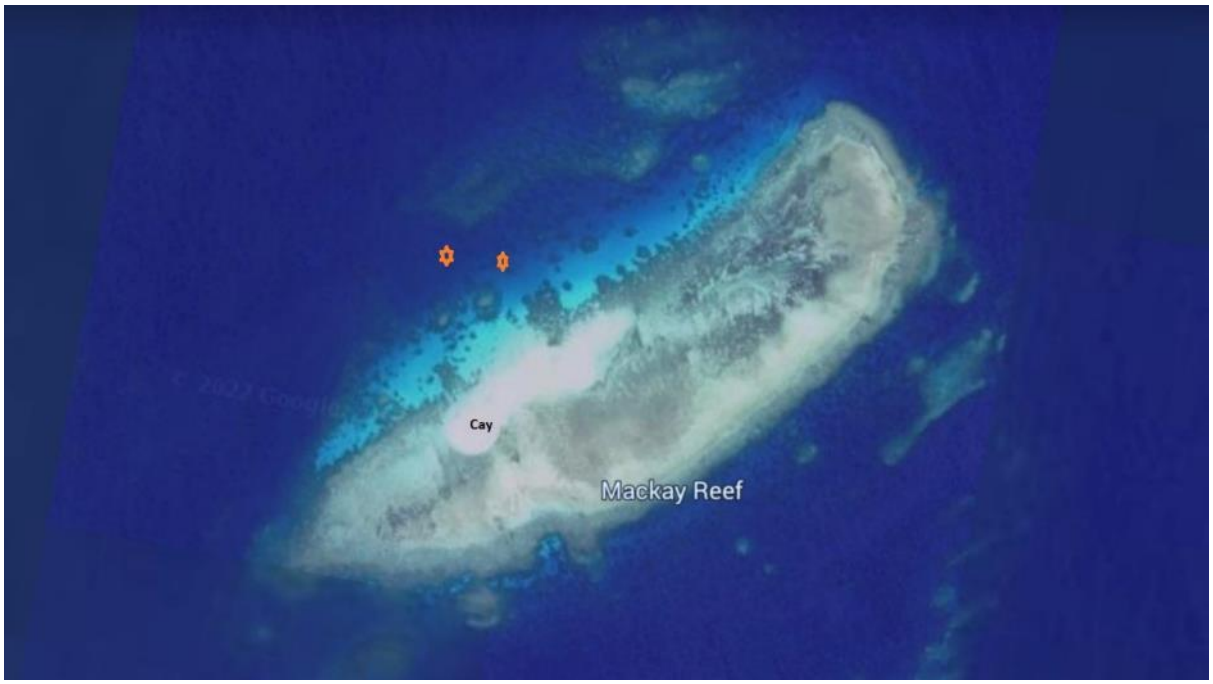
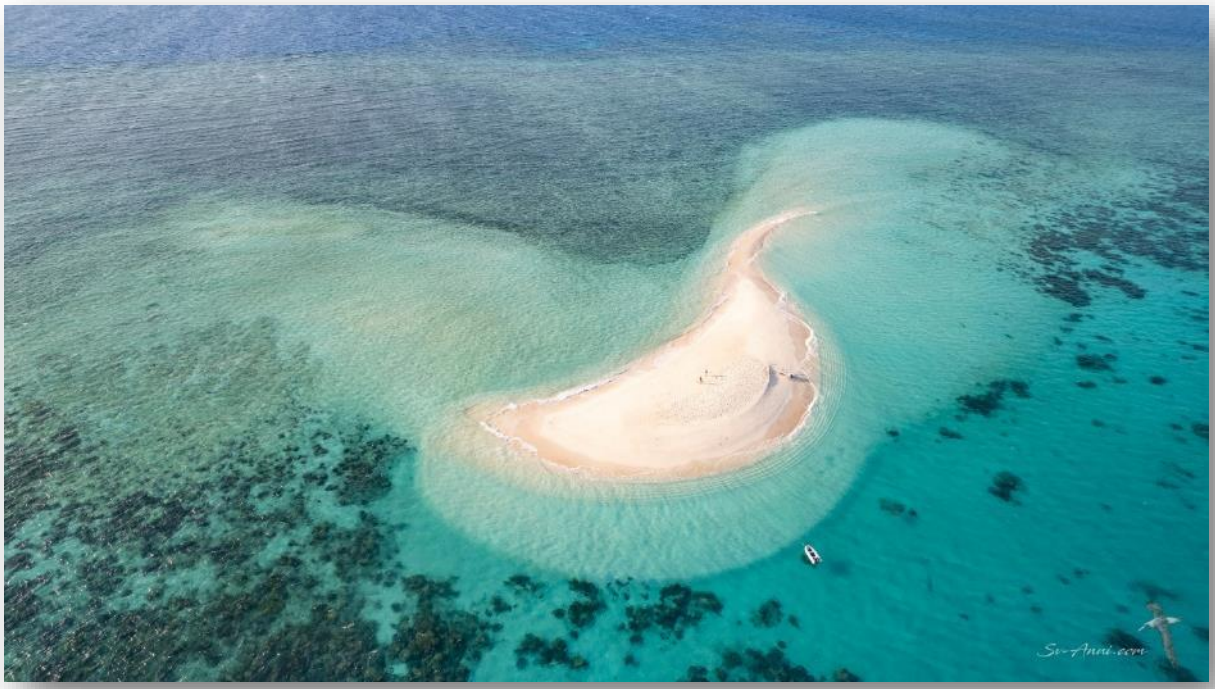
# Mackay Reef & Cay

Just a few miles further north from Undine is the popular Mackay Reef. We had been there before and really enjoyed the variety afforded by the combination of a sand cay, a protected area on the leeside of the reef for a paddle and a snorkel among corals gardens, and at slack water the opportunity to go to the outside edge of the reef wall. Around the NE-SE end, was by far the best, with thriving marine life.



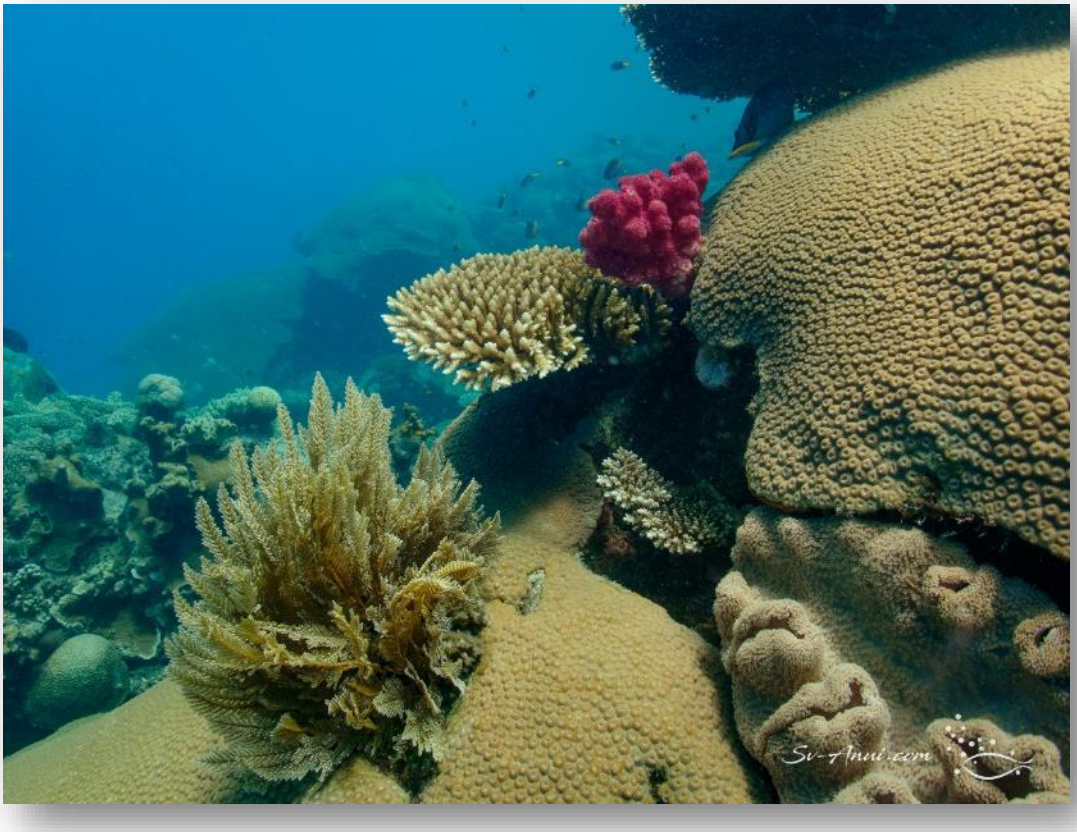

During the main part of the day, particularly when this coincides with low tide, commercial tour boats frequent the Mackay Reef so you probably won't have it to yourself, but you may be lucky to pick up one of two public moorings in front of the cay (marked in red). In any case there is plenty of space to anchor in 6 to 8 meters over sand which is what we did. As is often the case with the more popular reefs, the best time to enjoy the peace and quiet is first thing in the morning or late in the afternoon when the commercial tour vessels are not there!

This is what the sand cay looked like from the air first thing in the morning, looking south.



The public moorings were taken, but *Anui* was just anchored near them in 8m of water over sand. The image below was taken with the drone looking north.

Our underwater photos were all taken on the exposed side of the reef wall at low tide.

# Onto the Ribbons!


From here on, we are travelling along the Ribbon Reefs, a series of long and skinny reefs which lie well offshore between the latitude of Rossville and Lizard Island on the very edge of the Continental Shelf.

This was the long awaited part of our explorations!

There are 10 official Ribbon Reefs, plus Lena Reef at the southern end and a few extra unnamed ones past No.10, the longest one.

On the western side of the Ribbons, the water depth is 20-50m, but the current runs fast between each reef as the ocean is funnelled through a narrow gap.

On the eastern side of the Ribbons is the continental shelf with its canyon like edges. Beyond these the water depth quickly drops to over 1000 meters.

You can see a central line of reefs and islands in between the Ribbons and the mainland, at the northern end of which is Lizard Island.

We were not intending to stop at every one of the Ribbon Reefs. We had a limited weather window and had not got the opportunity to visit the entire series in the one trip. For those wondering why we stop at some and not others, a few things influence our choices.

For a start, we let reports from other cruisers and dive books guide us. The most popular ones were number 3, 5, 7 and 10. But something else comes into play which is crucial for us: safe anchoring or mooring availability. There are a few spots where one or two public moorings have been installed by Marine Parks, typically where established dive sites are located. If they are vacant, we use these. But if they are taken, we look for a safe anchorage. We study the satellite maps in advance, look for a wide enough strip of sand to anchor in, at a depth less than 10 meters, with a 80-100m radius clear of obstacles. Not all of the Ribbon Reefs meet our 'requirements'. Additionally, we like to be close to outlying bommies for snorkeling, as these tend to be in better condition than the leeside edge of the reef platform in our experience.

One of the additional challenges is that the seemingly sandy bottom on the charts is actually coarse crushed coral which does not provide great holding, and the seafloor drops down steeply to a depth of over 20m. If the anchor does not bite quickly, you have little chance of staying put. In general when we anchored it took more than one attempt to properly dig the anchor in.

# Lena Reef

Lena Reef sits just under the first of ten numbered rather than named Ribbon Reefs. We had identified a possible anchorage but found it was deeper than we expected. We dropped the pick in 16 meters of water in the clear strip of aqua water along the reef platform. With 80 meters of chain out, the boat sat in quite deep water.

The aerial looks north. It shows our anchorage, the large bommies both in front and especially behind the boat where we snorkeled, and Ribbon Reefs 1 and 2 in the distance.

We had great expectations for our snorkels: we were right on the outer edge of the Great Barrier Reef, at the start of the iconic Ribbons, in the cleanest water you can imagine. This would have to be a mecca for marine life!

Well, it was rather ordinary. On one hand it was exciting to be met by the big fellows: large batfish, a beefy grey shark and multiple whitetips and blacktips. In fact the number of sharks circling around took us a bit by surprise. You really felt like you were in their territory. But on the other hand, there was disappointment: a lot of repeated bleaching damage was evident. After the highlight of seeing thriving marine habitat at Mackay Reef, we had hoped it would be onward and upward from there, but it was not.

Lena Reef was the place where we saw the most sharks, particularly on our first snorkel along the reef wall.

Now we are not scared of reef sharks, but are always alert, always maintaining eye contact. Wade also wears a shark shields when he is spearing and keeps his catch out of the water, returning swiftly to the dinghy with his 'fish on a stick' as we call it – the spear and fish are out of the water as he swims back.


When you see a reef shark or two cruising past you, you think "great, healthy marine life, I'll just keep an eye on these". But when half a dozen excitedly circle around you, leading you to stand upright and face them camera rig or spear gun at the ready in front of you to poke those who get too daring, you think: "a bit close for comfort!"

And when as we did, we have guests with us who are not accustomed to seeing the beasties and for whom it is a rather fine line between excitement and panic, discretion is the better part of valour, and we retreat.

But not before taking another shot as they skim underneath your feet!

And then you focus your attention of those critters that don't move much at all, like the Giant Clams and the Black Sun Corals.

Wade had some fun and speared us a lovely trout which we had sashimi for dinner. The water was nice and clear. He looked good just under the surface with the reflections and marbling in the water.

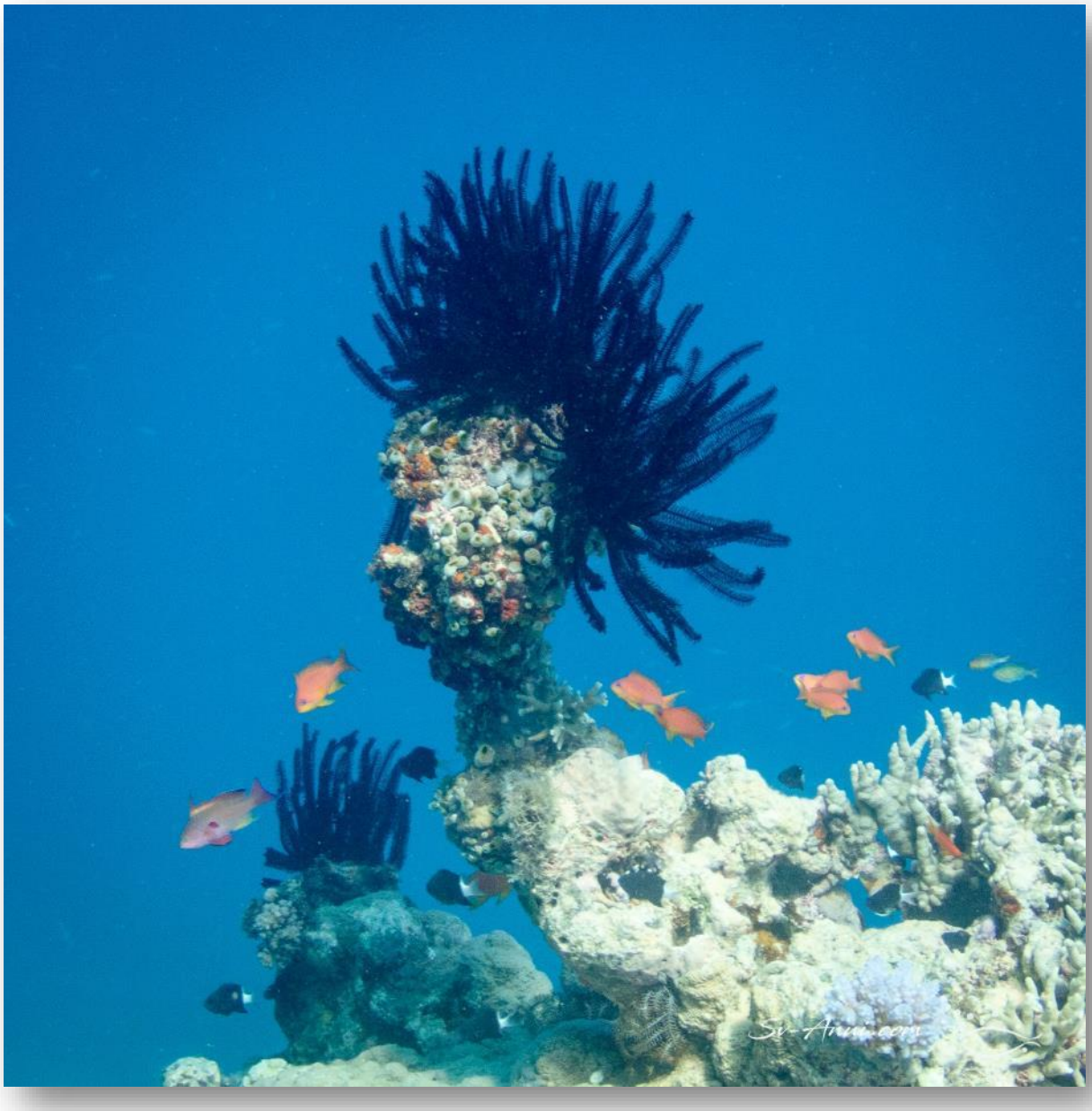

We spent another day at Lena Reef and decided to explore the large bommies a distance away behind the boat. You might not be able to just swim off the boat to your snorkeling spot, but you are rewarded for the effort of piling all your dive and photographic gear in the dinghy. This aerial shows the large bommies we investigated.

Our favourite crinoids were everywhere. These are so elegant with their feeding arms looking like ferns. We often find them in high flow areas, extending their fronds to feed on passing plankton.

Colonies of Christmas Tree Worms were also numerous in the porite, in blue, white, orange…


You can see the bleached and eroded coral next to the Saddle Butterflyfish, as well as the soft coral colonizing the substrate. The Lobophytum is a hardy rubbery soft coral species which seems to take over where no hard coral has been able to regrow. Also present are types of sponges in shades of bright orange and various types of tunicates.

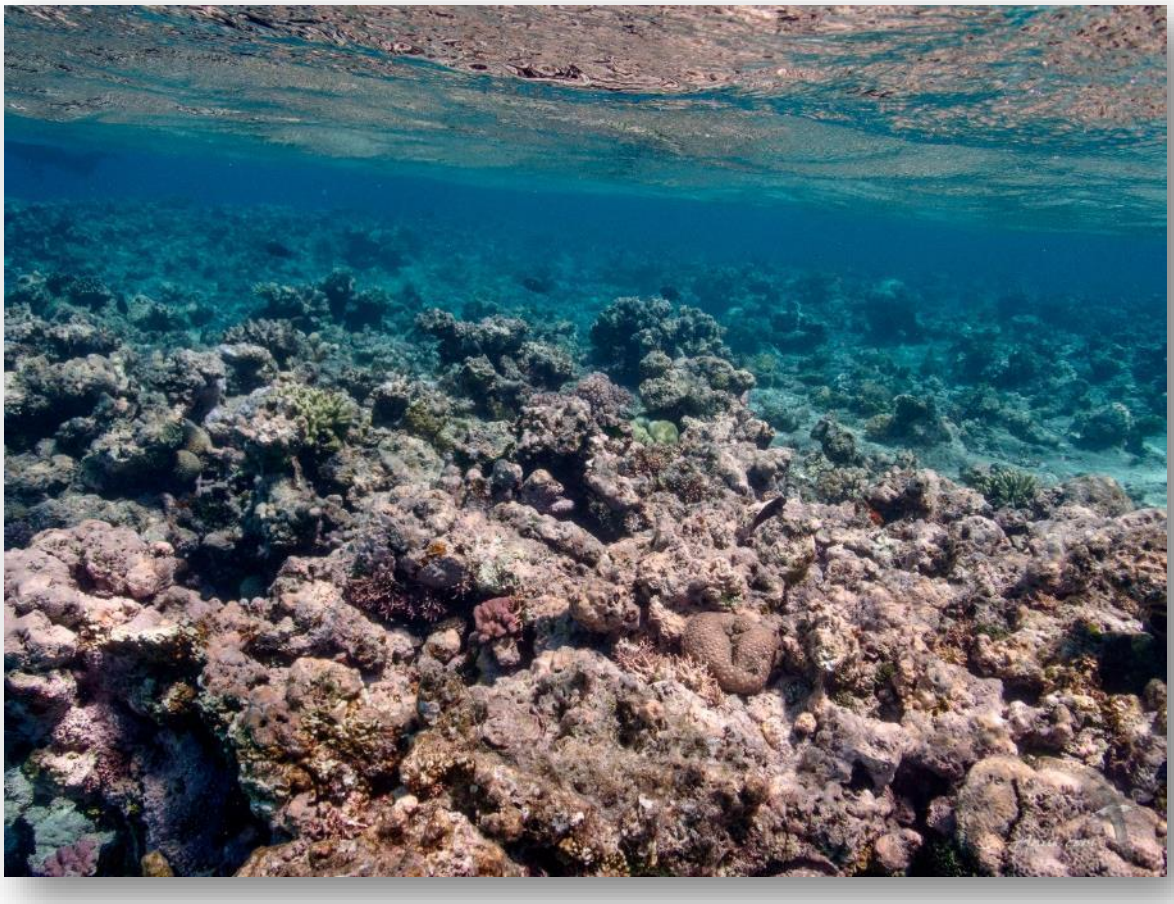
Crinoids have anchored themselves to now bleached coral. At the base of the main crinoid you can see a colony of Tunicates filtering the water for nutrients and a school of Orange Basslets. Despite the struggles, there is still life on this reef.



# Ribbon Reef No.5

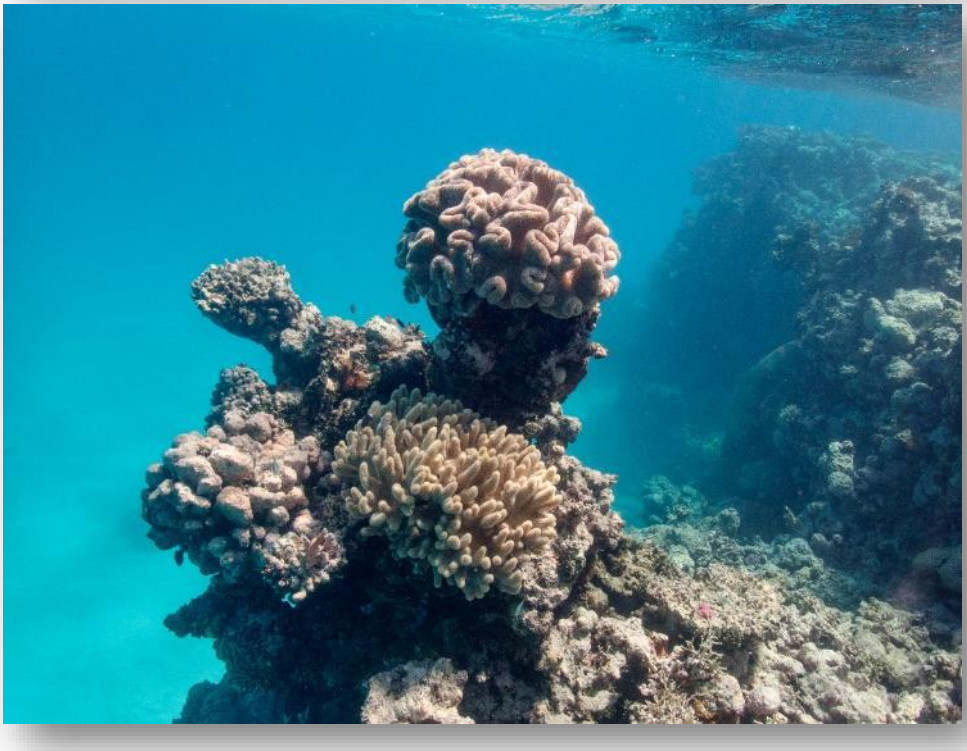
We had hoped to stop at Ribbon Reef No.3 and pick up one of two public moorings but they were taken and anchoring there was in deep water, over 20m, so we kept going to the next promising reef: No.5! We stopped at two different spots, the first at the southern end where there were two moorings, the second at the northern end where we anchored in 6m of water after a few attempts. Both spots had nearby large bommies to explore.

From a snorkeling point of view, Ribbon Reef No.5 can only be described as lackluster. We found the large bommies quite damaged, some with algae over dead coral, generally looking drab and lifeless. There was evidence of repeated bleaching. This is a typical seafloor view: bare substrate, eroded coral, monochrome tones, few fish about.



If we sound depressed, it is because we felt so sad. We had come to the Ribbon Reefs encouraged by their reputation and position and were seeing worse destruction than further south, not quite as bad as in the Coral Sea, but heading that way!

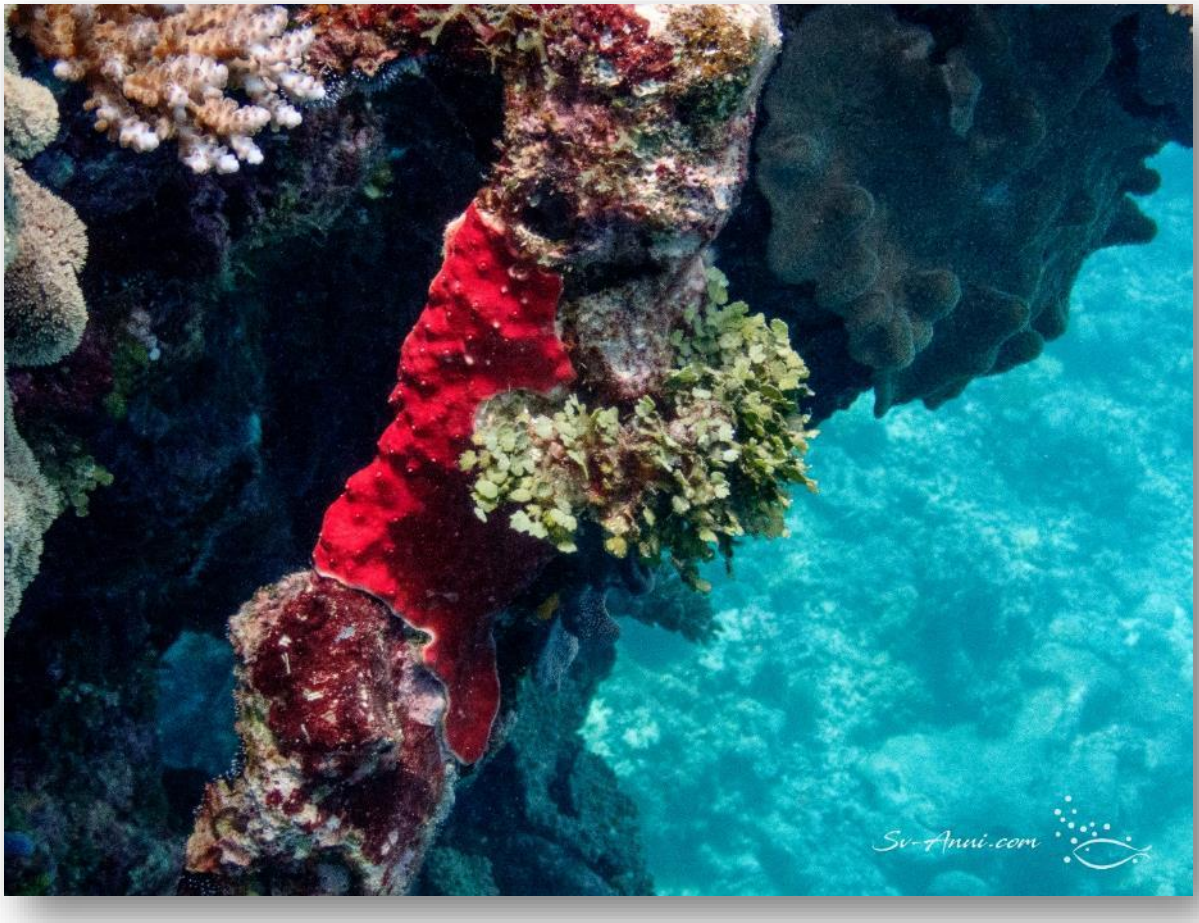
We did notice there were slabs of encrusting and rubbery coral colonizing sections where hard reef building coral no longer grew. These were lobophytum: low spreading, they creep along the substrate, covering the bare cement like rock with a thick rubbery growth. Sarcophyton (the Toadstools) and Sinularia (Fingers) soft corals were also about, the only small patches of life in an otherwise very dull seascape.



At the bommies of our second anchorage, a few positives lightened our mood. First, there was the behaviour of a Yellow Trumpetfish appearing to be attracted to a Yellow Coral Rabbitfish. It followed it, rubbed itself against it, shadowed it everywhere. Never had we seen anything like it before. It made us smile.

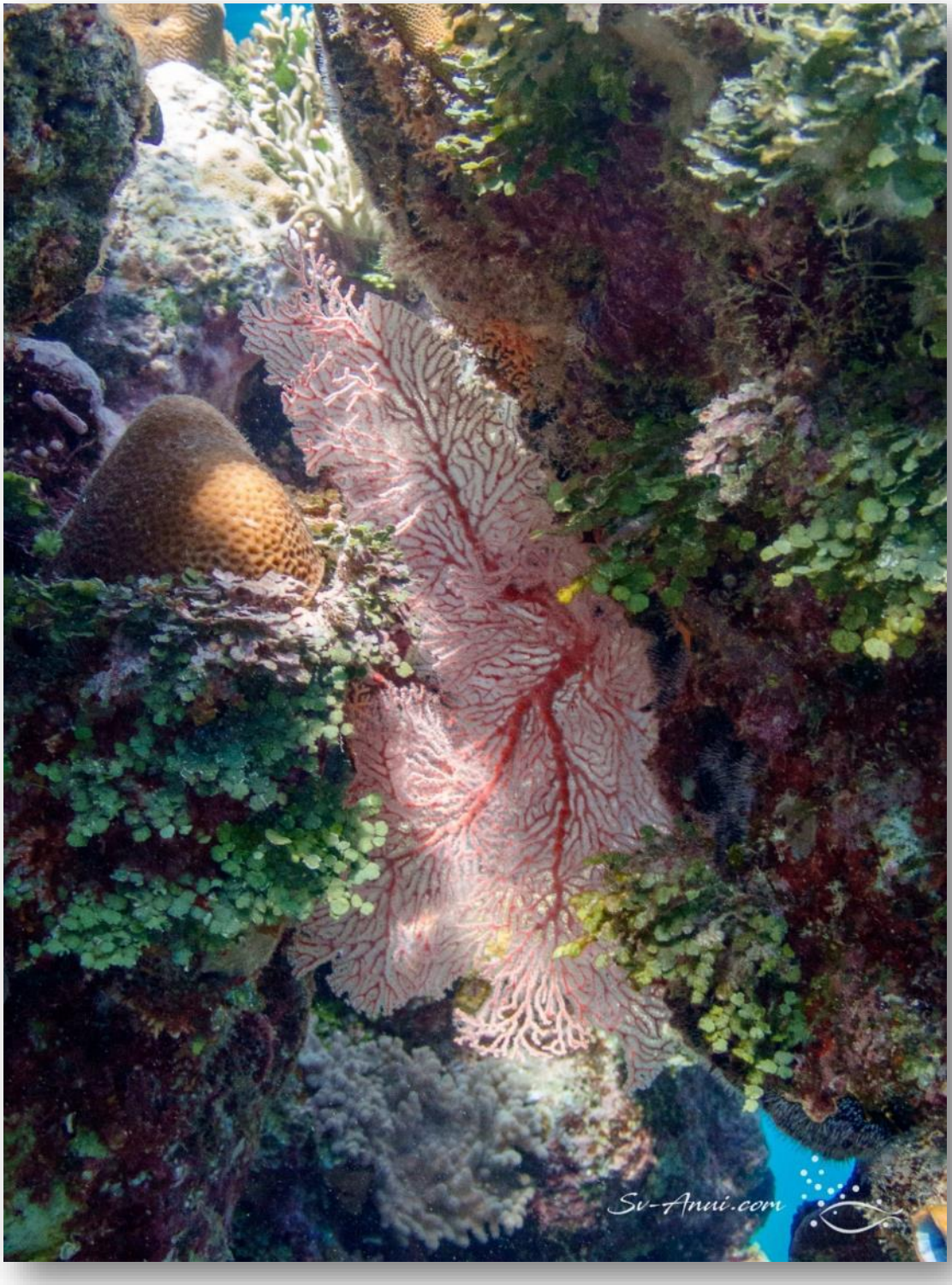

Then we noticed a Sea Cucumber on the move. These are normally stationary, but not only that, this one had its feeding tentacles out, those black feet like extensions! Way too much action for a sea cucumber!

Patches of colour in all the dullness attracted our attention. Here you see a bright red encrusting coral in a patch of green Halimeda, a type of algae which produces a chemical deterrent to protect itself from the onslaught of grazing herbivorous lawnmowers like the parrotfish or surgeonfish.




The Halimeda has a similar colour and segmented look to the maidenhair fern on land. But the comparison stops here. The Halimeda produces chemicals in a multi-pronged approach. It not only uses chemicals to deter predators but it also impregnates its tissues with inedible calcium carbonate. Fish won't get much nutrition from the algae. Those fish relying on acid for digestion will have their digestive processes disrupted if they eat it and other fish like some parrotfish that don't rely on acid in their digestive process will be deterred by the distasteful chemical! It is not easy being green, so the Halimeda does its best to survive!

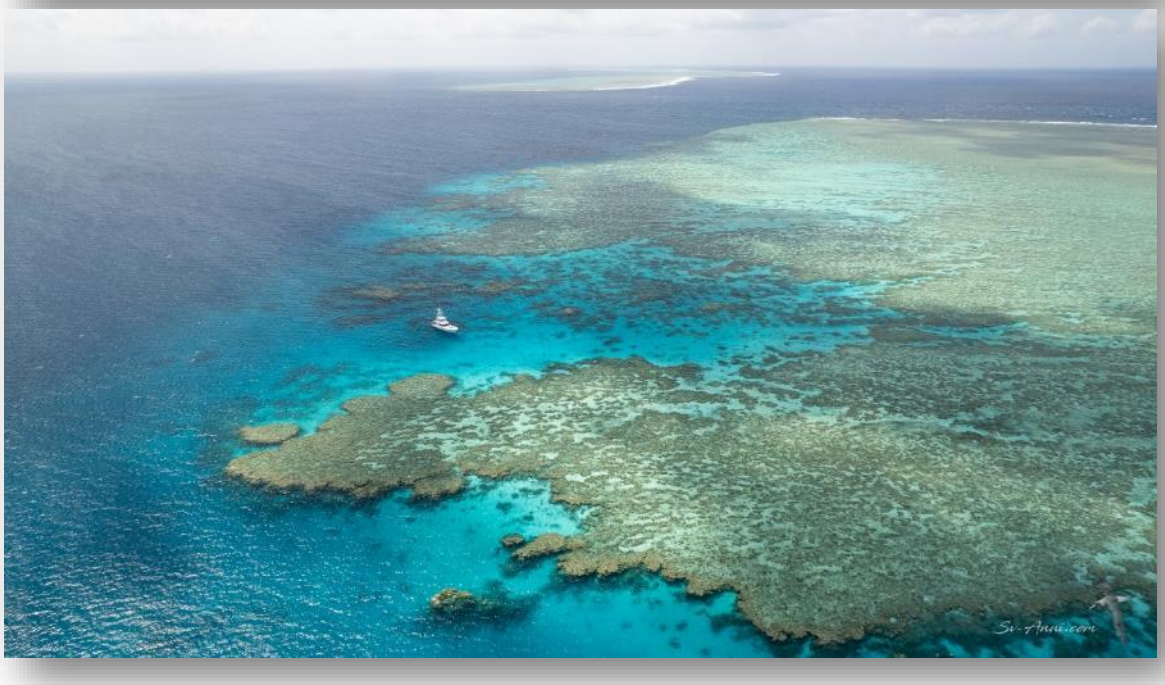
The highlight of our snorkels at No.5 was discovering a pale pink Gorgonian Fan in a crevice surrounded by Halimeda. It took a few goes to get pleasing images of this ‘ferny creek’, but it was worth it. This type of find makes a dive worthwhile.



Although the snorkeling was disappointing overall, the sunsets at both anchorages were spectacular.

# Ribbon Reef No. 7

Our next anchorage was at Ribbon Reef No. 7 and was particularly nice, although it took us a few goes to dig the anchor in. The boat was floating in 20m of water, but we dropped the pick in 6m and laid out about 40m of chain. It was reasonably windy – 14 to 18 knots south east - yet we managed a drone flight. The first image is looking south and captures the scalloping shape of the reef, the second is looking north at another possible anchorage next to ours but a bit more studded with bommies.



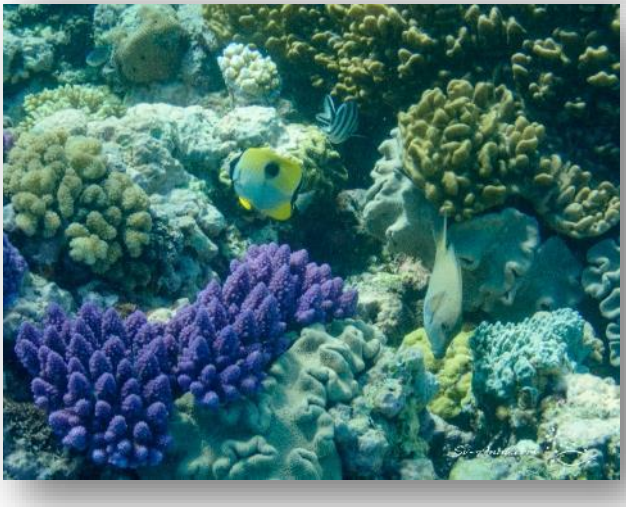
Just when we thought that there was little hope left for the health of the Ribbon Reefs, Ribbon No.7 surprised us. It was not great mind you, but there were signs of recovery and lots of fish activity.

We observed a lot of encrusting coral and soft corals like the Lobophytum and Sarcophyton. These colonize the substrate.

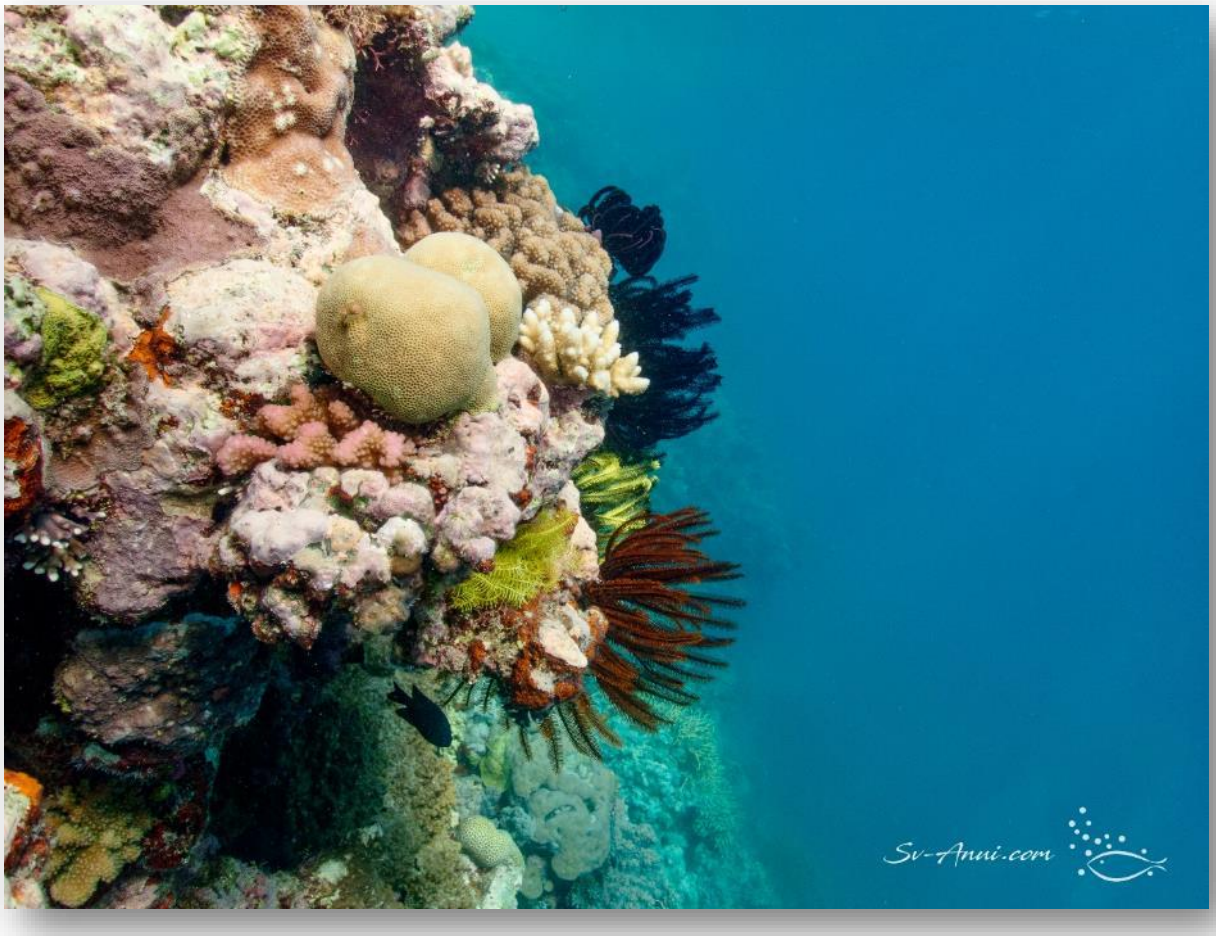

In places a kind of garden forms, there is competition for space with different species jostling for real estate. Some species act like space invaders. In the first image you can see a rubbery Lobophytum playing the expansion game right against an encrusting hard coral. In the second image two species of lobophytum soft corals are competing.


In other areas the damage is evident with a lively hard coral looking a bit like an island in the middle of bare substrate and expanses of rubble, as is shown in this photo.

At No.7 fish life was abundant. We saw schools of Steephead Parrotfish (both blue and pink), Humpnose Unicornfish cruising along at a fast pace, excited about something! Also about where the smaller and prettier Moorish Idols, Regal Angelfish, Teardrop and Ornate Butterflyfish grazing on the coral and algae.



And Crinoids were plentiful in various shades of black, green, orange and red. These are always so attractive. The beautiful plume-like stems are actually feeding arms with feathery pinnules that are spread wide to gather nutrients in the water.




It is hard to understand why reefs so close to one another can fare so differently. Some reefs, even those not in a Green zone, are showing more encouraging signs of regrowth and more abundant fish life while others look decimated and barren.

With Ribbon No.7 not in a Green Zone, we were able to spearfish.  We happened to be together when Wade spotted a coral trout and speared it, so Chris was able to shoot too… photos!

Typically after spearing, Wade dispatches his catch and swims back to the dinghy keeping the fish out of the water. We call it “Fish on a Stick”. Nobody likes to share the catch with sharks! This coral trout made another lovely meal, prepared as ceviche.

# Ribbon Reef No. 10

Ribbon Reef No.10 is the longest of the Ribbon Reefs. We chose to anchor towards the northern end, very much hoping it would be of a similar ilk to Ribbon No.7. The wind was picking up and the water was quite choppy.

However because we got there at highish tide, with the southeast already blowing at 18 knots and forecast to get stronger, we wanted to check one of the large bommies before committing to waiting for low tide later in the day and staying the night in what would be an uncomfortable anchorage. In other words it had to be worth it!


We jumped at the back of the boat with just our beathers, fins and mask, no wetsuit, no weights, no camera gear. We swam to the bommies behind us to look and see. We were both appalled by the state of the reef: barren, hardly any life, a grey shapeless mass.

Ribbon Reef No.10 might be passable if you scuba dive and go to its northern extremity to dive at the Cod Hole, a renowned site not so much for the coral life but the abundant fish life. But as a snorkeling spot the bommies edging the reef platform were in our view destroyed and the worst we had seen along the Ribbons.

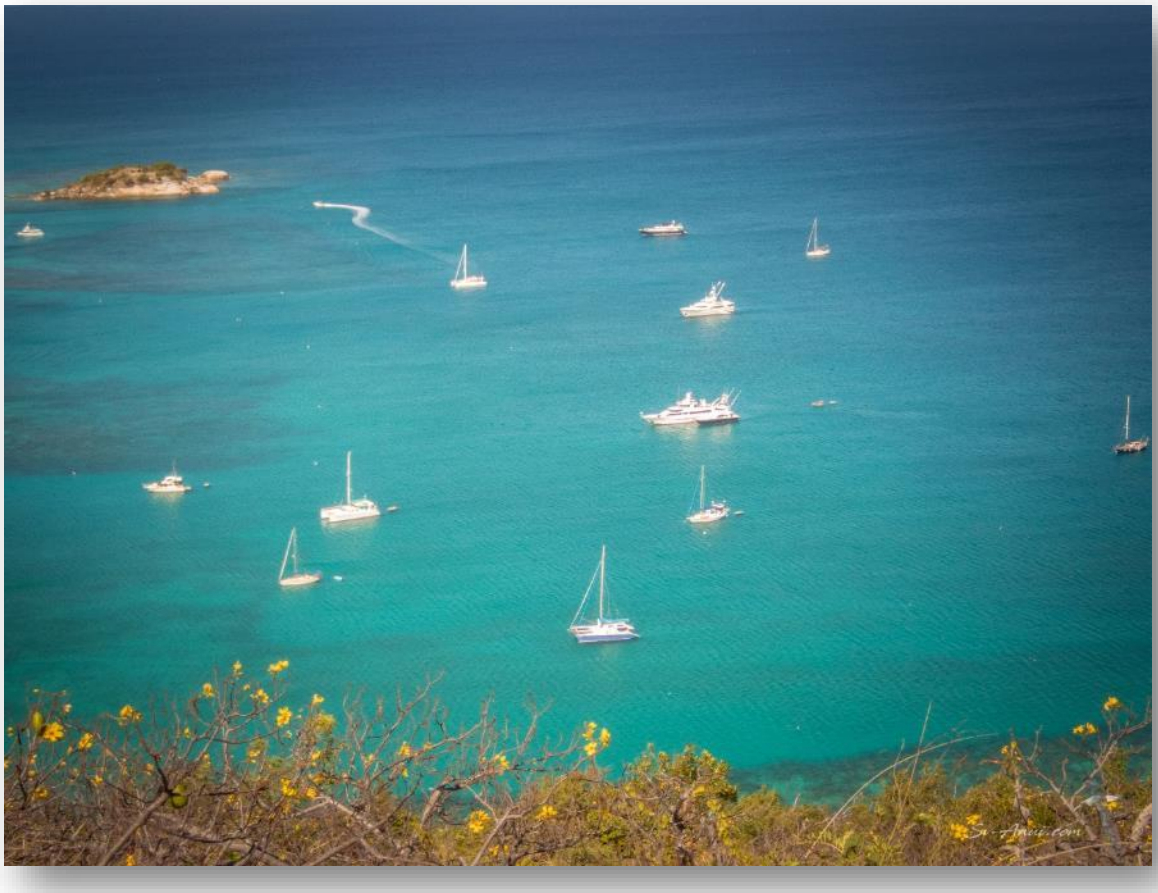
So it goes without saying that we did not wait for low tide, nor did we spend the night in rock and rolly conditions. We had some lunch, then opted to sail from there to Lizard Island in the afternoon, only 15 nautical miles west. It was a fun sail under screecher.

# Lizard Island

We had long hoped to get to Lizard Island on one of our expeditions north but although Lizard Island is easy to get to in trade wind season, the catch is getting away to return south. Many yachts get there too early in our view when the SE trades are still really strong (20-25 knots) and get stuck there for weeks on end unable to do anything because it is just too windy! In those conditions you can't enjoy the nearby reefs, you can't move from Watson's Bay on the NW side of the island and going south means motoring into wind and very unpleasant seas. What is the fun of that?

The last few years, we had observed that the northerlies were starting later and later in the year, well into October rather than September. We had also watched the SE remain stronger from Cairns northward, 20-25 rather than 15-20 further south. So we delayed our arrival at Lizard Island till the very end of September, and were also prepared to 'take' the first window of lighter conditions to escape and start our return south.

We still had guests on board and were not interested in getting stuck so far north with dwindling food supplies for an unknown amount of time. So we watched the weather while we were there and were very much aware our first ever stay would be short. We ended up staying four days anchored at Watson's Bay.



Some 20 boats were anchored in there, including several luxury motor vessels complete with multiple large tenders to amuse their paying customers.

Our first full day there was quiet because of the weather. It was very blustery, over 20 knots and did not let off until late in the afternoon when we ventured ashore for a quick reconnaissance trip. But we had internet service thanks to our CelFi Go modem, so were able to check on email and weather without needing to take a walk up the hill as many people do. We ended up doing some chores: cleaning the boat, doing a ton of laundry, making a huge bread loaf.

The next day was a lot more active and fun. We walked up to Cook's Lookout. The hike up to the highest point on this island was worth the effort with great views of Watson's Bay as we climbed up the rocky ridge, of the lagoon on the southern side as we reached the top and the other reefs in the east. It was a good aerobic exercise up the steep track and rocky slabs.

And everywhere we walked, the track was lined with Kapok bushes and their bright yellow flowers.

The view at the summit was wonderful. In this panoramic image you see Watson's Bay on the right and the Lagoon on the left.

The lagoon would be a very nice anchorage in northerly conditions.

And here is Watson’s Bay again, this time from the top.

On one of the calmer days we took a long dinghy ride right around to the northern end of the island, to Mermaid Beach and Reef. There was a mooring there for light crafts. We tied to that and went for a snorkel.

We were pleasantly surprised, finding a reef in recovery. Some areas were sparse, with expanses of sediment interspersed with regrowth. The visibility was not wonderful but what we saw was encouraging.

The coral cover was good and there was colour! We saw some fish, but not a lot.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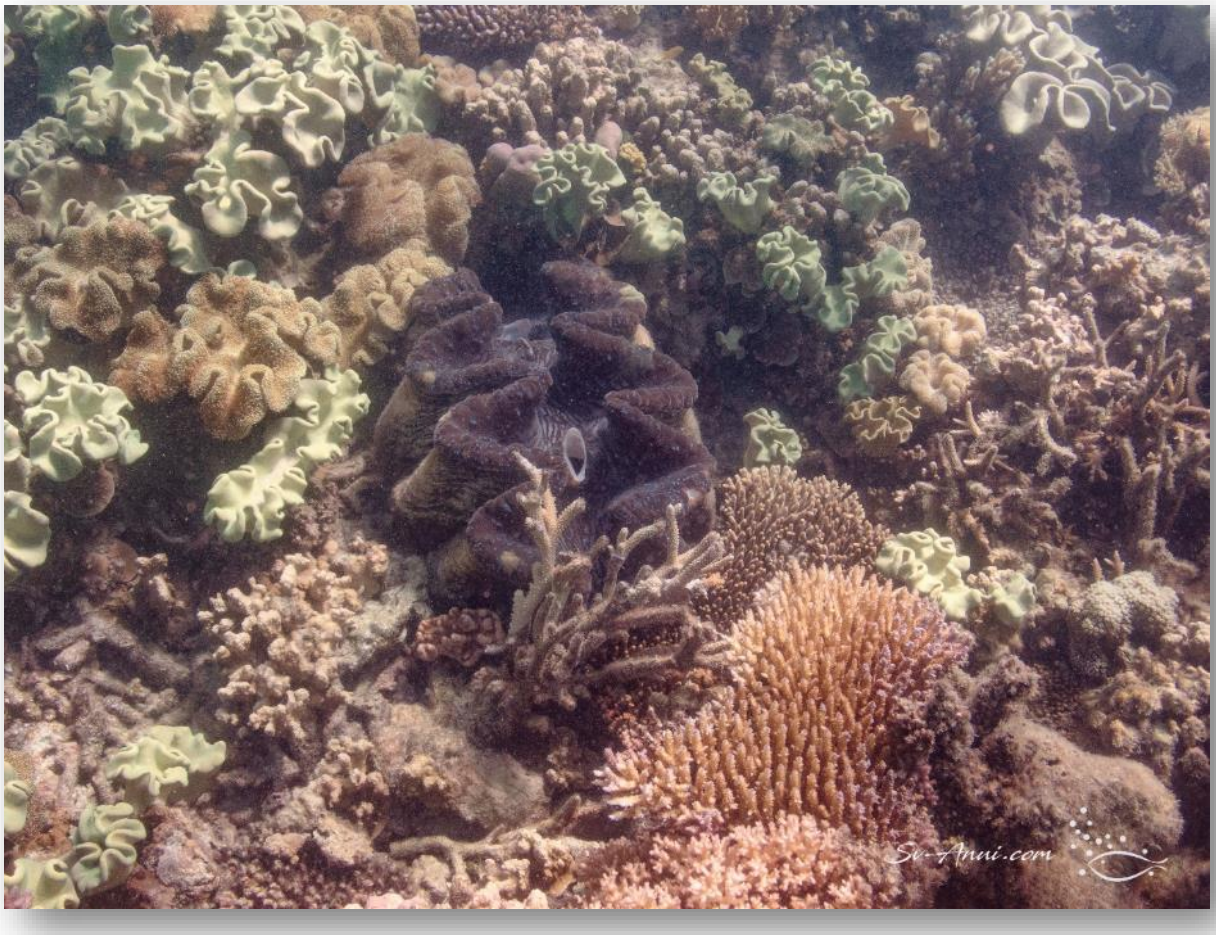
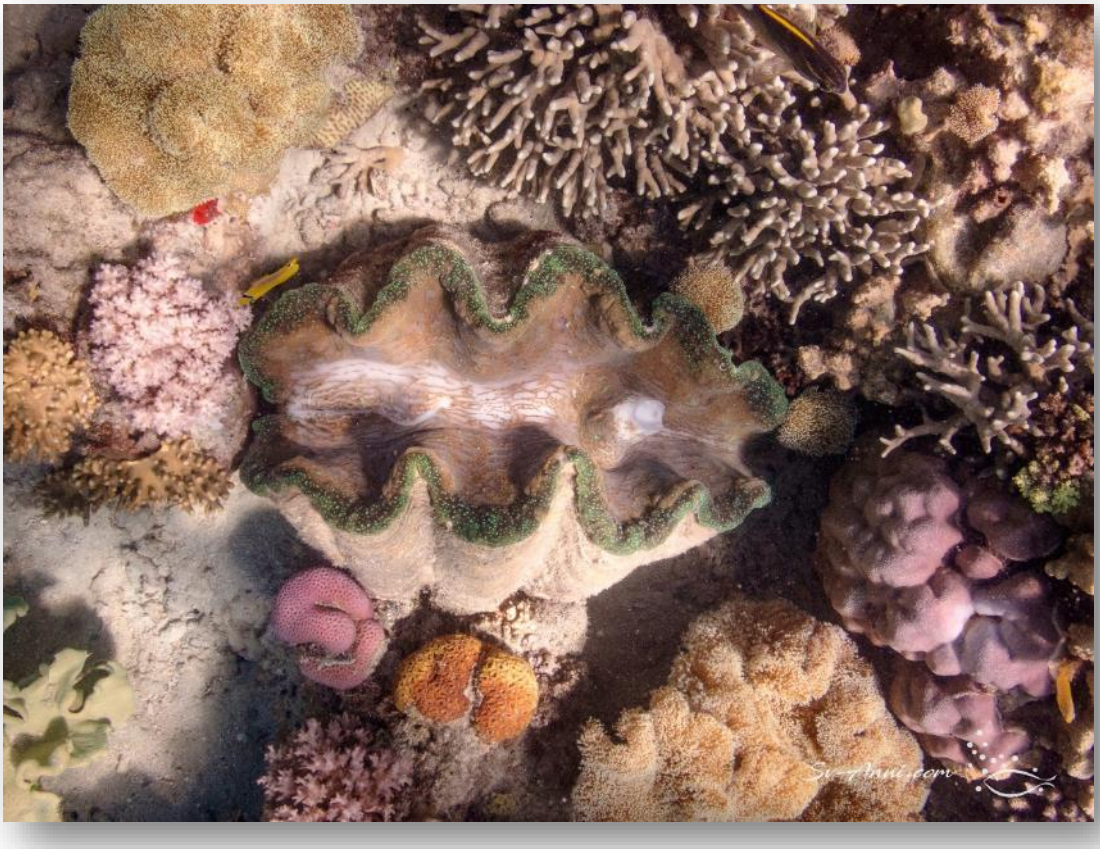
Among the healthy, vigorous growth, was also examples of struggling corals. Here is an unusual image showing different stages of coral decay in the one plate Acropora:

- The mauve colour at the bottom is the still healthy part of this table Acropora
- The white strip shows where it has been bleached, has expelled the symbiotic algae but is still alive
- The brown half is where filamentous algae has taken over and that part of the coral is now dead


Overall this little patch of reef at Mermaid Beach looked significantly better than most of the Ribbon Reefs. It is in recovery with good cover of the fast growing Acropora in branching and plate form as well as the hardy soft coral species of Sarcophyton, Lobophytum and Sinularia. But it is very much a kind of monoculture for hard corals which limits biodiversity. Acropora are also the most susceptible to storm and heat damage, as well as to Crown of Thorn Starfish attacks, so we will see how long they last!

Next came a quick snorkel at the Clam Garden in Watson's Bay. It apparently is not what it used to be, having been smashed by cyclones and bleaching, but again, the soft corals were recolonizing the patch and some of the clams had survived. We hesitated about going there under threat of a lone croc, but it had not been seen for weeks, so we were brave!





Before we left, we chatted to a few yachties, met with people who followed our blog and used our cruising resources as reference. It is always pleasing when yachties make a point of saying hello and thank us for sharing our cruise stories.

We could not miss out on a meal at the Marlin Bar, complete with live music. It was all very pleasant. We could have easily stayed longer at Lizard Island. In fact we would love to come back next year and use the island as a base to explore more of the island itself, the surrounding reefs and islets, but do so late in the season.

However with the SE forecast to lighten to 15 knots for two days only, then build back up to 25 knots, we and half a dozen boats decided it was time to raise anchor and leave Lizard Island.

So bright and early the next morning, we headed out, raised our main and jib, and sailed away.

# Return to Cairns

Our return towards Cairns was a series of tacks into wind and generally wet and wild rides, but we were glad we left Lizard Island when we did as we would have still been there several weeks later otherwise.

We did not intend to sail straight to Cairns. We wanted to explore a few spots along the way: a mix of islets and central reefs, however were keen to do so south of Cooktown. We had observed that the region further south was less battered by howling winds and forecast to be at least 10 knots less than at Lizard.

But as often happens, the forecast changed, the SE picked up again all the way along the coast, forcing us to aim for places we could hide in for a while.

# Hope Island

After a long day of tacking back and forth from Lizard Island, we reached Hope Island East, somewhere we had never been to before.

With four public moorings already taken, we checked the satellite map and discovered there was an area close to the island which looked fine for anchoring. So we did something we rarely do: we motored right past the moored boats and anchored ahead of them and in front of the island, 100m from the beach.

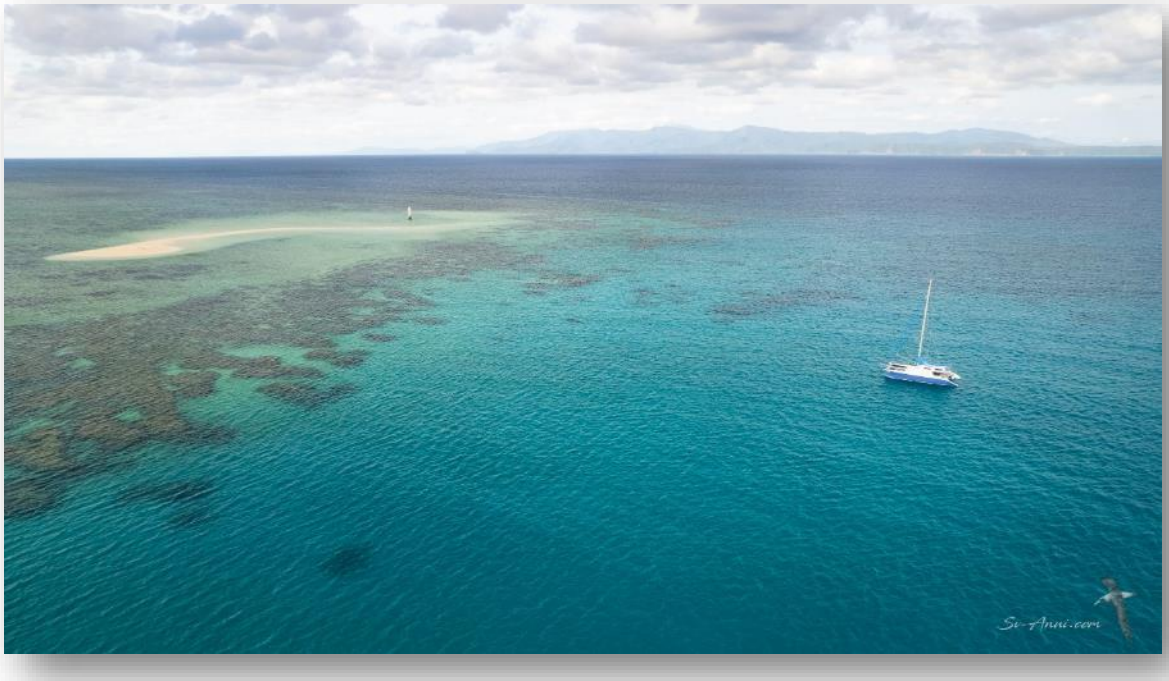
We were ready for a leg stretch so dinghied ashore with sundowner supplies in a basket, walked right around the vegetated cay, then settled at a picnic table no less and enjoyed the sunset, serenaded by flocks of Imperial Pied Pigeons. These were returning to the island after a day's foraging on land in the rainforest.

Hope Island will stay in our memory as the place for colourful sunsets and sunrises!

# Pickersgill Reef

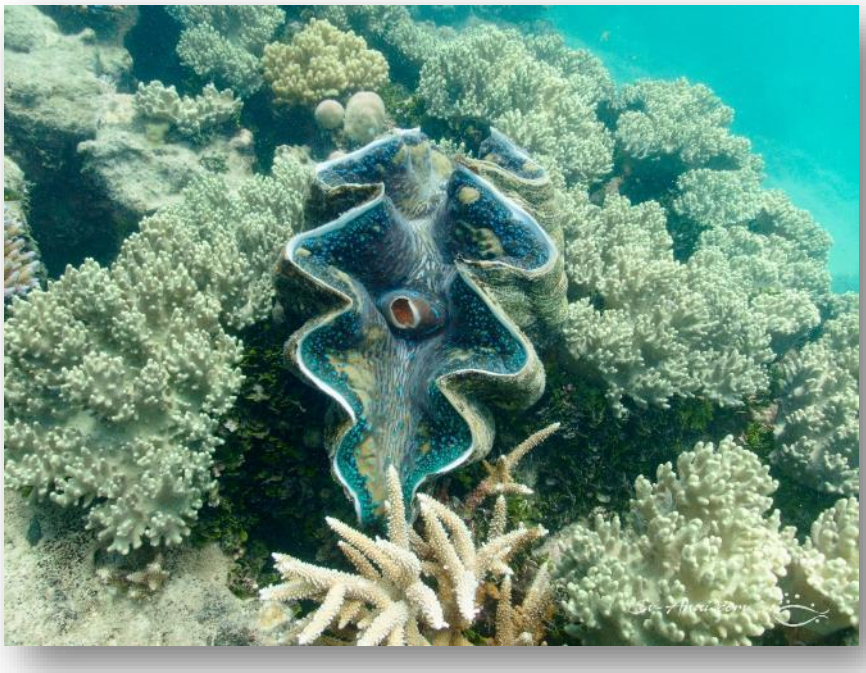
With a few days of moderate conditions, we elected to head to a nearby reef, with a cay and lagoon, hoping to spend a few days exploring as it looked quite substantial. We anchored at the northwest tip of the reef in 6 m over sand.


Even Bengie enjoyed a little outing. We took her for a walk on the cay.



We first snorkeled along the bommies at the top of the reef, in front of the boat. The visibility was not wonderful, but considering the proximity to the mainland, we thought the coral cover and fish life were quite reasonable.

Over the next couple of days, we dinghied to the western side of the reef and the lagoon which offered some protection from the chop for snorkeling, as the SE was picking up. The anchorage remained comfortable in 15-18 knots of wind.

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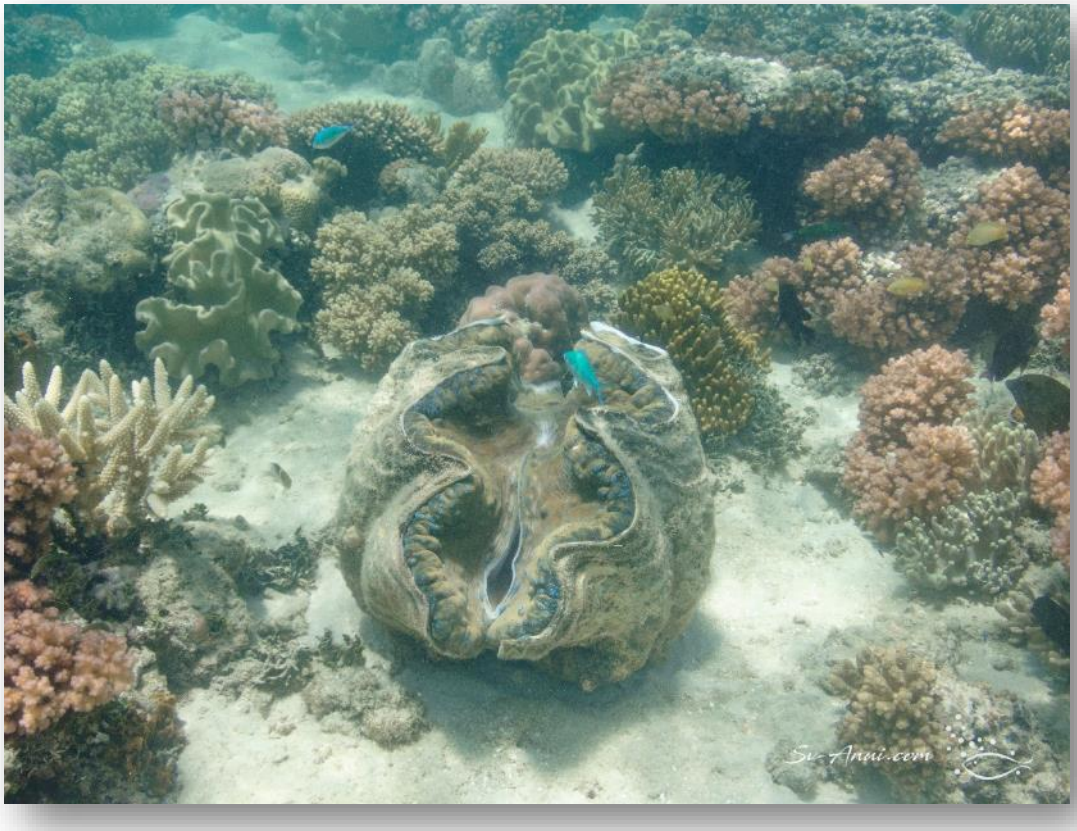
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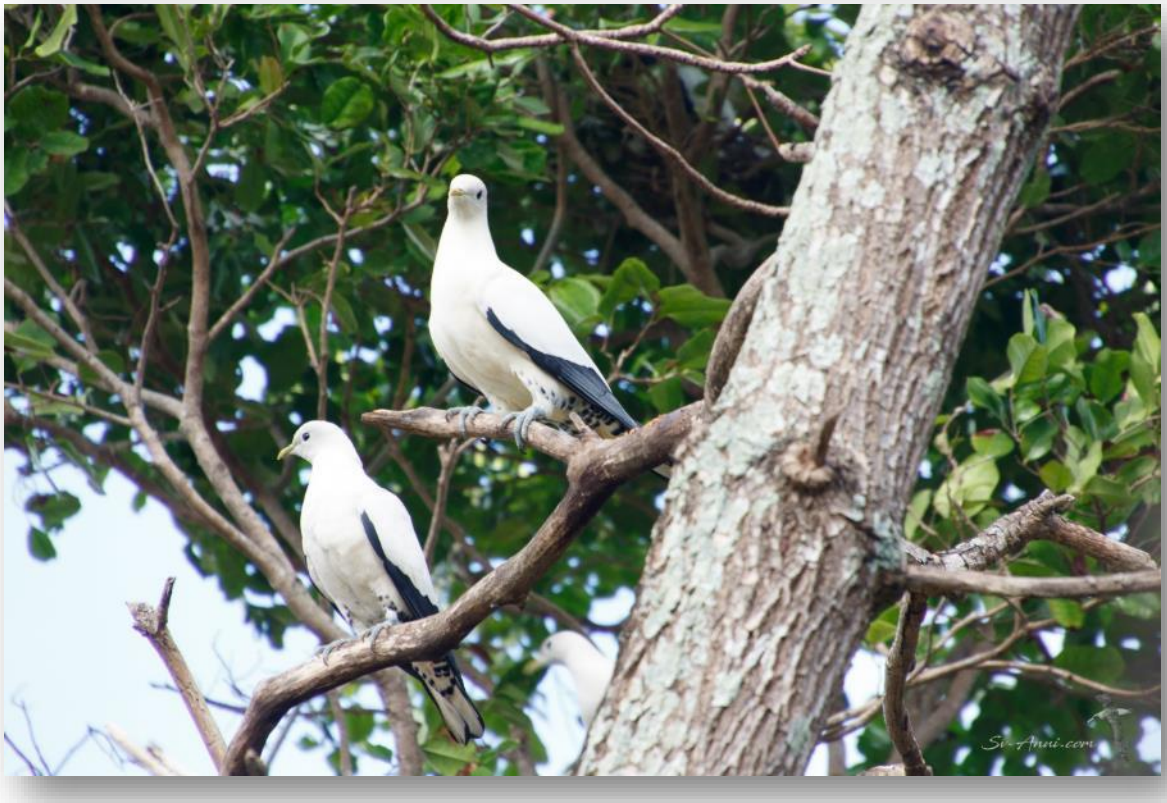
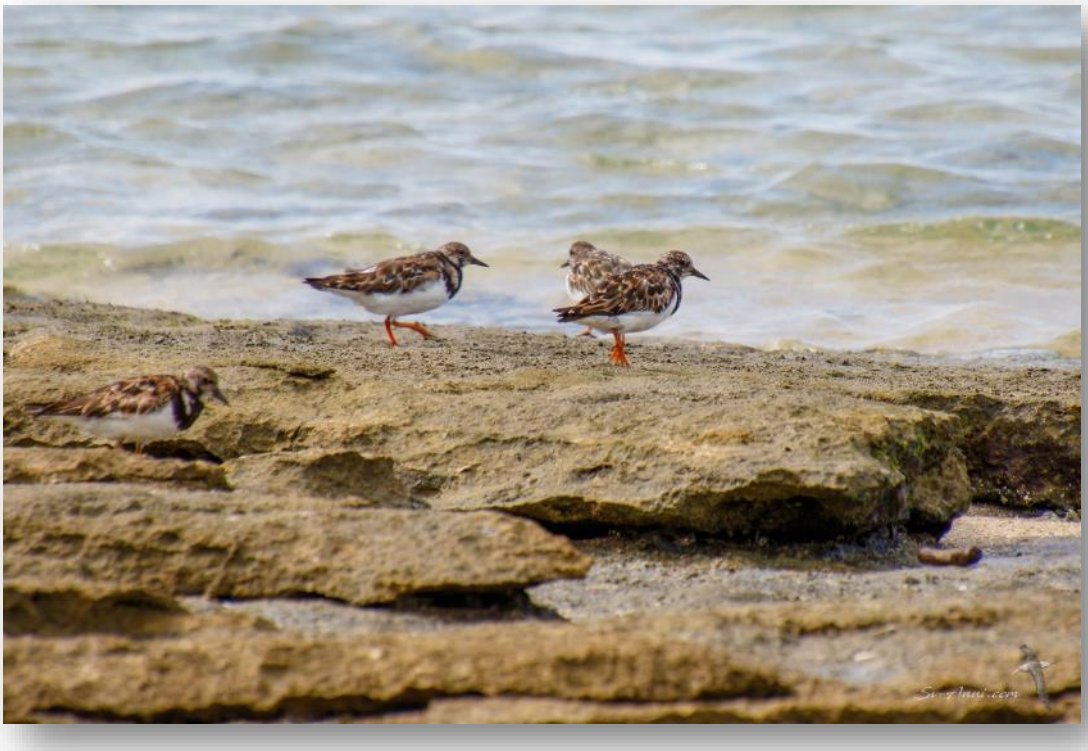
# Low Isles

With strengthening SE to over 20 knots, we left Pickersgill Reef and tacked our way to the Low Isles, situated only 8 nautical miles from Port Douglas. The Low Isles consist of two islets, Low Isle itself, a coral cay with a lighthouse and a house for the caretaker who lives there, and Woody Island, a large uninhabited mangrove island with a large bird population. The anchorage is in between the two isles and we were lucky to pick up the last available public mooring.

Before the wind picked up too much, we quickly sent the drone up to capture this spectacular spot from the air.



Visiting Low Isle is best done early in the morning or late in the afternoon, after the commercial tourist boats have gone so you can enjoy the bird life. The resident Ospreys, Reef Egrets, Ruddy Turnstones, Crested Terns are about.



And in the evenings, the Pied Imperial Pigeons return to the islands in long processions, and the Sooty Terns come back too, some choosing to settle on *Anui*!

Our Bengie was a bit put off by the lineup of birds on the bows, but too scared to do anything about it! She is a bit of a scaredy cat in her old age, but pretty cute!

We did not think it was worth going in for a snorkel given the turbidity of the water. Our last experience at Low Isles was poor. But Wade's brother Murray was keen to have a look and came back with a few decent photos of coral life, much to our surprise. So Chris could not resist and jumped in, camera in hand. The visibility was down to one or two meters in places, with a thick layer of sediment covering the seafloor, but there were patches of interesting hard as well as soft coral. The moral of the story: never assume and give things a go!






# Michaelmas Cay & Reef

We left Low Isles after several days of strong SE, when the conditions started easing. We made an overnight stop at Double Island to give us a better sailing angle to head to Michaelmas Cay the next day. We wanted to give our family a few last days at the reef before heading back to Cairns. We had all been to Michaelmas before, but this was a protected spot in 15-18 knots which also allowed some variety - bird watching, snorkeling in the shallows - and we are glad we did.

Although the birdlife on Michaelmas does not compare with what we experienced at the Coral Sea Atolls, it was fun to see boobies, noddies and terns milling about on the cay.

Noddies were caring for their young, very protective and loving towards each other.

Some Brown Boobies were sitting on a single egg, others had a chick just hatched, yet others had bigger fluff balls!

We spent three days at Michaelmas, snorkeling in front of the cay and around bommies further along the reef. All our favourites were there: Pink Anemonefish, Steephead Parrotfish, juvenile Black Damsels, Sixbar Wrasses…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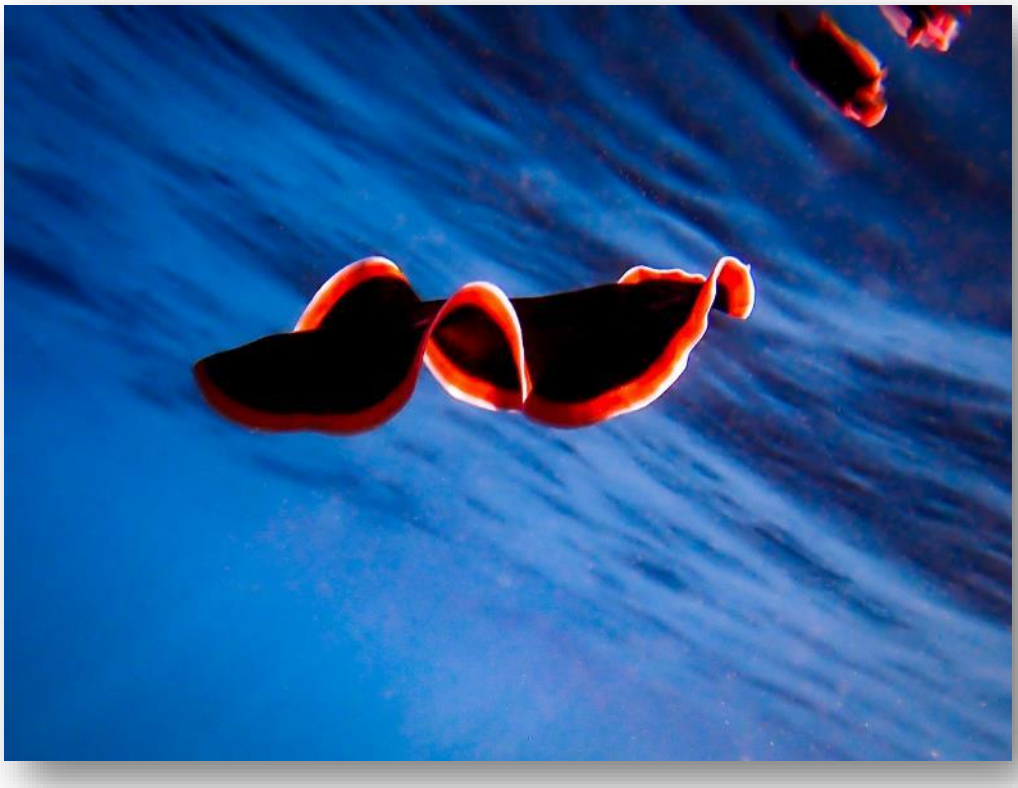
We spotted the less frequently seen Goatfish and Harlequin Tuskfish.


We had the delight of discovering a critter we did not recognize as anything we knew and enlisted the help of Eye on The Reef to identify what it was. It turned out to be the egg mass of a nudibranch. Apparently the nudibranch lay their rosette-like ribbon of eggs in a spiral embedded in mucus on hard surfaces like a rock. Two days later we saw another one! Finds like these make your day!


We think they are the egg clusters of the spectacular Spanish Dancer. We saw one of these in the Keppels a few years ago.



As the wind and current picked up, it was fun to focus on the soft coral to capture the movement of their polyps.

When the visibility is not as good underwater and wide-angle shots lose their clarity, taking macro images or getting really close to a subject often works well. Here the Christmas Tree Worms and the patterns in the porite come out, as do the fingers of the Sinularia soft coral or the polyps of the Sarcophyton.

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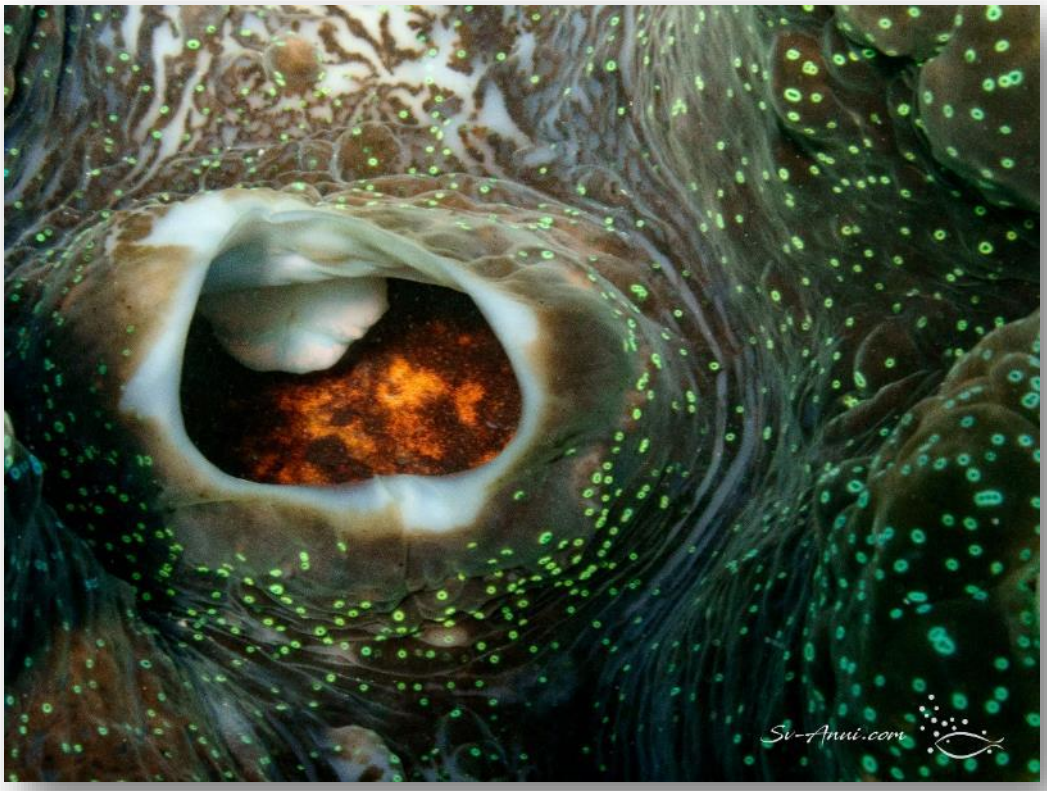
And then there is always a lot more activity with schools of fish: Goldlined Rabbitfish, Batfish, Subnose Darts

And you could not spend time at Michaelmas and not admire the beautiful Giant Clams.




Spending a few unhurried days at Michaelmas Cay and Reef was a great way to end our Far North Queensland Reef adventure. After our last snorkel, we headed back to Cairns where we dropped our family off for their return to Melbourne.

They were on board for four weeks, discovering with us new regions and experiencing the ups and downs of our cruising life.

# Coral Health Project

We have been exploring and photographing the Reef for six years. In that time we have seen significant changes in the health of the coral. We have published magazine articles, blog posts and photographs about what we have seen, in the main showing the beauty of the Great Barrier Reef and highlighting what is at stake.

People often comment that the coral “looks good” and “seems to be doing reasonably well”. We cringe when we hear this as the reality is that no, it is not doing well at all. We have seen increased damage each year, often noticing differences for the worst every six months. The biggest risks to the reef come from bleaching, storms and Crown of Thorns attacks. We have seen all three much too frequently.


To share the marked changes we have observed, we started keeping records of photographs showing both healthy and damaged coral. Chris decided it was time to show the contrast in a set of side by side image comparisons of the same corals, on the left alive, on the right dead or very damaged.

A magazine article is about to be published. It presents the confronting facts and images. We hope this will contribute to raising awareness and will encourage people to take part in citizen’s science projects to help protect and save what is left! We thought we would include here the set of 12 comparisons which tell a story of life and death.

Acropora is a fast growing coral, the first to recolonize an area after storm damage, Crown of Thorn Starfish attack or bleaching. Whether in branching or table form it is also the most susceptible to further damage.

One of the most noticeable aspects of coral damage is the change in colour, percentage of cover and variety of species. When a reef scape is alive, you see vibrant colour, diversity of shapes and types of corals. Every inch of the seafloor is covered. When a coral reef is struggling what is striking is the greyness, the dullness of it all, the patches of crumbling coral.

When the water temperature becomes too hot for extended periods, the coral becomes stressed and expels the symbiotic algae which gives it its colour. What you then see is the white skeleton. The coral is not dead yet but at great risk of starvation. If the conditions don't ease and the symbiotic algae does not return, filamentous algae invade the coral which then suffocates and dies.

Coral bommies, gutters and colonies should be vibrant places, brimming with life. But increasingly we see a grey mass with a few survivors struggling to stay alive, a trench that looks like a concrete corridor, or a brain coral that is crumbling away.

And you can enjoy the colourful and varied coral fields, but later return to a crumbling expanse, with one lone coral putting up a fight when everything else around has perished. It is fluorescing, the last hurray to survive, a beautiful phase, but a stage of death nevertheless.

Table Acropora can show layer upon layer of beautiful leaf like plates. But these are susceptible to the attacks of Crown of Thorn Starfish which can digest and liquify the plates and quickly destroy an entire reef.

We are too much in love with the Reef to just sail away. This year we are involved in surveying and reporting on the state of the reef through the Eye on the Reef Program. It involves systematically completing surveys, making detailed notes and photographing every reef we visit. All it takes is ten minutes of a dive or snorkel. We encourage you to do the same and have adventures with purpose.

We can all help and have collective impact by collaborating. From ditching single-use plastics to citizen science and world-leading research – now is the time to act. Passion is a great connector. We don't all need to be marine biologists to make a difference. Discover, connect with the reef, learn to love it and protect it. We might feel as though we are just one person, but together we can be much more than that.

Did you know that the GBRMPA runs projects which all contribute to helping save the Great Barrier Reef? These projects range from education programs, plastic pollution control, Crown of Thorn Starfish eradication, coral nurseries, renewable energy development and responsible stewardships by marine park tourism organisations. Check out https://www.gbrmpa.gov.au/our-work/eye-on-the-reef

All programs harness the eyes, ears and good will of marine park users everywhere to provide near real time snapshots of wildlife happening or reef health events along the geographic scope of the GBR. Anyone can take part in most of these programs. You and I can take part. All we need is a mask and snorkel and a willingness to get involved.

You can complete a training program online which is informative and supplements what you might already know about corals, algae, fish species, signs of coral health. It provides you with tools to record your findings. Your reports, photos and notes provide valuable feedback to the GBRMPA which by law cannot be ignored and have to be acted on. To find out more, go to https://www.gbrmpa.gov.au/our-work/eye-on-the-reef/reef-discovery-online-learning

Here are a few other ways you might also like to help the Great Barrier Reef. These might seem like a drop in the ocean: a bunch of projects that are far from sufficient. But every little thing helps.

- Join Oceans 2 Earth volunteer programs (https://ocean2earth.org)
- Become a citizen of the Great Barrier Reef (https://citizensgbr.org)
- Become a volunteer with the Great Barrier Reef volunteer program (https://volunteerhq.org/destinations/australia/great-barrier-reef-conservation)
- Only use reef-safe sunscreen and wear high SPF factor clothing where you can in place of sunscreen. Australian skincare brands Sukin, Endota and Wotnot all offer reef-safe formulas free of ingredients like oxybenzone and octinoxate which are harmful to marine life and coral.
- Pledge to give up plastic straws with https://www.strawnomore.org, the movement started in Cairns by 11 year old Molly Steer, to encourage schools and tuckshops to stop using straws.
- Contribute to Clean Up Australia, https://www.cleanup.org.au by picking up litter, stepping up to Australia's waste challenge in a variety of ways
- Stop releasing balloons that are harmful to marine creatures – when balloons fly, seabirds die.

- Reduce your own carbon footprint with a few lifestyle adjustments – opt to cycle, walk or carpool to work, cut out single use plastics, plant an edible garden, join Meatless Monday, avoid packaged foods and/or reduce food waste.
- Make your home more eco-friendly. Solar energy is a clean renewable energy so instal solar panels to power your home, plant an edible garden, reduce your leftover food waste and make the switch to chemical-free cleaning and gardening products.

So please don't just sail past. If you love the reef and want to help preserve it, get involved.