South Pacific Cyclone Seasons aboard Green Nomad

A major threat to any cruising plans is the tropical revolving storms that occur in most tropical regions during summer. These are called hurricanes in the North Atlantic Ocean and cyclones in the South Pacific. Strictly speaking, a tropical revolving storm is called a cyclone if the sustained wind speeds it generates are equal or above 64 knots.

Since the areas in which we like to cruise are mainly situated in a belt of 25 degrees to each side of the equator, well in advance of summer for the hemisphere in which we are cruising we have to decide how to avoid or cope with the upcoming cyclone season if we are in an affected area, such as the South Pacific Ocean.

During the years we cruised in the South Pacific aboard Green Nomad we opted for many different ways to cope with the cyclone season.

In the first season we sailed all the way from Panama to Australia, where we arrived in Brisbane, which is South of the normal limit for tropical cyclones, so we were out of danger.
After we spent three years in Australia working and becoming new Australians, we decided it was time for another Pacific Journey, since the first one had been by far too fast. This time we had to go against the trades to reach island groups to the east of Australia.

Being so hard to get back to the islands, we decided that going down South again to an area outside the tropics, which basically meant Australia or New Zealand, was not interesting, and so we decided that we would spend the next few cyclone seasons around the tropics, but we would have our cyclone season plans always ready well in advance.

Basically one can choose three kinds of evasive action regarding the cyclone season:

1 – Finding a region outside the tropics, where tropical cyclones do not form. It is the preferred option of most cruisers in the Pacific, but it entails longer trips at the end of the cruising season, and normally having to cross areas that are traditionally boisterous, as the passage to New Zealand or even the approach to the Australian coast near Brisbane. It also means getting back to a more urban lifestyle, in marinas, or at least anchored off big towns.

2 – Looking for a suitable place near the equator, generally less than 8 degrees in latitude, N. or S.. It is perhaps the safest option, but it still requires a lengthy passage. The upside is that you gain a whole new cruising season, and by norm you end up in idyllic places, which have been little affected by the madness of the modern world, apart from most of them being earmarked for sinking slowly into the ocean due to sea level rises forecast to happen as the earth climate changes.

3 – Staying in a cyclone affected area, but in a place that you know to have good hiding spots, the so called “cyclone holes”.
A world to oneself in the South Pacific anchorages during the cyclone season.

When the first summer was coming we decided that we would stay in New Caledonia (thus choosing nº3 option listed above), a place we had fallen in love with and that we were not willing to leave behind.
In order to decide our course of action we needed to make sure there were really safe cyclone holes in New Caledonia and try to get from locals and other cruisers precise directions on how to get into them. Having no insurance for the boat meant that all our material possessions were at stake, not mentioning the risk of getting hurt, or even worst.

New Caledonia is an overseas territory of France, and it is made up of a main island called the “Grande Terre” and many smaller ones, such as the Isle of Pines and the Loyalty Islands.

The Grande Terre is surrounded by a coral barrier reef, and in its southeast end is located the Isle of Pines, where we spent most of our cruising days before the cyclone season.

The Isle of Pines (Kunie in the local Kanak language) truly is one of the wonders of the world. We have to try very hard to remember another place that comes close in beauty, quality of anchorages, marine life and water clarity, and so on.

So, when the cyclone season was approaching, we started our way back to Noumea with a broken hearth, but getting closer to the cyclone hole we had chosen.
Amongst many possible options, we had decided in favor of a mangrove system near a bay called Port Laguerre.

Port Laguerre is located about 10 Nautical miles NW of Noumea, the capital of New Caledonia, which in itself is already a well protected anchorage, but not a cyclone hole, as many would be reminded later in that season.
Chart of the South of New Caledonia, showing Port Laguerre (1) and the Isle of Pines (2)

As you can see from the chart the way from Isle of Pines to Port Laguerre is far from clear of dangers, and the 70 nm cannot be safely made in one day by small cruising sailboats if there is any kind of adverse weather. Daylight navigation should be the norm there if one prefers to stay in the safe side of things.

Taking that in account we decided to spend the cyclone season months, from December to May, anchored in between Noumea and Baie Saint Vincent, some fifteen nautical miles away from Port Laguerre.

A panoramic assembly of Noumea’s port, with Port Moselle marina in the foreground and the anchorage to the left.
As usual, we had supplies to last for six months, and just fresh produce and fish were needed to complement our stocks, so, most of the time during cyclone season we spent in anchorages not too far from Port Laguerre, the main one being Baie Papaye (red anchor sign on the chart below). From there we could do trekking in the surrounding mountains, go fishing on the nearby reefs, scavenge the beaches for edible shells, pick fruits in the bush, and relaxing at night under a breathtaking sky, outlining the ragged mountains.
Baie Papaye anchorage and the track to the mangrove cyclone hole

Green Nomad at anchor in Baie Papaye
We had an old notebook and used our SSB radio to pick up weather-fax signals from the Australian, New Zealand and USCG weather services. In between 1200 and 0200 PM most of the useful charts were transmitted, and our daily routine included analyzing them while we had our lunch. In this way we had almost a week forewarning for any cyclonic activity.

In particular the Pacific Streamline Analysis transmitted by the Honolulu weather-fax station would clearly show at least a week in advance if something was brewing. Of course you would only get that feeling after repeated observation.

By the end of December 2002 we decided to do an in depth check of the cyclone hole, and, with a hand drawn map we had copied from another cruiser, we got into the dinghy taking a handheld GPS and a sounding line (a diving belt weight tied to a rope with knots at every half metre) with us, and followed the indicated track, taking soundings and registering waypoints, producing a local chart of sorts.

That was a must since there was only a very narrow channel, and contrary to the norm in this area, the water colour did not give you any clues for the depth when seen from sea level.
Notice the shallows in the way to the mangrove hiding hole! This picture was taken with the polarized sun glasses in front of the camera lenses.
As if to reward us from all that work, on December 28th, 2002, the weather maps were showing cyclone Zoe, with wind speed of up to 180 knots, passing over the small island of Tikopia, and moving straight to New Caledonia.

We spent the last days of the year anchored inside Port Laguerre bay together with some other boats, one of them the Brazilian catamaran Saravá. Lots of partying and some worrying, but in the end on that occasion we did not move into the mangroves.

By the end of January the time had come for the first real test of our cyclone hole. Cyclone Beni was aiming at New Caledonia, and together with two other boats, one of them belonging to an Australian couple, and the other to a Swedish single-hander, we moved into the mangroves.

It was not a light decision to take, since considering shallowness of the channel, and our 1.78m draught, we had to wait for high tide to move in, and this had to be a daylight high tide, so we eventually were not granted a chance to draw back during those five, six days before the cyclone, besides the whole affair of tying up being very tiresome. The mosquitoes were also a constant company, should we get stuck in there for a fortnight.
At least on the bright side there were no salt water crocodiles such as the ones we would have to deal with later in Australia, where we did not know which was worse, a cyclone catching us out of the mangroves or a crocodile getting us inside them!

Tied up with friends waiting for cyclone Beni
Boats are ready, so we may as well get together and do some cruiser style dinner party with Juergen, from Sea Tramp and Peter and Sandy, aboard Otama Song

Beni's track passed 30 Nm south of Noumea and all we felt in Port Laguerre was 35 knot gusts and lots of rain.

But we did not waste our time training for the big one. In March cyclone Erica formed near the Australian coast and started strengthening and to move in a big arc passing near the Solomon Islands and pointing again to New Caledonia.
Cyclone Erica’s track, which reached category 5 at some stages.

As one cannot always be lucky, that was one of the rare periods we had moved away from Baie Papaye, and when Erica showed up on the maps we were in Baie Saint Vincent, 15 Nm to windward of our safe haven, and it was blowing 20 to 25 knots. A heavy boat (13 tons) and a small engine (30 HP), besides having to deal with the narrow channel, it was the time for full throttle, and 3 knots of boat speed being all we could get.

This time we got into the mangroves five days in advance. And believe it or not, right up to the last morning before the cyclone hit, we were the only boat there. We almost made half turn and left in the same tide we went in, as the New Zealand 72 hour forecast showed Erica weakening and bearing away.

But look at the satellite picture we downloaded 3 years later in Australia. Erica was a huge cyclone, nearly as big as the main island of New Caledonia, which is 254 nautical miles long. Centre pressure was down to 920 hPa, and sustained wind speeds were 150 knots, reaching 190 knots in gusts.
Cyclone Érica, a monster with a well formed eye. Notice the outline of the main island of New Caledonia to the SE of the cyclone.
Preparation was to tie the boat to ten different points in the mangrove trees, each line being passed through as many roots as we could reach, remove all loose items from deck, store the sails down below (mainsail was left out, well tied around the boom), remove solar panels and wind generator blades, go up the mast and remove the Windex and tri-colour light, and the list goes on.

The evening before the cyclone was expected saw us ready and able to give a hand to other boats that would come. Most of them had draught problems as we did, and had to wait for high tide to get in. And the last tide window was to be at 03:00AM.

Erica was coming. I left the boat at 02:00AM and went to get our friend Edi, from Joceba, guiding him through. Joceba was drawing nearly 2 metres and ran aground right in the entrance of the mangrove side channel. That meant doors closed to anybody else!

But in fact nobody else tried to get in, apart from our other friend, Maho, on a small aluminium catamaran, which got in before Edi, as he could move at any time due to its shallow draught.
Some did not get in by sheer impossibility, like Jean Michel and Zaza from Kyrymba, a seventeen metres long steel goëlette. Jean Michel and Zaza were in their third circumnavigation, having even been cruising companions of legendary Bernard Moitessier.

Some did not believe it was needed; some were lazy to go to all the trouble. The anchorage of Port Laguerre, the bay right outside the mangroves, had some 5 boats anchored, which had decided that it was safe enough already to be there.

Saravá, the Brazilian catamaran, was inside the mangroves, but in the main channel, as her huge beam did not allow her to access the side channel like we did, which was safer by being narrower, deeper and out of a possible strong current.

Saravá could not reach the side channel due to her wide beam, while Kyrymba stayed just outside the mangroves because of its excessive draught. Both were quick to act, but their boats limited their chances of protection.

Having the boat ready, all we had to do now was to wait and monitor the cyclone’s track. The local VHF radio broadcasted regular updates and we also were receiving the usual weather maps.

So the boat was ready but, what about us? We knew what we had to do and had done it as well as possible, but up to that moment we had no idea of what the weather in a cyclone would look like. We had been at sea in 50 knots of wind, but 150, that was beyond common experience to even start imagining.

In the early hours of the day the cyclone was to arrive, a fine rain started, and it did not stop and became heavier and heavier as the cyclone approached. The radio updates told us that Erica was now moving at 20 knots, which is very fast for such a big cyclone. We would later conclude that this quick motion was a great helper, as it limited the time the cyclone affected a given area. A lot of
damage was suffered by the boats and other property in Noumea, but if the cyclone had been moving at the more usual speed of 6 to 10 knots, we believe that New Caledonia’s nautical scene would have been wiped out almost entirely.

Boat tied to the mangroves but lots of work to be done yet, such as removing solar panels, wind generator blades, storing loose items below decks...
You couldn’t see Green Nomad from outside the lateral channel.

Ahead of the eye the winds from Erica were blowing out of the NE. As the cyclone was moving in a SE track, the winds were a bit weaker than the real cyclone wind speed, since they were composed with the cyclone movement, and also high mountains provided some protection from that quadrant.

So, the first half of the experience was a bit milder than expected. The wind speed increased during all morning, and at 1100 AM we estimate they were blowing around 70 knots, but as the refuge was worth its name, at water level there was no real concern inside the mangroves.
These pictures were taken before and during the passage of the cyclone’s eye. As the eye passed overhead we were even calm enough to snap this picture using the camera’s timer.

As the cyclone’s eye moved overhead the wind started to decrease, and I even was confident to get out on deck and check things, making sure all lines were secure.

During the first half of the cyclone passage I was mostly perched on the companionway ladder and peaking through the dodger’s tempered glass windows. Marli was looking through the side portlights, and I thought that the framing around the bookshelves would show her fingernail prints by now.

We sat in the cockpit waiting for the eye to pass and for the real blow to start. Our warning was a darkening of the sky followed by a strong roar.

Our friend Edi thought the ordeal was over and was on his dinghy on the way to Maho’s catamaran when the strong south-westerly started, but luckily he was close to the boat and got there in safety.

I got down but still managed to see through the dodger. I was looking at the treetops when something amazing happened: All of a sudden most leaves left them in concert, as if ordered. The wind noise was terrifying and we were heeling 30 degrees only by the pressure on the top third of the mast.
The barometer had long ago been rendered useless, and the pointer rushed past the scale’s bottom well before the eye reached us.

This stronger second half of the storm only lasted about half an hour, with varying intensity. But opposite to the wind speeds before the eye reached us, which increased slowly from 20 to maybe 70 knots, the wind speed dropped quite drastically after this half hour.

We did not have an anemometer on Green Nomad, but the official wind speeds recorded in Noumea were around 110 knots.

As soon as the wind abated we got out on deck, and all was in order. The whole deck was covered in thorn leaves and the water level had raised a lot, and its colour changed from the usual green to a light brown.
The water level was much higher after the cyclone passage. Notice the two spools we carried to store 100m of 20mm line on each deck side. Very handy for demanding anchoring situations.

Our first thought was to go and check how the others had done. We got into the dinghy and went out of the mangrove lateral channel. To shortcut a long story, apart from Kyrymba, that was nearly inside the mangrove, all the boats that decided to stay anchored in the access bay had found another element below their keels.
Of all anchored boats none stayed in the water, all were high and dry with varying damage, apart from a racing catamaran, around 28ft long, which allowed herself to face the cyclone in style by taking off but forgetting to land with the keel down, losing the rig in the process.

Sarava, the 55 ft catamaran that was inside the main mangrove arm was unscathed, but her skipper, Cacalo, told us that the roots to which he was tied broke one by one, and in the end there was only one line holding them.

We remained in Port Laguerre for five days more, getting the boat back together again (solar panels had to go back up, wind gen, and so on) and helping on the effort to get the grounded boats back into the water.

With Kyrymba using her powerful engine and all dinghies pulling from the top of the masts with a halyard to help to turn the boats in the right direction and reduce draught by heeling, we managed to refloat all of them.

In those five days a lot had been done to clear Noumea’s port from the damage, but when we went back there, what we saw were lots of masts sticking out of the water and an impressive amount of floating debris.

On our way to Noumea we had an incredible sight: the southwest side of the hills was brown, as the leaves had been burnt by the friction of the salt water spray caused by the strong SW winds. As far high as 30 or 40 metres above sea level!
Lots if debris and boats tossed about on the streets of Noumea!
The first and only stainless steel boat we saw!

The sights on the local repair yard and hardstand were no less dramatic.
Could you picture a steel boat hull looking like this?
Erica was not fussy about hull materials. She dished it out on all!

We still spent another three months in New Caledonia, and in June resumed our voyage, sailing to the island of Tanna, in Southern Vanuatu, after a quick stop in Lifou, in the Loyalty Islands. We were relieved to be out of the cyclone season.

Or almost, as on June 6th, after a couple of relaxed days not looking at any weather maps, we decided it was time for a check, and sure enough, cyclone Gina was bearing down on us, already in the island of Espiritu Santo, Northern Vanuatu!

That was a big fright, since Tanna did not offer any all weather anchorage, never mentioning cyclonic conditions. So, if Gina really was going to come over us, the only thing to do was to put out all anchor gear and get out of the boat onto high ground. Heading to another island was out of the question, as our speed would be insufficient to get us anywhere safely.

But Gina decided to be kind and started to veer and weaken. But it left the message that early June may be too early for lowering your guard.
For the next cyclone season we decided that we did not want the company of Ginas, Ericas, neither their boyfriends, so we headed for the Kiribati Islands, in the Gilbert group, which are all located within 3 degrees of the equator. No cyclones there and we would have one of the most memorable experiences of our cruising life, meeting some of the kindest people on Earth.

After that season, the next one we spent in the Solomon Islands, which lie mostly between 5 and 8 degrees of latitude South, and therefore are also out of the danger zone.
Zazen (BRA), Green Nomad (BRA), Nyathi (USA) e Joceba (FRA) in the Solomon Islands. Sleepy morning after an enjoyable night party!

With these choices we managed to spend three years without having to leave the island groups of the Pacific and accumulated some of the best moments of our lives, living a natural and peaceful existence (ok, discounting nail marks on the shelving, malaria and...)

But we had to get back to Australia and work again, go to Brazil to see the families and plan on future voyages.

As we elected to stay in Cairns, which is located in the Northern Queensland coast, we were back on a cyclone affected area, and so weather maps and cyclone warnings were the order of the day again.

And should we have forgotten our cyclone handling skills, cyclone Larry, one of the most destructive in Australian history, would remind us, since it passed just at scant 30 nautical miles south of us, shattering a whole village totally to the ground.

We had got licences from our jobs in order to be prepared for the cyclone season, and also because it rains almost all the time there in those months
(February, March, April). We did a bit of sounding just like in New Caledonia, so when the big one came we had a plan.

Tying the boat to the mangrove roots in Cairns, Australia. Every time a branch moved I only thought of a crocodile’s big mouth closing!
Green Nomad getting ready for cyclone Larry

This time I missed Port Laguerre, where the only problem was the cyclone, because during the months we stayed anchored in Trinity Inlet, in Cairns, many times we saw salt water crocodiles swimming past the boat.

So, anything brown that moved quickly became a crocodile in our minds, and getting down on the dinghy to tie ropes to the mangroves was not done with a light hearth. The locals told us to make lots of noise, hit the water with the oars when approaching the mangroves, so the crocs would move away frightened.

If they got frightened we don’t know, but us…
Second cyclone cat. 5. Many lines to stow, but no damage!