

The

Turtle Times

Arrival of the hatchlings

In early September the first wild nests began to hatch. Then towards the end of the month the hatchery in Lacacão also began to show signs of movements.

It has been a particularly anxious wait this year as Fred inevitably destroyed countless nests around the island; especially those not a good distance from the tide-line. And in the hatchery as nobody knew to what extent the impacts of Fred would affect hatchling success. Although it is too early to know for certain, it appears that the majority of the nests are doing well and 25 have already fully emerged!

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HURRICANE FRED

As you are all aware, and most of you experienced- at the end of August Boa Vista was hit by a hurricane by the name of Fred.

Fred – like his namesake, was short, simple, not the quickest tool in the shed nor the meanest. Nonetheless, this was the first time Cape Verde has ever been directly impacted by a hurricane and one of the most easterly forming hurricanes ever to come out of the Atlantic, and Fred caused a good amount of damage island-wide.

Although all of the camps were flattened everybody was able to get out safe and sound (just wet and covered in sand). Fortunately nobody in Cape Verde was killed and there were only a handful of injuries on the island.

Fred impacted Boa Vista more than any other island in Cabo Verde and the camps and beaches were obviously subject to the full force of this. Inevitably the turtles are going to have suffered damage but this month we take a look at Fred and establish why things could have been a lot worse!



ADOPT a stray!
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Although Fred brought devastation there are many reasons why the impacts weren't as bad as they could have been. As well as people who helped to reduce the damage through their quick thinking and kindheartedness.

Here are some of the main ones:

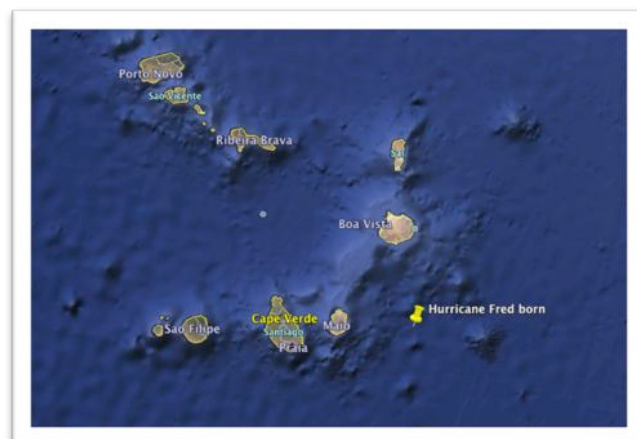
Good morning - Fred passed about 20nm SE of Boa Vista and actually only officially became a hurricane just before entering that zone between Boa Vista and Maio. Fortunately by the time Fred was fully being felt on land it was already morning, had it been dark things could have been very different (similarly had it been a direct hit!).

Communications in the north of the island stayed up during the worst- this allowed communication with Boa Esperança to let them know we were on the way and to assure them to stay in the tent. As well as with Norte. Norte were able to pack some things down (get the stuck and then unstuck) and get back to Fundo in the car before the eye arrived.

Lacacão wasn't as fortunate – sitting on the SE tip of the island it was the first place to feel the full force and like Povoação Velha it was completely flattened. However, thankfully they were able to seek refuge at a local farm and fortunately Ermita's house is nearly as big as her heart and it seems to be just as strong.

Rain? - It didn't actually rain as much as it could, had it rained more then the roads might have disappeared and believe it or not the bridge might have been damaged or even collapsed. This would clearly have caused big problems in getting in touch with those in the south and the northeast and moods wouldn't have been so chipper with a few days out in the wild. There also wasn't really much lightening..

Low season - Had it been the 'big' year we were all expecting then many more nests would have inevitably been lost. Perhaps the turtles knew Fred was on the way!



The 'old' kitchen in BE



A bush showing the power of the wind/ sand



broken pylon

Hatchery

It is too early to be making conclusions about the impact of Fred on the hatchery on Ponta Pesqueira. Nonetheless, initial results suggest in spite of the external damage, the nests faired okay during / after the hurricane and we are still hoping for a hatching success rate of around 70% overall.

In the days following the hurricane the hatchery was a complete mess, however, compare this to the hatchery in Ervatão and it really didn't do too badly.

There were a couple of factors that helped reduce the damage.

1. Fortunately the choice of **location** was sufficiently far from the tideline to avoid much of the storm surge.
2. Fred was quick in developing and therefore hadn't built up quite such a wall of water in his advance.
3. **Fred hit the island at low tide.** Were it the opposite then we could have expected to find it underwater.
4. **The sand** that was piled on top may have actually helped reduce predation from crabs in the days that followed.

Had it been inundated then many of the nests may have been pulled open under the sand by the swash dislocating the embryo and breaking eggs. More obviously many of the eggs may have died as they were unable to breath.



Famous Freddy

With the hurricane we didn't get only negative things. The whole island, before dry and 'brown', was covered in green, but not just that... Boa Esperança camp got a new volunteer: Freddy, the pig. This little dude showed up in camp right after the hurricane. He ran from his farm, and ran again when his previous owner went there to get him...so he found a new 'home'. He eats, sleeps, swim in the ocean, and loves having his belly rubbed... what a life!

Here are some interesting report on Fred:

“At its height, Fred boasted prominent spiral banding, and microwave data revealed a well-defined eye, although it was mostly cloud-covered in visible satellite imagery. Fred’s centre did not make a landfall on any of the islands, though it came within roughly 20 miles of the northeastern island of Boa Vista and the northwestern islands of Sao Nicolau and Santo Antão, so Fred’s eyewall may have affected each of these areas. **Boa Vista was on the stronger right-hand side of the storm**, whereas São Nicolau and Santo Antão fell on the weaker left-hand side of Fred. Either way, many residents unaccustomed to extreme weather could have experienced very strong winds and heavy rain. Several weather stations on the islands did not report at the height of the storm, so our picture of what happened is still incomplete. Arlindo Lima, president of the National Civil Protection Service for the Republic of Cabo Verde reported that Boa Visa and Sal, both north of Fred’s track, were the hardest-hit islands, with about 120 islanders displaced to a shelter. The nation’s airports were closed ahead of Fred’s arrival. Reports and photos suggest widespread but mostly minor damage, with trees and communication towers knocked down. There were no reports of casualties as of early Tuesday. Storm surge expert Hal Needham (Louisiana State University) was not expecting the surge from Fred to be extreme since the hurricane had not had much time as a tropical cyclone to push large amounts of water ahead of it. The Cape Verde news site A Nação reported flooding related to Fred in the West African republic of Guinea-Bissau, with flooding and some evacuations in the capital city of Bissau.

“Fred was the easternmost hurricane to develop in the tropical Atlantic in NOAA’s HURDAT database, which extends back to 1851. (These records are less complete and reliable prior to the advent of satellite monitoring in the 1960s.) Fred was dubbed a hurricane at 2:00 am EDT Sunday while at 15.3°N, 22.5°W. During the record-setting 2005 Atlantic season, Hurricane Vince actually formed further east than Fred (18.9°W), but at a much higher latitude (34.1°N).

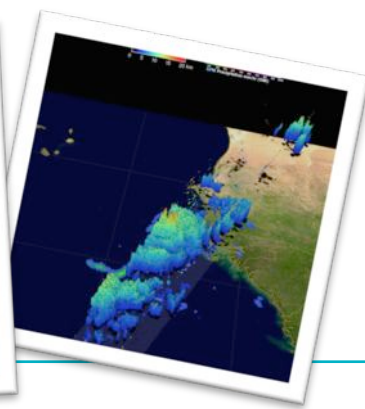
Fred made the closest approach to a Cape Verde island of any hurricane in the HURDAT database. The only other hurricane to affect the islands, other than glancing blows from well to the south, was an unnamed storm 1892 that moved between the two clusters of islands that makes up the Republic of Cabo Verde. As Jeff Masters and I noted yesterday, independent hurricane scholar Mike Chenoweth has identified the most damaging storm known to affect the islands: an apparent hurricane on September 2nd in 1850 (predating the HURDAT database) that reportedly destroyed more than 600 homes and wiped out crops.”



The eye of the storm



Fred's track through Cabo Verde



THE 2015 NESTING SEASON: POACHING

Contrary to expectations from all organizations involved in turtle conservation on the island prior to the start of the season, 2015 is going to be a relatively low year in terms of numbers of nesting turtles. Although this in itself is concerning what was perhaps more worrying was the increase in relative poaching. We registered not only an increase in the number of poachers (coming from more areas) but also a shift in their behaviour.

Having been reduced to negligible numbers in the last 5 years the problem is now once again widespread. Although never close to being eradicated and still a part of recent tradition, the unsustainable consumption of turtle meat was to some extent understood to be driving other ecological problems and had been decreasing. Nonetheless, in July it was already evident that the levels of poaching, particularly in the north of the island, were significantly higher than in the recent past; surpassing the annual total for 2014 in Porto Ferreira in the first month of the season alone. Furthermore, we noticed a shift in attitude as the hunters became more brutal and more aggressive.

As a result, working in collaboration with all NGOs involved in turtle protection and the *Áreas Protegidas de Boa Vista (APBV)*, we sought support from the government to help strengthen the authority on the beach and to protect the volunteers and rangers in Norte from the growing threat. After months of dialogue we eventually heard something and the day before the hurricane *some* military personnel arrived. Clearly this was progress and I will not deny their presence has massively helped but to take 3 months, after repeatedly being asked and having recorded over 60 turtles having been killed before the government was willing to defend *their own* environmental law –doesn't really demonstrate it being a priority.

Likewise, the 'eco-tourism' industry, which has grown in Boa Vista to see the nesting turtles in the southeast of the island, instead of improving has also deteriorated. For 4 years under the supervision of the UN Development Program (UNDP), Boa Vista was able to manage capacity of the beaches through the authorization of permits controlled by the Protected Areas (APBV). It wasn't perfect but it worked. However, when the money stopped coming the government did little find replacement funds; seemingly maintaining the institution and the 14 protected areas on the island, just on paper and not in practice. A situation now exists where it pays to expand numbers well above capacity- with the majority of all 'eco-turtle tours' using a handful of beaches and there are also now more tours operating without permits than ever-before not to mention those that don't pay their environmental contributions.

In spite of these somewhat dreary circumstances in which we find ourselves we will continue to protect the beaches one turtle at a time, extremely grateful to our funders and our volunteers for their contribution to this cause. In the hope that maybe one day the government will fully support our efforts instead of standing idly by - if only to prevent the extirpation of the tourist dollar.

Juvenile green dies

In late September it transpired that the juvenile green turtle (*C. mydas*), which we released at the end of August, had not survived. Unfortunately, one morning we received a call informing us that a turtle had been found washed-up on Praia de Chaves.

It is a sad ending but it is also realistic and hardly surprising given the circumstances. The poor turtle had been badly injured in April; most probably by a small boat or jet-ski, then been encountered again in August still showing signs of this injury. On both occasions the turtle was weighed. These data suggest that after being released in April it had struggled to feed before being found again. In this time it lost 14% of its total mass. During recuperation it was able to put this weight back on due to a combination of spirulina and vegetable smoothies. However, that it wasn't able to sustain itself in the wild illustrates the gravity of the initial injury.

So often with the releasing of animals that have been injured one can only hope that they survive. In many ways this blissful ignorance is all we have since to return to the wild means to no longer be found by man.

Realistically there are always going to be conflicts in areas that man and animals co-exist and to think a handful of collateral animals will prevent certain activities from occurring would be *niève*. However, with a little planning I am confident we can improve the balance on both sides.

Perhaps the bay could one day be recognized for the sanctuary that it provides for turtles, sharks, reef-associated fish and in the winter - cetaceans. Although given its location it is likely always going to be used by fishers and tourism, with a little zoning certain areas could be protected from the most detrimental activities and in turn have knock-on benefits to both industries from which it is protected.



Did you know that ...

... Boa Esperança beach has 3 diferente names!?

The Boa Esperança coast, located in northeastern Boavista, since 1920 it has also been called **Atalanta** Beach, when a Scandinavian ship with that name during a party on board, was lost in the shallows around.



The beach received another name for which is best known from September 1st, 1968, when the Spanish freighter **Cabo de Santa Maria** ran aground on the coast. It was going to Brazil and Argentina, taking varied load (sports cars, food, weapons, machines, clothes, dishes, drinks, etc). Despite the maneuvers was impossible to avoid the loss of the boat and to date are still clearly visible the ship's wreckage, but its demise is inevitable.

All this happened at a difficult time for Cape Verde, so what could have been a major disaster has become a "good" thing. The charge of the rescue mobilized much of the inhabitants of Boavista and many civil servants and other islands machine operators. For about a year machines and men worked unloading Cabo Santa Maria. The movement of people, including children, between Sal Rei village (now city) and the beach was intense, there were plenty of mules and donkeys.

Fonte: <http://www.asemana.publ.cv/spip.php?article35177>

It is also popularly known as **Costa de mar** (*Sea Coast*).



... The Lacação beach will receive another tourist resort?

The Santa Monica Beach Resort, which will be born within the project Lacação Golf & Beach Resort is a luxury development consisting in apartments and luxury villas and a five star hotel designed to have about 1800 rooms. The construction work should start next year.

WHY SAVE SHARKS?

After months of everything turtles we take a look at another key family whose presence is fundamental in keeping the sea healthy...

Sharks are 'apex predators' that evolved around 400 million years ago and have changed little since. In all this time, life in the sea has depended on them - by hunting other fish they have dictated those that survive and those that don't, and in doing so **they defined genetical evolution for the species below them.**

These days there are more than **550 species existing in the world's oceans**, however, most species are being exploited at unsustainable rates - about **100 million individuals killed annually** by the shark fin industry and as bycatch in other fisheries.

The result of this is that **30% of all shark species are in danger of becoming extinct** (according to the IUCN) and we have **already caught 90% of all the 'big fish' in the sea.** But does this matter? Aside from making the world a less exciting place and robbing future generations of biodiversity, here is why...

By removing the top predators we risk profoundly altering the balance of the ecosystem and causing them to collapse (known as a trophic cascade). This in turn means the things we take for granted also disappear. **Less sharks = less fish** (and may even reduce the ability of the ocean to respond to things like climate change).

Why? This is because sharks target the injured, ill or weak fish (as it involves less energy) and in doing so keep the populations healthy. This predation also prompts 'schooling', as fish bunch together in defence- something that hugely benefits the fishing industry. Take away the sharks and other competing predators expand, which in turn alter the lower levels of the food chain (and again alter the situation to which are accustomed and which we take for granted.

An example:

1. *Less sharks = more cow nose rays,*
2. *More cow nose rays = less clams, scallops, oysters (bi-valves),*
3. *Less bi-valves = less food for us and less water filtration...*

Okay so things change, get over it? Although this is true there is a massive difference between the extinction of species due to natural evolution and the 6th mass extinction in which we find ourselves and for which we are responsible. Like sharks or not, we are dependent on marine ecosystems for protein, defence from storms, water purification, and sheer enjoyment (amongst a million other reasons), kill the sharks, change the balance and we will be the ones to lose out.

Unfortunately, the world's media would lead us to believe that sharks are senseless 'man-eating' beasts and pay almost no attention to the facts and the diminutively small probability of being bitten (**bees, dogs, coconuts, falling out of bed (and countless other abstract species / events) kill many more people annually).**

This mis-perception has resulted in widespread irrational fear. Aside from largely being unfounded it has often also promoted further killing, culling or general lack of appreciation.

On land we are beginning to appreciate the importance of maintaining ecosystems in their complexity. Reintroductions of top predators are starting to be realised on various continents.

By restoring systems to natural complexity we can reduce the management role we need to play and improve the health of the ecosystem and environment.

By protecting areas of the ocean from fishing (and other exploitation of resources), we can allow populations to recover and restore systems to natural complexity by doing so we can reduce the management role we need to play and improve the health of the ecosystem and environment. These populations will themselves repopulate other areas due to their highly mobile state. However, they require sharks (and other apex predators) to keep it all in balance. By saving sharks before they are extirpated (made locally extinct) we are saving ourselves the effort we now face on land.

Join us in 2016!

We know that by now, after 'eating' sand, mosquitoes, heat, long hours of patrol ... the last thing you should be thinking is *returning*!

Well...don't worry... you'll get over it!

Think about the good things ... waking up with a good view (*boa vista*), having the great opportunity to help these magnificent animals, observe small turtles running towards the sea, making new friends (and new loves), eating bolacha, anyway. ...

You're always welcome to return!

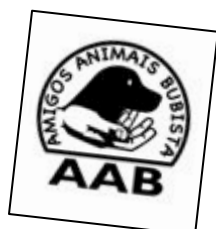
We will be waiting for you!



Café com leite



Freddy



Double adoption

Do you want to help these animals find a permanent home?

They have been living with 'foster parents', but they need someone who can take full responsibility of them and give them the love they deserve.

Café com Leite

- Aprox. 3 months
- Female
- No breed
- Very sweet
- Just like Frida!

Freddy

- Unknown age
- Male
- Playful
- Big personality!

Note: we need guaranties that Freddy won't end up in a pan!