

How inappropriate to call this planet Earth, when it is clearly Ocean!

October 2013

Dear Dugong conservation Supporters

Mozambique's Dugong Emergency Protection Project wishes South Africa a very Happy Marine Month! National Marine Month celebrations are aimed at acknowledging the crucial role played by our oceans and sharing this, as well as an appreciation of our marine environments with as many communities as possible.

Mozambique and SA have roughly the same amount of coastline- both nearing 3,000km, and both are influenced by the warm Agulhus current sweeping the western flanks of the Indian Ocean. We love that SA has dedicated an entire month to celebrating our favorite body of water, and home of the Dugongs!

In celebration of National Marine Month, this edition of Dugong news will share some poignant Marine Month themes alongside our latest project updates.

We hope you enjoy the highlights from this Quarter- it's been busy few months.

Why we do what we do:

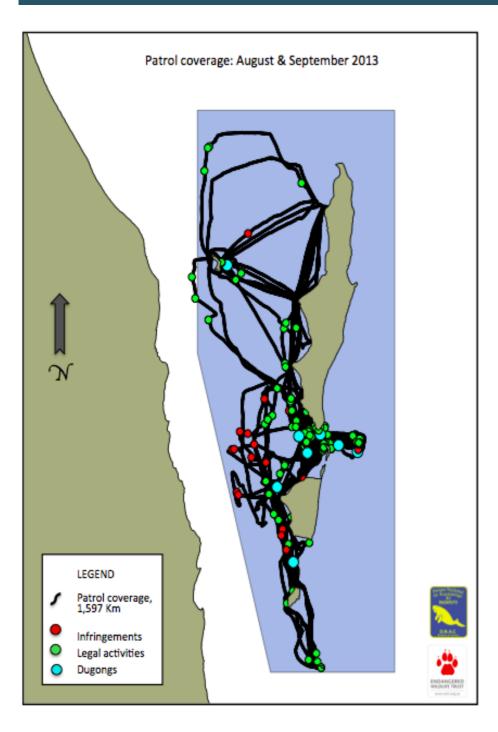
Every now and then, it helps to take a step back and re-focus on the bigger picture. I find myself doing this at least once a fortnight when the challenges of implementing the Dugong Emergency Protection Project threatens to madden me.

So, this is what I remind myself, and what I tell people who wonder why I conserve Dugongs:

- Of the 196 countries in the world, only 48 of these have Dugongs
- Only 8 of these 48 countries can say with some certainty "we have a viable population of Dugongs".
- In the vast expanse of the Western Indian Ocean, only 1 viable Dugong population exists- this is the Bazaruto population.
- Scientific surveys estimate that this population numbers no more than 247 Dugongs.
- The biggest threat to these Dugongs are their entanglement in illegally-used gill nets- which are primarily laid for sharks.
- We can mitigate this threat by facilitating improved law enforcement, enhancing environmental education and awareness, and by introducing a set of alternative livelihood opportunities for fishing communities in order to reduce netting.



- Facilitating improved law enforcement
- 2. Sponsor a Patrol
- 3. Environmental Education
- 4. Partners in Conservation
- 5. Alternative livelihoods
- Dugong Monitoring & Aerial Surveillance
- 7. Marine Debris
- 8. (Sea)food for thought
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To date, the support from SOS has allowed 106 marine patrols, covering 5,221Km. This effort has resulted in the confiscation of 2,219 items of illegal equipment from 201 infringements, and seizure of 535 Kg of illegally harvested marine resources.

We believe that the protection offered to Dugongs and the general biodiversity unique to the National Park through these marine patrols is significant, and that these activities should be maintained through the deployment of at least 30 patrols every month. With such economic boat motors- fuelling 30 patrols hardly breaks the bank. However- we need your support to raise the R350/patrol needed. Which brings us to...the **Sponsor-A-Patrol Initiative.** If Every Dugong supporter rallies to this cause, we could maintain our marine patrol activities for another full year.

Since the arrival of 2 new boats, and fuel to operate these (donated by SOS, <u>www.sospecies.com</u>), the Bazaruto Archipelago National Park has been able to up-scale their law enforcement efforts, and perform as many as 40 marine patrols every month.

These patrols check each passing boat for illegal fishing gear, and make sure that no protected species are being harvested. Should prohibited equipment or protected species be found, these are confiscated from fishing crews. Law enforcement Scouts are at all times on the look-out for gill nets, which are immediately removed from the water once found, and these are later burned.

During marine patrols- the location and activity of all fishing boats are marked to our GPS units. This data allows us to establish fishing hotspots, and we target these during the following month's patrols.

Patrols also record Dugong sightings, and these are mapped along with fishing activity in the Park.



<u> https://www.facebook.com/pages/Pa</u> rgue-Nacional-do-Arguipélago-de-

You can help us protect Dugongs in 2014...



SUPPORT THE SPONSOR-A-PATROL INITIATIVE

For every R350 donated, a 60 Km marine patrol is performed; Preventing Dugong entanglement in Gill nets, and protecting the Bazaruto Archipelago National Park seascape.





Not all learning can be done inside a classroom!

Learners of Benguerra Primary enjoy a mix of weekly indoor and outdoor environmental education lessons and interactive marine-themed games.

Soon, schools in Vilanculos and Inhassoro will be able to participate in the locally designed syllabus when our lesson plans are translated into Portuguese, and once our teacher-training workshops are delivered.



Partners in Conservation



We'd like to salute a dedicated group of international Dugong supporters who took to the waters of Lac Leman, and swam it's breadth in a aid of raising funds for the Dugong EPP.

On 22 August, 11 brave non-marine mammals made the 5km crossing from France to Switzerland in 3,24 hours by all manner of strokes and styles. The Big Swim, coordinated by SOS and The IUCN, was a splashing success!

Take a look at the Big Swim video:





http://www.sospecies.org/sos_news/success_stories/?13761/SOS-Big-Swim-Video



Another of SOS's athletes-Giuditta Andreaus dedicated her first half marathon to Bazaruto's Dugongs.

Thanks to the efforts of active SOS and IUCN sportsmen & women, close on \$22,000 has been raised to support Dugong conservation in Mozambique.

A very big "OBRIGADA" to all involved, and all those who donated to these causes!!

 Andre and

 Image: Andre and Antonio:

 Image: Anto

We're shining our spotlight on Machilla Magic in this issue- simply because we can't get enough of this creative community upliftment arts & crafts enterprise! Based in Vilanculos- just a hop and a skip away from the Bazaruto Archipelago National Park-Machilla provides jobs to 60 local artisans. These artisans in turn, are bringing focus to the plight of the Dugong, and no longer rely on fishing as their primary livelihood.

> Carved wooden Dugongs: An alternative livelihood

According to the World Food Programme, the future looks uncertain for many fish species. Fish is the largest source of wild protein in the world. The total annual commercial harvest from our seas exceeds 85 million metric tons. The way in which fish is harvested can destroy other forms of marine life, and has many indirect consequences especially for marine mammals. Global by-catch; unintended destruction caused by the use of non-selective fishing gear, such as trawl nets, long-lines and gill nets amounts to the death of more than 300,000 small whales, dolphins, porpoises, and Dugongs every year.

Where harvests were once plentiful in Bazaruto, fishers now report that they are catching fewer fish. Some fishers have resorted to using gill nets to increase their harvest, and to target sharks. The Dugong Emergency Protection Project realizes that in order to prevent overfishing in the Bazaruto Archipelago National Park and protect Dugongs from entanglement in gill nets - alternative fishing gear and complimentary livelihoods for fishing communities need to be sought. Thanks to funding from the Laguntza Foundation, we were able to start identifying the economic value of different fishing methods- mostly netting, following which- appropriate alternative livelihood options will be investigated. We'll soon be experimenting with a Sustainable Seafood Initiativewhere the feasibility of trading-in nets for hand-line will be tested. It is expected that fishers who are registered as Sustainable Suppliers, and who will be able to fetch a higher price for fish caught on hand-line, will have a better income than net fishers. Those fishers who are able to maintain Sustainable Fishing for a year will receive new sails for their traditional boats.

How you can help:

Sustainable alternative livelihoods can only be successful if we lend a hand, why not get involved and support a livelihoods development initiative in your home-town?

When visiting the Bazaruto Archipelago, you could help by:

- Ordering / buying sustainable seafood from a registered supplier
- Recycling
- Buying your gifts/ souvenirs from Machilla Magic and other local artisans
- Buy fruit and vegetables from local suppliers.

Dugong monitoring & Aerial surveillance

Thanks to further support from SOS, the Dugong Emergency Protection Project is now able to supplement marine patrols with aerial surveillance and monitoring. By using a Bat-Hawk ultra-light aircraft, we are able to cover vast areas of Bazaruto in a short time, and from an altitude of 500ft- spotting Dugongs and illegal gill nets is a piece of cake!

Eyes in the sky

Right: Pilot Janneman Conradie and observer Bento Couelia are in search of Dugongs and gill nets in the Ponto Dundo area. The aircraft team communicates with the boat-based patrol teams when gill nets or other illegal activities are observed. The aerial observer reports the position of the infringement using GPS, and the boat-based teams are directed to the location. In this way, many illegal activities are alleviated, and gill nets are located and removed from the water.

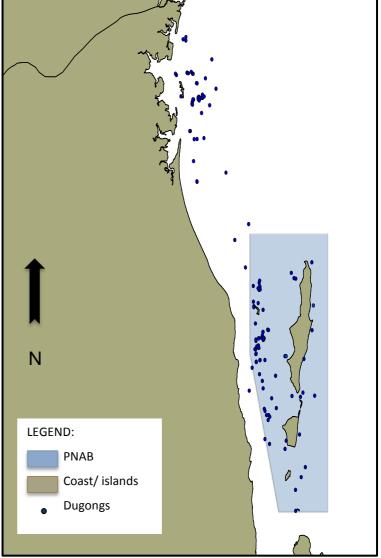


Right: A donation from WWF in August enabled 16 hours of surveillance flying. A total of 263 Dugongs were counted over the space of 5 days along a flight path measuring 2,484 Km.

Dugong occurrence was recorded both within the PNAB and to the north of Inhassoro (Figure 3). The Assessment distinguished two recognisable Dugong assemblages; one within the PNAB boundaries, and another in the Nova Mabone - Nyamabwe region south of the Rio Save

The largest Dugong herd observed numbered 13 animals, while 60% of sightings were of individuals and 21,5% were observed as paired Dugongs. A total of 37 calves were observed, and make up an overall proportion of 28% calves to the 216 recorded adults. 9 of 24 Dugongs observed on 15 July were calves, as were 28 of 67 on 16 July.







Sea(food) for thought...

Sustainable seafood comes from sources, either fished or farmed, that are able to produce into the future without negatively affecting their populations or natural ecosystems. As consumers, we influence fish stocks when we purchase our seafood. Choosing sustainable seafood is sensible, and ensures a healthy marine environment and does not result in a fish population's decline. The South African Sustainable Seafood Initiative (SASSI) provides a responsible seafood guide to help you make the right seafood choice.

mongre



Sound the global alarm. Scientists predict that if we continue fishing at the current rate, the planet will run out of seafood by 2048 with catastrophic consequences. Based on the book by Charles Clover, and narrated by Ted Danson, The End of the Line explores the devastating effect that overfishing is having on fish stocks and the health of our oceans. Take a look at the trailer for more details: http://www.youtube.com/wat ch?v=QWB8KJ1alJ4

Supporter's Page



We know, really deep! Some of our supporters are cornerstones; making a significant difference to Dugong conservation in the Bazaruto Archipelago. We would like to thank you for your contributions, donations & dedication to Dugong conservation!



ACHILLA MAGIC Hand made In Mozambique

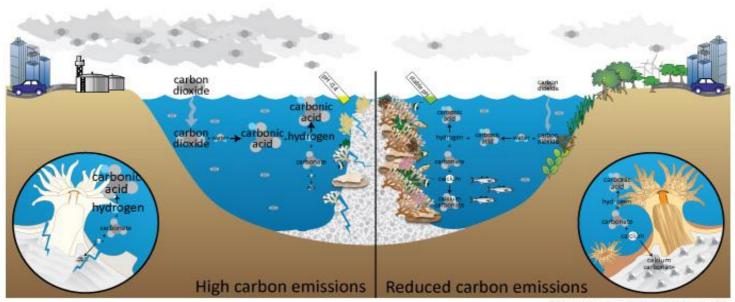






Further thanks is made to Odyssea Dive (<u>www.odyssea.com</u>) for their beach clean-up on Bazaruto Island, and a generous donation. The Vilanculos Downwind (<u>www.facebook.com/vilanculos.downwind</u>) is also gratefully acknowledged for their sponsorship of 12 marine Patrols, and for helping to raise the profile of the Dugong in Mozambique. We're also extremely grateful for contributions from Mozambique Horse Safari and Vila do Paraiso (<u>www.mozambiquehorsesafari.com</u>) (<u>www.viladoparaiso.com</u>). THANK YOU for your support!

Did you know? Ocean Acidification



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Quoted in an article in *National Geographic*, former chief biodiversity adviser to the World Bank Thomas Lovejoy estimated that the acidity of the oceans will more than double in the next 40 years. "This rate is 100 times faster than any changes in ocean acidity in the last 20-million years, making it unlikely that marine life can somehow adapt to the changes." Altering or stopping ocean acidification on human- relevant time-scales will ultimately depend upon reducing net CO2 emissions into the atmosphere.

Flavour of the month: The Bateleurs

Since the Project's pilot was unavailable in September, we enlisted the support of the Bateleurs (<u>www.bateleurs.co.za</u>).

Flying over the brilliant blue waters of the Bazaruto Archipelago in search of Dugongs is considered an idyllic activity that indeed may interest many a pilot. In fact, many of The Bateleurs volunteer pilots were vying to assist the Dugong EPP with this mission in September. However, only one lucky fellow was appointed for this job, and Brett Hill soon discovered the magnificent azure charms of Bazaruto's bay.





Accompanying the mission was Paul Dutton- conservationist and pioneer of Dugong surveys in the Bazaruto Archipelago as far back as 1981. Paul was involved in bringing about the expansion of the National Park in 2001.

Thanks to the keen eyes of observer-João Masani- a total of 34 Dugongs were counted during 3 days.

A big thank-you to the Bateleurs for their support!



In Closing

For any queries, please get in touch: karena@ewt.org.za
To report Dugong sightings or
gill nets, please text:
00258 84 2020704
To donate, please contact Bridget:
bridgetc@ewt.org.za

Until the next edition of Dugong News...

Warm wishes, Karen.

