


Message from our VP

After more than a decade of campaigning, we've got a sensational update on efforts to ban the use of gillnets in Belizean waters.

Community Outreach

Find out what our field reps have been up to during these virtual times.



OCEANA Protecting the
World's Oceans



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A MESSAGE FROM OUR VP

JANELLE CHANONA



Dearest Wavemakers,

I had hoped that in the time between my last message and this one, there would be a little more certainty and a lot less craziness happening in the world. Instead, Covid-19 cases are twenty-fold what they were a month ago and the last thing we need is a hurricane to make things even worse medically, mentally and monetarily. The gravity of just how different everything everywhere is—and will continue to be—is still sinking in.

Thank goodness hope floats. Just a couple weeks ago, we were buoyed by a major milestone on a long-standing goal. After more than a decade (!) of campaigning, on August 20th, 2020, a joint agreement executed between the Government of Belize, Oceana and the Coalition for Sustainable Fisheries, will implement the legislative and regulatory changes necessary to provide for the prohibition of gillnets as a form of legal fishing gear. Once enacted, the ban will make Belizean waters completely protected from gillnets, bottom trawling and offshore oil activities. This is a historic moment for Belize, her people, the Caribbean Sea and most importantly, for everyone who depends on the country's marine resources for their livelihoods.

“*Our collective perseverance on this issue is testament to the strength of our determination to stop an inherently destructive gear from harming fisheries and fishing-based livelihoods.*”

This achievement would not have been possible without you. The commitment of Oceana's Wavemakers, supporters and donors have been essential in getting to this point. **Thank you.** Our collective perseverance on this issue is testament to the strength of our determination to stop an inherently destructive gear from harming fisheries and fishing-based livelihoods, all the while supporting Belizean fishers to alternate means of fishing and sustainability.

A MESSAGE FROM OUR VP

JANELLE CHANONA



A couple key points to note in terms of next steps: the agreement reiterates the conditions and timelines for a successful phase-out and livelihoods transition, that would conclude in a ban to be instituted throughout Belize's maritime waters by January 2022, at the latest or earlier when the livelihoods transition of fishers is successfully attained. The agreement also sets the framework to determine the eligibility of gill net fishers for the livelihoods transition programme and direct financial support sponsored by the Coalition and Oceana respectively, which includes those gill net fishers licensed in 2018 who presently meet the legal requirements as stated in SI 81 of 2019. Those legal requirements are that only Belizean citizens who have been resident in Belize for the past six (6) months, and who sell their fisheries products only in Belize, will be eligible for the livelihoods transition programme and direct financial support.

There is a lot to get done in the next couple months. And inevitably, 2020 will bring more face-palming, "what the heck" moments to the table. But if we've learnt anything in the last six months, it's that human spirit is resilient even though change is the only constant. Together we will face the storms yet to appear on the horizon. Together we will celebrate the moments we can. And together, we will continue to love and protect our beautiful Belize.

Janelle Chanona
Vice President
Oceana Belize

NEXT STEPS

- 1** Determine eligibility of gillnet fishers for transition programme
- 2** Direct financial support to those eligible fishers
- 3** Transition gillnetters to alternative livelihoods successfully
- 4** Complete gillnet ban by Jan 2022

CEO NOTE

Historic Agreement to Protect Belize's Reef and Ocean Fisheries and Wildlife



The Government of Belize has taken a big step forward in protecting its ocean – home to 40% of the world's second largest reef. After campaigning by the people of Belize, Oceana, the Belize Coalition for Sustainable Fisheries, and our allies, the Government has signed an agreement to protect its ocean from a type of fishing gear responsible for the indiscriminate killing of countless important fish, turtles, and sharks. Once enacted, today's promise from the Government of Belize, will make Belizean waters – and therefore 40% of the world's second largest reef – completely protected from gillnets, bottom trawling and oil drilling. This is a historic victory for Belize, its people, its ocean, and most importantly for the local fishers who depend on the country's marine resources for their livelihoods.

Gillnets are an inherently destructive way to fish. Often combined to be miles long, the nets are set by fishers to catch one species, but also catch and kill many other species that the fishers don't intend or want to catch. Marine life swim into the long nets and become trapped in the nets and essentially suffocate to death - either because they can no longer swim forward to push air through their gills or because they can't resurface to breathe. In Belize, protected species like bonefish, tarpon, permit, manatees, and even endangered species such as scalloped hammerheads have been caught and killed by this indiscriminate gear. Gillnets have even been credited with the regional extinction of sawfish.

On average, fewer than 100 licensed fishers have a license to use gillnets in Belize. However, gillnets are the gear of choice for many foreign fishers illegally fishing in Belize's waters. The banning of these nets will be a critical tool in stopping this illegal fishing. It will also stop the agonizing events that occur when gillnets are lost at sea and continue to capture and kill marine life without any benefit to fishers. Such "ghost nets" have been found in Belize's Barrier Reef harming a critical UNESCO protected ecosystem that harbors nearly 1,400 species and central to Belize's tourism and fishing industries.

CEO NOTE



Historic Agreement to Protect Belize's Reef and Ocean Fisheries and Wildlife

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More than 97% of commercial fishers in Belize don't use gillnets and yet, for years, these illegal nets have been depleting fish stocks and directly harming all those in Belize who depend on wild fisheries for their livelihoods, the country's economy, and environment. Oceana and the Coalition for Sustainable Fisheries worked with the government to find a way to address this problem while still supporting the legal fishers who dependent on it. That's why in November 2019, Oceana and the Coalition for Sustainable Fisheries raised over \$2 million BZ to allow licensed gillnet users to transition away from the gear to alternative gear or to find alternatives sources of income. Making this change helps to preserve the abundance and biodiversity of Belize's ocean and the ability of all Belizean fishers to make a living from the seas.

This agreement with the Government of Belize demonstrates the extraordinary vision and leadership of the Belizean people and their deep connection and commitment to preserving their marine resources. When this agreement is implemented by Belize and they ban gillnets, it will be a big step forward for Belize and the protection of the creatures of the world's second largest reef.

If you'd like to read more about this, here is the joint press release between the Ministry of Fisheries, Forestry, the Environment and Sustainable Development (MFFESD), the Coalition for Sustainable Fisheries and Oceana on their Agreement to support gillnet fishers to transition to alternative means.

ANDY SHARPLESS

Chief Executive Officer
Oceana



HANDS ACROSS THE SAND

Held annually across the world since 2010, Hands Across the Sand (HATS) is a unique event to promote clean energy alternatives to fossil fuels, saying “NO” to fossil fuels and “YES” to clean energy like solar and wind power. This movement was founded by Dave Rauschkolb, a restaurateur in Florida, who saw the need for change after the horrific BP Oil spill. Over the years, the movement has grown internationally with Belize joining annually. Participants come together to join hands in solidarity to symbolize unity against fossil fuel and the over dependency on nonrenewable energy.



Normally, participants would meet at a location in their community to stand together holding hands in solidarity. However, this year the team participated in the HATS online event, which was never done before. Volunteers participated by submitting their photos or videos displaying themselves with a message to protect our environment and to move to cleaner energy. Wavemakers from across the country uploaded it to the HATS website where it was compiled into a video that displayed the fantastic work from participants globally.

You can view the video [here](#) and be sure to look out for our flag and Wavemakers!

Thank you to everyone who participated in one way or another. Belize was well represented!





WORLD OCEANS DAY

JUNE 8TH

This year's theme explored the impact of innovation across all categories to ensure a sustainable ocean. Everything from resource management to technology, thought-leaders are learning to adapt to an ever-evolving world.

Oceana continues to find ways to innovate how we work to protect the oceans. Our team alongside other partners are currently working towards the creation of a virtual marketplace to better connect seafood consumers with suppliers. This will allow Belize's fishers to advertise and sell their product beyond their local community and give consumers an easy way to vet and purchase local seafood from fishers who they trust. Now more than ever we are utilizing the benefits that technology offers in this changing world.

Learn more at fishrighteatright.com.



BELIZE LEADS IN PROTECTION OF LAND AND SEA, BUT WE'RE NOT STOPPING THERE!

Written By: Andrea Polanco

Almost one hundred years ago, in 1928, the Half Moon Caye Natural Monument (HMCNM) was declared a Crown Reserve because of its large nesting colonies of Red-footed Booby birds. Then in 1982, HMCNM became the first protected area in Belize under the National Park Systems Act. That same year, it also became the first marine protected area in the Central American region. The site is co-managed by the Belize Audubon Society (BAS). The HMCNM is protected with a strict “no take” policy, which helps it to serve as a nursery for commercial fish species and home to endangered species like the Hawksbill turtle and the Nassau grouper.

The Executive Director of BAS, Amanda Burgos-Acosta, notes, *“The two Natural Monuments-Blue Hole and Half Moon Caye are in essence the “replenishment areas” or the “no harvest areas” within the Lighthouse Reef Atoll. The site has additional protection as a World Heritage Site, a site of Outstanding Universal Value. No development or change in the footprint can occur with this status.”* Researchers and conservationists have seen biologically important species, as well as commercial catch, thrive. And it’s that protection and strong conservation management practices that have tremendously served the site and its beneficiaries. *“Science is being used in outreach. Fisherfolk are being informed,”* as Burgos-Acosta adds, *“Protection of the site and good enforcement assures fishers that when the season closes for high value products such as lobster and conch, they can “trust” that the resource is secure.”* But even with patrols and other costly management measures, fish and other marine products are being removed from the sea at exceedingly high rates laments Burgos-Acosta, *“overfishing is a real threat and constant education and staff is required to curb this.”*

In 2019, the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) warned that ecosystems were deteriorating at alarming rates, with climate change the third biggest driver of animal and plant decline, only after land and sea use change and the over exploitation of resources. But because the Strategic Plan for Biodiversity 2011-2020 failed to curb the overwhelming decline in biodiversity, there is a race globally to protect more marine and terrestrial areas because of their importance to the survival and well-being of humans, plant and animal life. A new proposal called the *Post-2020 Global Biodiversity Framework* sets out an ambitious vision that, “By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people.”

This new plan includes twenty targets and their implementation of long-term, measurable impact on plant and animal species for the next thirty years. The UN Convention on Biological Diversity (CBD), in one of its targets, proposed protection for thirty percent of land and seas to reverse the biodiversity crisis. This is an expansion on the *Aichi Target 11 of the Strategic Plan for Biodiversity 2011-2020*, which initially called for seventeen percent protection. Belize has exceeded that thirty percent for both marine and terrestrial areas, an accomplishment acknowledged by the director of the newly established National Biodiversity Office in Belize.

“As it relates to marine, we can say that Belize

possesses twenty-one point seven percent of the marine component under protection and ten percent is what we consider no-take or replenishment zones. On the terrestrial front Belize maintains approximately thirty-six percent protected, and these refer to sites currently recognized formally within the system. We are working to incorporate within the immediate future sites which are under conservation practices into the Protected areas system. If we were to sum this up, one can confidently state that Belize is at approximately sixty percent, which corresponds to the global cumulative targets for Marine and terrestrial protection,” explains Hannah St.Luce-Martinez, Director of the National Biodiversity Office.

The post 2020 framework calls for one third of that thirty-percent protected status to be covered by “strict protection” categories, which means it restricts the extraction of resources and uses. This, again, is already in place for Belize, St. Luce-Martinez says, “*If you look at the marine realm there is twenty percent considered conservation area which is an area where there is a regulated extraction of marine produce, but also there is a ten percent area which is classified as no-take or replenishment zones, which can be classified at the global level as a stricter layer to protected areas management.*”

St. Luce-Martinez also highlights that Belize, with sixty percent of its forest cover fairly intact across the national territory, has achieved a similar achievement for its terrestrial areas only. “*Even while working within the Pre-2020 Framework, Belize had already surpassed this*

threshold for terrestrial protected areas; having approximately forty percent of our national territory under protection. But even beyond that, we have approximately sixty percent of our national territory under forest cover.”



While the figure for the strict protective status is clear for marine areas, St. Luce-Martinez admits that the management and protection of the percentage of strict terrestrial coverage is not where it should be, *“We have not to date assessed and quantified the effectiveness of this stricter management category at the terrestrial level. We have areas which fall under strict protective strata such as nature reserves; nature reserves in Belize are the strictest classification of strictly protected status even to protected area within the protected area network; for example, the Bladen Nature Reserve in the southern part of Belize is one of those areas that falls under a very strict category of protection, within this area only research development is permitted – strict protection of habitat and species. There are other areas of strict protection such as the Burdon Canal Nature Reserve which are in need of management intervention similar to those implemented within the marine realm.”*

“So, we can say that at the global level and even at the regional level Belize is looked upon favorably for having surpassed global expectations relating to protected areas establishment,” St. Luce-Martinez acknowledges, *“because while many countries must now focus on the protection of thirty percent of their marine and terrestrial areas, Belize has already achieved that.”*

But today terrestrial bodies, like marine ecosystems, are under sustained attack. Population growth and expansion of urban areas have placed increased pressures on resources, for food, infrastructure, and land use and other economic activities. These things, have undoubtedly, significantly impacted biodiversity. Friends for Conservation and Development (FCD) echoes this reality, illustrating how the illicit overuse and extraction of resources pose serious threats to the largest protected area in Belize.

As the co-managers for the Chiquibul National Park, FCD's Executive Director Raphael Manzanero says cross border, human impacts place many pressures on this natural environment, *"We know for sure that biodiversity is being affected, [with many threats we face originating] from Guatemala. Our management plan normally relates to some eleven environmental threats."*

Illegal logging, agricultural expansion, illicit wildlife trafficking and extraction of precious materials are only some of the incursions recorded inside the Chiquibul Forest. Back in 2011, the FCD recorded sixty million dollars in losses of illegal hardwood extraction. The Xate plant was almost wiped out of the Chiquibul Forest due to illegal harvesting. And almost ten years later, Manzanero admits that despite interventions, the plundering of wildlife continues, *"last year we documented more than twenty-five and probably more than fifty parrots that were stolen from Belize, from the Chiquibul, in terms of Scarlet Macaws. Now, how do you put a figure to that?"*

"I know for sure that other endangered parrots are being targeted, but we don't have the concise, concrete information with us. I feel that we have lost lots more in terms of biodiversity but we don't know," shares Manzanero. And St. Luce-Martinez admits that Belize needs to step up its efforts to document and quantify its biodiversity, *"There is still the need to increase enforcement. We are still very much behind in terms of data on species population, data on species distribution and species health. We are still behind in the establishment of regulations and guidelines for the sustainable use and monitoring of many of our species and natural resources."*

Threats to Belize's physical environment such as habitat destruction, large scale tourism development, agricultural expansion and other unplanned commercial projects continue to be a problem. Pollution, overconsumption of resources, burning of fossil fuels and deforestation are also concerns. These man-made activities help to worsen climate change, poor air quality and soil erosion – triggering ocean warming, severe droughts and bigger, more frequent storms.

According to a UN report published in May, this footprint could signal devastation for the globe. The report found that human activity, if left unabated, could wipe out up to one million land and marine species, highlighting the need for urgent actions and interventions as this crisis looms. It's a never before seen devastation that serves as a warning to CARICOM nations, including Belize, where some of the world's top biodiversity hotspots are located.

The Government of Belize has conventionally delegated conservation site management authority to local NGOs who co-manage national lands. Three years ago, the FCD's management effectiveness assessment showed that they have done a fair job but that more work needed to be done. Similarly, the Belize Audubon Society scored a B+ and for them to get the site to optimum would require significant amount of investments. As these managers know, massive and costly efforts are needed

to manage these sites and moving forward the need for diversification in funding and increased cross collaboration are critical to their success.

FCD's Manzanero maintains, *"The stuff happening in Chiquibul goes beyond one single institution, so FCD can only do so much. Even though we go to the media very often, don't expect that it will be on a high point on the agenda for the government - it will not [be]! What is required truly is for it to be made a part of a critical agenda point at the government level - that is important. We have some regulatory agencies, like the B.D.F is there with us, but that is not enough!"*

And now, more than ever, resources are stretched thin because of COVID-19, as Burgos-Acosta of the BAS reveals, *"COVID 19 has provided new challenges in 2020. Funding has become an issue with a lack of tourism. HMC is funded from tourism activities/entrance fees; hence funding is a struggle. Fisherfolk have now seen the need for alternative livelihood asking for support when we have no donor funds allocated at this moment."*



Tourism, which accounts for about forty-five percent of G.D.P, fisheries, forestry, and agriculture are all directly tied to the health and performance of natural resources. Because Belize is dependent on the productivity of this handful of industries it shows how invaluable our nature based resources are, Manzanero adds, *"When we look at the Chiquibul Forest it is seven point seven percent of Belize. It is the largest water reserve where maybe forty-percent of Belize depends on that water."* The Statistical Institute of Belize's (SIB) External Trade Bulletin shows that Belize earned over forty million dollars in exports of nature-based goods and services for the month of April 2020, with marine products, for example, accounting for \$1.2 million dollars.

Belize, like the rest of world, use these resources every day and for that reason the Convention calls for countries to take drastic measures to protect natural assets through regulated, inclusive ways so that local people can still benefit. St. Luce-Martinez outlines how Belize prioritized seven Pre-2020 National Biodiversity Framework targets to effect this much needed change.

“One of the main targets prioritized at the national level in 2018 relates to key ecosystem services sustainably managed and resilient to threats. Two, is that biodiversity goals and objectives are prioritized via the establishment of formerly recognized structures to safeguard the implementation of our biodiversity’s strategies and action plan. Other targets include reduction in incursions and to improve the integrity of ecosystems, as well as accurate and current data on Belize’s natural resources and environmental services inform relevant national development decisions.”



In line with partner agencies, BAS and FCD, St. Luce reiterates the need for funding and improved collaboration, *“One of our priorities within the National Biodiversity Office is to improve resource mobilization and to improve allocation of funds towards areas of greater impact at the national level and the other is to establish cross-sectoral coordination mechanism, this is a way of addressing the threats to protected areas and drivers of biodiversity loss.”*



But in order to achieve all these things, St. Luce-Martinez says that the management and inter-sectoral coordination and collaboration remain critical, *“Honestly, there is need to do more in terms of cross-sectoral coordination, especially recognizing the drivers of biodiversity loss at the national level...we need to ensure that there is a balance between all of those sustainable development pillars and environmental management... because to not safeguard these resources is to actually reduce our economic, social and economic resilience.”*

An aerial photograph of a coastline. The top half of the image shows clear, turquoise water. The bottom half shows a rugged, brownish coastline with some white foam from waves crashing against the shore. The text is overlaid on the image in a white, outlined, sans-serif font.

COMMUNITY

OUTREACH

&

EVENTS

Club Meetings

With all of us being safe at home these past months, the team was able to continue meeting with their respective clubs from time to time, virtually. We often update Wavemakers on COVID-19 related information, safety measures and other information on Oceana online events. Corozal Field Representative, Ryan Rivera, also shared online presentations with the Department of Youth Services and Rotaract Club of Corozal. Most recently, our Belize City Representative, Kleon Coleman, met with the SJCJC executive group to discuss plans for the new semester. As we continue to adjust to the new norm, our team continues to host meetings with various online platforms to continue to carry out these types of discussions, presentations and meetings.

Trainings

During the past months, our team was able to host a few trainings for our Wavemakers throughout the country. Ryan Rivera, our Corozal Field Representative, carried out an online training, teaching participants how to make their own hair wax from locally-sourced coconut oil and unrefined bees wax. The team also offered our Wavemakers an online photography crash course for beginners. Local photographer, Mr. Dioni Marin, was our guest presenter and gave an exceptional beginners' training in photography, whether you're using a professional camera or just your mobile device.



Collaborations

With the increasing economic challenges the country faces during these uncertain times, many people have lost their main source of income, especially our fishers. With this in mind, Oceana partnered with several organizations throughout the country to assist fisherfolk families with a food pantry program. The team identified the following organizations: Rotaract Club of Corozal, Rotaract Club of Cayo, Help Age Belize, Belize Territorial Volunteers, San Pedro Tour Operator Association, Placencia Food Bank and Dangriga Ecumenical High School Teachers Initiative. These organizations were able to purchase groceries with the funds donated and package them into food baskets to deliver to several families. In addition, in preparation of the start of the new school year, Oceana was able to assist 'back to school' programs by donating a total of 25 school bags to primary school students. The organizations that hosted these programs and were in receipt of the donations were Rotaract Club of Corozal and Cool Cuts Barbershop in Southern Belize. We take this opportunity to greatly thank everyone involved in this initiative, your constant efforts do not go unnoticed!



Zoom Discussions

The last few months have been quite challenging for all of us. We have had to adjust to a new lifestyle, a new way of doing routine tasks and we've had to get comfortable being at home...a lot. Regardless, with a bit of creativity from our team, we found new ways to still get things done.

Although we cannot physically be together, we are lucky to have technology that connect us like never before. Over the last few months, our team has been able to host online meetings/discussions and trainings to our always dedicated and interactive wavemakers. One of our key activities has been movie discussions on various environmental films that target key issues such as plastic pollution, gillnets and coral reef protection. Wavemakers were invited to participate – viewing the film on their own time and then meeting on a given date, via zoom, to discuss the film. The importance of this activity was to provide our wavemakers with a deeper look at the importance of the issues portrayed in the film and why we should make every effort to protect and preserve our marine environment. Our outreach team garnered Wavemaker support from each district to join on these discussions that took place throughout the last few months.



Summer Camps

Even under the COVID-19 restrictions, our team was still able to participate in a few summer camps. One of them being BK Creative's Annual Summer Camp, which has been growing and expanding its objectives to encompass photography and media trainings. This year's camp focused on the use of those tools as a means to promote domestic tourism and encourage Belizeans to not only travel within their own country, but to also appreciate and protect our environment and oceans. Oceana participated by giving a presentation on gillnets and how harmful it is to our marine environment. Immediately following this, Oceana was also able to donate to the SEADAFT's Annual Summer Camp, to ensure it was as successful as possible. This year, the camp had 29 participants who learnt the importance of turtle nesting and their habitat, followed by a beach cleanup.

Deep Dive Talks

A new and exciting venture that we've taken on is our Deep Dive Talk! It's a new series, where we're talking to local and regional thought-leaders about all things work, life and conservation. This series is a one-on-one interview hosted by our Toledo Field Representative, Analee, on our Instagram Live where we ask guests a series of questions to learn more about their work and personality- something most people don't get to see. We have had six successful episodes since its inception, featuring Chef Sean Kuylen; Activist Will Maheia; Artist Ernest Garcia; St. Lucian Entrepreneur Johanan Dujon; Food Truck owner Miss Debs, and Career-conservationist Miguel Alamilla. All episodes can be accessed on our Instagram page to view!

Oceana thanks every Wavemaker, supporter, partner and guest for being flexible and patient during these times! We truly appreciate all the effort and support that we have received, and we hope to continue innovating and finding new ways to connect for the remainder of the year.

Please be safe, be cautious and stay healthy!

FISH RIGHT, EAT RIGHT IN BELIZE

Ever been curious about the seafood on your plate?

“How and where was my seafood caught?”

WRITTEN BY: MARTINIQUE FABRO
OCEANA BELIZE



Don't worry, you are not alone. Over generations, Belizean

fishers have navigated our blues with the proper management of national fisheries in mind. Through these sustainability efforts, fishers and NGOs have partnered on various initiatives to not only ensure proper fisheries management, but to also find innovative ways that highlights the importance that responsible consumption can have in compliance with fisheries regulations and integrated best practices.

In 2016, this search for innovation led to the creation of the **Fish Right, Eat Right program (FRER)**. This certification program aims to curb illegal fishing and encourage sustainable fisheries by offering marketing opportunities through the promotion of responsible seafood sourcing and consumption in Belize.

Since its inception, FRER has worked alongside **twenty-two restaurants countrywide** that ensures, from sea to plate, customers are receiving the most sustainably caught seafood possible. One restaurant that has always been committed to the preservation of our marine ecosystems is Ambergris Caye's Blue Water Grill (BWG). Since 2001, Kelly and Mukul Kanabar, owners of this popular beachfront restaurant, have been offering their patrons in San Pedro the culinary experience of a lifetime through the use of local ingredients with their thoughtful and innovative menu. BWG's dedication to providing sustainable seafood led to their FRER restaurant certification in September 2019.



Mukul shared, *“The Fish Right, Eat Right initiative fits exactly into our world view. We need to take care of the environment, the ocean, and the marine life so we can always experience the beauty of Belize - now and in the future.*

Also, as one of the largest and most visible restaurants in the country, we felt it was important to set an example by joining Fish Right, Eat Right.”

With sustainability at the forefront, Blue Water Grill opts to buy a variety of fish from local, licensed fishermen who align with their operation's sustainable methods – even being creative along the way. Seven years ago, they stopped listing specific fish on their menu, completely shifting not only how they were able to interact with fishermen, but also how their employees would interact with customers. The newfound flexibility to serve the 'catch of the day' created an opportunity for conversation starters between servers and guests. Blue Water Grill's customer service is a cornerstone of their success, which may only be outmatched by their incredible food.

Due to their location on one of Belize's busy islands, Blue Water Grill still often faces the challenge of sourcing sustainably caught seafood to meet their demands. Because they rely on a small network of fishermen to supply their restaurant, the system is delicate and not always guaranteed. This uncertainty has only emphasized to BWG the tremendous benefits that a **virtual marketplace** can offer; showing seafood availability in real time, how it was caught, while creating easy communication between fishermen and restaurants.

[Click here to read CC+L's latest publication, The Gold Book.](#)



This is how the pilot project, “**Market Based Incentives for Responsible Fishing**”, being spearheaded by Oceana in San Pedro and Caye Caulker under the FRER initiative, aims to improve the fisheries industry supply chain through open communication and transparency. This is how we can safeguard our food security and fisheries resources.

However, as they say, “Rome was not built in a day”. And so, the development and evolution of FRER continues

alongside the many NGO partners, restaurants and fishermen that sees **the value of sustainably sourced seafood**. Through their participation in the certification program, many restaurants, like Blue Water Grill, will pave the way for a virtual marketplace to revolutionize Belize’s fisheries supply chain.

Hopefully, becoming akin to the Uber app - but for seafood. Given the economic and cultural importance of fisheries in Belize, it is imperative that we ensure the sector’s sustainability.



PHOTO CREDIT: ALEX ELLIS | OCEANA™

So just remember this: The next time you sit down to enjoy a seafood meal, ask about what will be served and how it was caught. Not only will this encourage vendors to source responsibly-caught seafood, but you might even end up learning more about your new favorite fish. **Learn more** about how to support Blue Water Grill’s sustainable initiatives at www.bluewatergrillbelize.com

**NO GILLNETS NOW,
GILLNETS EVER.**



ARE

CATCHING

SELLING

YOU

BUYING

EATING

OUT OF SEASON SEAFOOD?

If you are, you're breaking the law!

Know your open and closed seasons.

Closed seasons are:

- Queen Conch: July 1st - September 30th**
- Spiny Lobster: February 15th - June 14th
- Nassau Grouper: December 1st - March 31st
- Wild Shrimp: July 14th - March 14th
- Hickatee: May 1st - May 31st

****Closes earlier if quota is met**





TWISTED CREOLE LOBSTER

Recipe By: Asha's Culture Kitchen

INGREDIENTS

- 1/4 cup chopped fresh cilantro
- 1/4 cup chopped fresh onion
- 1/4 tsp chopped fresh basil
- 1/4 cup grated carrot
- 1 medium green pepper; finely chopped
- 1 tbsp minced garlic
- 1/4 tsp butter
- 1 lb lobster diced into 1" cubes
- 1/2 cup fresh squeezed coconut milk
- complete seasoning

PREP TIME

- Prep | 15 mins
- Cook | 7 mins
- Serves | 4

DIRECTIONS

01

Mix cilantro, onion, carrot, green pepper, garlic, salt and complete seasoning together. Use this mixture to season the lobster cubes.

02

Heat a pot to medium heat; melt butter before adding season lobster. Simmer and stir for 3 minutes.

03

Add coconut milk, stir and simmer 4 more minutes.

At Asha's Culture Kitchen, Asha and his brothers fish for most of their seafood product themselves, while following Belize's fisheries regulations. Located in Punta Gorda, Asha's Culture Kitchen is known for pulling up to the restaurant so that customers can order fresh - right off the boat. The family was born and raised exploring Belizean waters and can see the benefits of the expansive marine reserves they are blessed to enjoy down South.

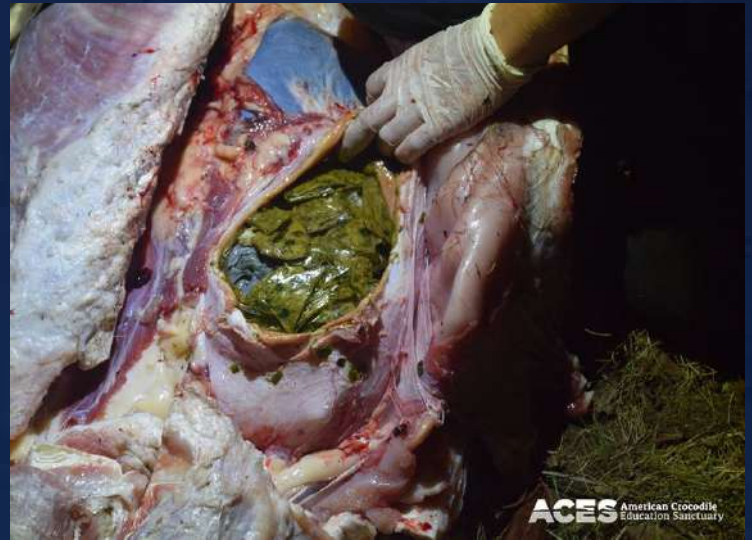
[Click for more information on Asha's Culture Kitchen.](#)

Navigating the Plastic Tide

written by Andrea Polanco

“As soon as we made that first incision into the stomach you saw plastic immediately. It was just full of plastic. You didn’t have to dig around. It was absolutely compacted with plastic bags.”

A dead reptile’s **stomach full of plastics** – that’s what Operations Manager of the American Crocodile Education Sanctuary, Chris Summers, found when ACES conducted a necropsy in May on an adult American Crocodile in San Pedro, Ambergris Caye.



Summers says, *“We were horrified. I had never seen anything like this. This was eighty-two plastic bags. I have never seen anything like that. It is insane. Absolutely insane. This animal starved to death on a full stomach. It is insanity.”*

The crocodile was emaciated and suffering when ACES found him. The bags were compacted and prevented the intake of food which led to starvation. More than seventy of the bags were chicken packaging. The adult crocodile had to be euthanized. While illegal feeding may be a reason why the croc ingested so many large plastic bags, this is a stark reminder of the many dangers of plastics. This is a pollutant that is bad for our environment. Plastics kill.



Plastic pollution is a global problem – and perhaps we have taken too much comfort in that fact – this is just another pressing environmental issue that the world is unable to control. Maybe we have underestimated just how much waste we generate individually and so we have overlooked the staggering volume of waste we produce as a country. This underscores that we each must take accountability for our contributions in order to help tackle pollution.

Did you know that collectively, the Caribbean nations produce the most plastic waste per capita in the world?

A Science Magazine report called *“Plastic waste inputs from land into the ocean”* published in 2010 shows that more than ten Caribbean islands were in the top thirty plastic waste producing countries per capita.[1]

Looking closer at home, Our World in Data Plastic Pollution (2018) report shows that Belize’s daily plastic waste generation per person was 0.17 kilograms in 2010. This is two to four times less than the top per capita waste-producing Caribbean countries; however, it is seventeen times higher than India’s per capita waste generation. Simply put, for that year, each person in Belize was producing more plastic waste than each person in India.

Fast forward to almost ten years later, an article in Forbes shows that ten Caribbean countries are still in the top ten global polluters per person. *“Trinidad & Tobago, Antigua & Barbuda, St. Kitts & Nevis, Guyana, Barbados, St. Lucia, Bahamas, Grenada, Anguilla, and Aruba...every year these ten island nations generate more plastic debris than the weight of twenty-thousand space shuttles,”* writes Daphne Ewing Chung (Forbes, September 2019)

In 2017, the Department of the Environment (DOE) found that over three years, Belize imported over two hundred million pieces of single-use plastic bags and fifty-two million pieces of Styrofoam and plastic food containers every year, for each year. That figure doesn’t include local manufacturers who produce an estimated thirty-five million single-use plastic bags and five million pieces of Styrofoam.



[1] Daily plastic waste generation per person, measured in kilograms per person per day. This measures the overall per capita plastic waste generation rate prior to waste management, recycling or incineration.

On average, how many single-use products does each Belizean use weekly?



When placed in the context of Belize's population, these figures are astounding. According to the DOE, these numbers roughly translate to each Belizean citizen using an average of eleven single-use plastic bags and three pieces of Styrofoam per week over one year.

OCEANA

*Quantities are estimated values.
Source: The Department of the Environment, 2017

A product like the plastic bag started out as a simple invention that was cheap to buy, convenient to carry, and durable. But what the world wasn't prepared for the environmental degradation, economic implications, as well as the cost of disposal. And that is the big problem with plastic waste, it never truly goes away. And although we know that it never fully decomposes, it is still being released into our natural environment at an alarming rate.

A 2019 World Bank Report called "*Marine Pollution in the Caribbean: Not a Minute to Waste*" finds that seventy to eighty-five per cent of marine litter in the Caribbean Sea come from land-based sources. The report states that packaging is the largest contributor to plastic waste and accounts for around forty-two per cent of that waste in the Caribbean. Added to that, countries still struggle to manage solid waste so that increases the chance that plastics and other litter will end up in the ocean in this region.

This litter is made up of large number of plastics and so it has environmental, social and economic repercussions. Plastic waste blocks waterways; contaminates soil and water; infiltrates the food chain; and affects the sewage system. It is also an aesthetic problem when you think about how it impacts tourism and leisure activities.

In short, it poses serious threats to animals and human life. Industries and jobs are also at risk, including the multi-billion-dollar revenue that the region's coastal tourism attracts every year.

The World Bank Report calls for urgent action to tackle this problem. It contends that some three hundred and twenty tons of plastic waste remains uncollected each year in the Caribbean. Similarly, a

concentration of plastics estimated at hundred thousand pieces of plastic per square kilometer was identified in the northeastern Caribbean.

The Centre for Environment, Fisheries, and Aquaculture Science (CEFAS), along with the Department of Environment (DOE), under the Commonwealth Litter Programme (CLiP), carried out a small survey to get a snapshot of the problem in Belize. The survey was conducted on six beaches in June 2019 and the results showed that seventy per cent of the litter was made of six material types:

- **Plastic pieces (<50cm) – 36.8%**
- **Polystyrene (Styrofoam) (<50cm) – 12.3%**
- **Bottle caps and lids – 9.3%**
- **Bottle glass – 5%**
- **Water bags – 3.4%**
- **Snack wrappers and chips bag – 3.4%**



As Senior Environmental Officer of the Department of the Environment Anthony Mai points out, a single plastic bag on a beach has far-reaching impacts. *“It has become a problem because plastic degrades very slowly and so it accumulates into the environment. I always say that if you throw a plastic bag on the ground and you pass at the same location two or three days later and you don’t see that plastic bag, that doesn’t necessarily mean that the bag is not there. The weathering might cause it to break down into fine micro-plastics and once plastic degrades into micro-plastic, it lasts in the environment for a long time.”*

According to the International Institute for Sustainable Development (IISD), approximately seventy-five per cent of the micro-plastics in the ocean are smaller pieces from plastic bags, bottles and marine gears.

Mai emphasizes that these particles can carry harmful substances and affect marine life, *“So, in terms of the accumulation of plastics globally, the accumulation of micro-plastics is one of the more serious issues for the time being...the micro-plastics are the plastics that are ingested by various animals. For example, animals living in the sea and when they ingest the plastics it can disrupt pathological functions.”*

Incidentally, humans drink it, eat it, and breathe it in, too. So, how can we reduce the concentration of plastics and micro-plastics on land and in our waters going forward?

Improved solid waste management and waste infrastructures, such as garbage collection and secure landfills can help. A transition to clean and biodegradable products, coupled with appropriate policies and strong enforcement are also part of the solution. *“Solid Waste Management, in the past, has been one of the biggest challenges for Belize in terms of environmental issues. But the government has done a lot in terms of ensuring that solid waste is being managed properly. We have a solid waste management plan that is being implemented and every day we reach closer to our goal in terms of solid waste management,”* Mai says.

Belize Solid Waste Management’s records show that Belize generated a total of forty thousand five hundred and eighty-seven metric tons of waste in 2018. Data to illustrate the types of waste generated that year wasn’t readily available but research shows in the past few years plastics and Styrofoam made up nineteen per cent of the national waste taken to the regional sanitary landfill. And it costs a whopping three point five million dollars a year to manage the waste generated.



We’ve had litter laws since the late nineteen-nineties, but in 2003 and 2005 the Summary Jurisdiction Littering Offenses Violation Tickets Regulations were amended to give more ticketing power to local government.

The regulations say that a person who is issued a violation ticket shall pay a fine of one hundred dollars. If the violation ticket is issued to a business, the fine increases to five hundred dollars. If the tickets are not paid within fifteen days, the violator incurs further penalty fees. But the ticketing of violators doesn’t just have to be the responsibility of police officers, public health officers, and other enforcement personnel.

Environmental Officer for the DOE Aldo Cansino points out that you can also play your part to help hold polluters accountable, *“There is also a provision that, let’s say, for example, you are interested to assist. You can submit your name to the Minister and the Minister can then authorize you to issue tickets as well.”*

In 2019 Chief Environmental Officer Martin Alegria conceded that enforcement of litter laws hasn’t been as successful as they had expected. *“That hasn’t worked out as well as we thought. Secondly, the whole issue of littering from outside the city limits and that hasn’t worked out either for many reasons,”* Alegria told 7 News Belize.

One of the reasons is because enforcement is collaborative and prosecution for littering offences

doesn't appear to be of major concern for those involved in the process. *"The department of the environment is not the only one that is involved, because there is prosecution. We depended a lot and still to a certain degree depend on the police department's prosecution branch...we were dependent on police and perhaps twenty years that wasn't a priority. Crime is more what the priority was for DPP, the solicitor office and the prosecution branch of police,"* Alegria discloses.

In the past year, two to three litterers have been ticketed under this system. It's a shockingly low number when we look at the large number of plastics scattered along shore lines and highways across the country, but Mai says don't put too much weight on the figure, *"The number of people we take to court is not an indication of how effective we are dealing with plastic."*

Although the DOE has an Environmental Compliance and Enforcement Unit, it is grossly under- resourced and understaffed to address the increasing pollution infractions, including illicit dumping and burning of litter.

Mai reveals that enforcement officers must resort to stakeouts and the use of technology to confirm these illicit activities, *"To have a successful prosecution, we need strong evidence to show who is dumping garbage - and for us to be the right place at the right time is not easy for us. So, we try to set up sting operations at hot spots and try to set cameras up because eye- witnesses don't want to testify even though they are the ones who report at times."*

But the DOE has a strategy that appears to have some impact. According to Mai and Cansino, the aim is not to haul the violators off to court. They want to change behaviors which will in turn cut littering and illicit dumping. *"Between 2016-2017 we set up "no dumping" signs in communities and you saw ninety percent of the time the area remained clean. And what if we don't provide an avenue for people to properly dispose of garbage; they will dump somewhere else,"* Mai remarks.

Cansino reiterates that the community impact cannot be denied, *"For example, last year Santa Familia's leader reached out to the DOE to say that garbage is a problem in the community and that they don't have a proper site. So, we worked along with the Solid Waste Management Authority and gave them access to the transfer stations and then we supported the collection system at the village level. So, what is the DOE doing to reduce plastics on the ground? We are working to empower communities so that the effort on the ground has a greater benefit than going to the court."*

Mai accepts that a lot more has to be done to effectively manage plastic pollution and the wider issue of solid waste management in Belize, *"In terms of the effectiveness and the efficiency of it, I think more boots need to be put on the ground. I think that the Public Health Department, the Belize Solid Waste Management Authority, and in some instances, the municipal government such as village, town and city councils need to come together to address this."*

And a part of the country's solution is the "Environmental Protection Pollution from Plastics 2020" legislation. Single-use items such as plastic bags, plates, cups, straws and utensils will be prohibited by mid-2021.

Since the legislation was signed in January of this year, the importation of prohibited products stopped in April. The ban would have come into effect by January 2021, but the COVID-19 pandemic has now pushed back that date until July of 2021. The next step of the phase-out is the cease of manufacturing prohibited products, set for January 2021.

Environmental Protection
(POLLUTION FROM PLASTICS)
Regulations enacted as of **JANUARY 15TH 2020**

Timeframe for Phase Out of **SINGLE-USE PLASTICS** listed in Schedule II of Legislation

AFTER 3 MONTHS
NO IMPORTATION
Of prohibited products will be allowed after 15 April, 2020 as stated in the Environmental Protection (Pollution From Plastics) Regulations, 2020.

AFTER 6 MONTHS
NO MANUFACTURING
Of prohibited products will be allowed after 15 July, 2020 as stated in the Environmental Protection (Pollution From Plastics) Regulations, 2020.

AFTER 12 MONTHS
NO POSSESSION
Of prohibited products will be allowed after 14 January 2021 as stated in the Environmental Protection (Pollution From Plastics) Regulations, 2020.

SINGLE-USE PLASTICS BEING PHASED OUT:

- **SINGLE - USE STYROFOAM:** clamshell, food containers, soup containers, plates, cups and lids, etc.
- **SINGLE - USE PLASTIC:** disposable food containers, forks, knives, spoons, sporks, cutlery, etc. plates, bowls, cups & drinking straws and eating utensils.
- **Single - Use Styrofoam and Plastic Plates** (not classified as Barrier Bags and Plastics)
- **Single - Use Plastic** carrier bags commonly referred to as shopping bags and/or T-shirt bags
- **Single - Use Plastic cups and lids** (not classified as barrier bags and plastics)
- **Single - Use Plastic and Styrofoam containers** (not classified as barrier bags and plastics)

FOR MORE DETAILS: WWW.DOE.GOV.BZ

Although the manufacturing of single-use plastics continues into next year, the Department of Environment wants to make sure that the prohibition of plastics and Styrofoam will not create a void. For that reason, the development of standards of biodegradable materials is already underway. Aldo Cansino emphasizes the importance of this step in the fight against plastics: "That aspect is important because while we are phasing out, we also phase in. And the phase in is where we are looking at the alternatives. We have to make sure that these alternatives will not be as detrimental."

And the sale of prohibited items will stop in April 2021, while three months later, July 2021, it will become illegal to have these banned items in your possession.

Mai reckons that this decision to ban may help Belize reduce the harmful plastics in the environment, "We hope that by reducing the number of single-use plastics; when we think about the volume that will be reduced that would end up in the regional sanitary landfill. So, whenever the government can reduce garbage from reaching the regional sanitary landfill, it is increasing the life span of that facility. So, it is critical for us to conduct another assessment, perhaps in three to five years of the passing of this legislation to see the effect of the legislation."

GREEN VENDOR REGISTRY

We are excited to see all the green alternatives businesses and restaurants have started integrating into their everyday operations.

Haven't signed up as yet?

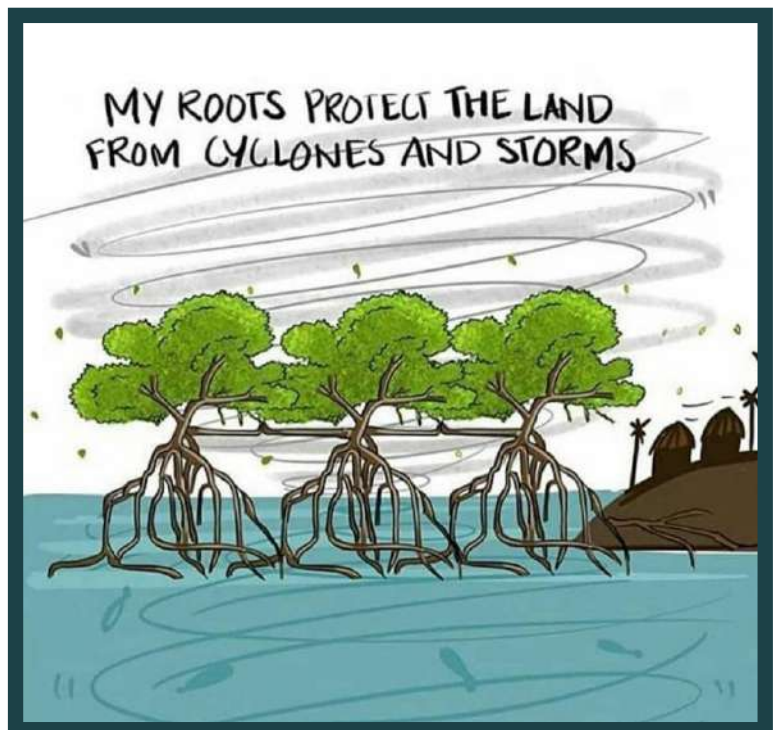
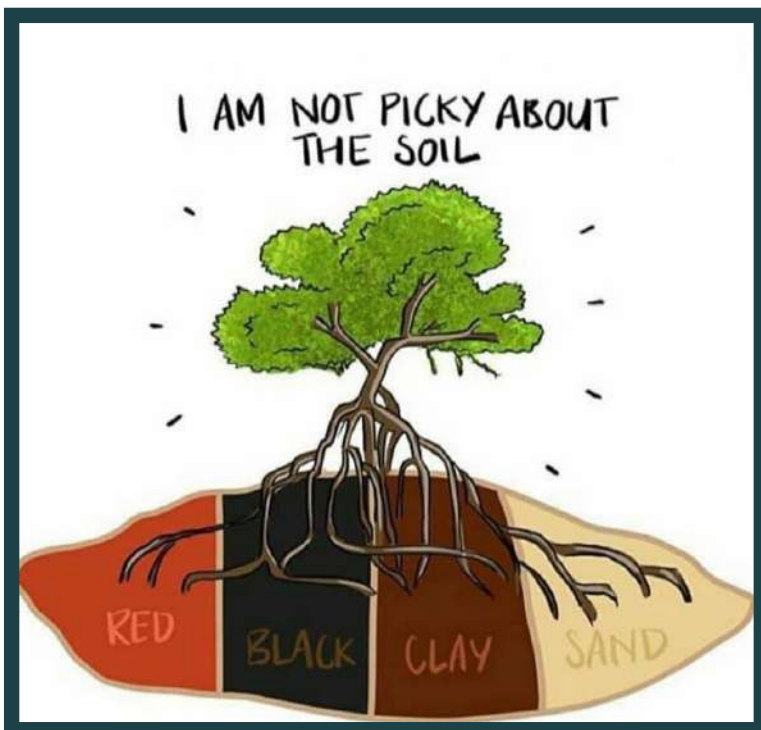
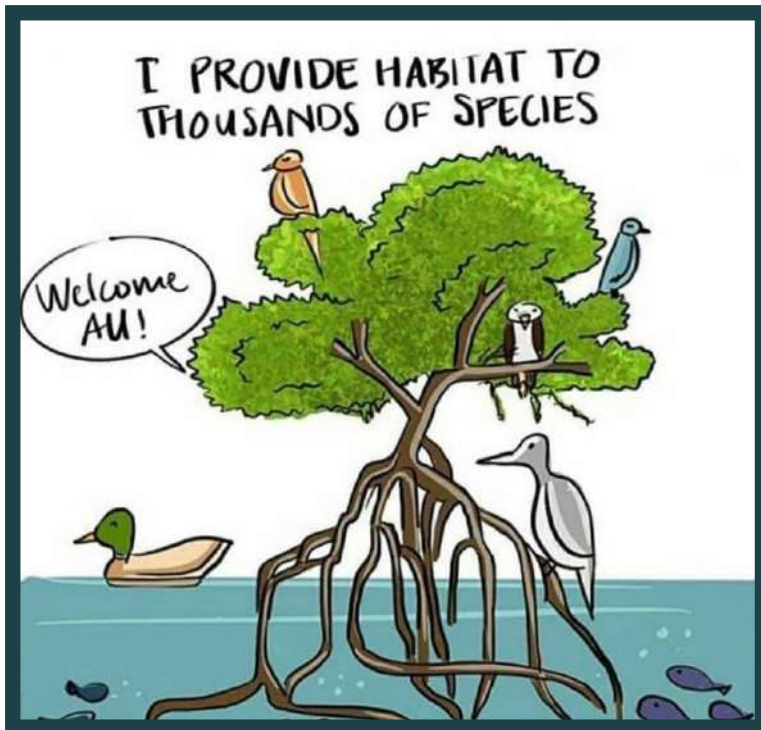
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Registered
Vendors



WHY ARE MANGROVES SO IMPORTANT TO THE ENVIRONMENT?



REEF WORD SEARCH

D I P W V O S P O N G E B P I A K F F D U G R
S Y Z M E S O P H O T I C Z O N E N P R Y Z E
B D M A R I N E D E B R I S O A Z I S F F C E
C D I C I C Q W T S Y C O T A M E N X A R A F
H P V W T B R K W G X C D U X G Y H C A L J Q
X W W M O Z E L V M K J B Y B L Q W A X A E E
M L J L O G G E R H E A D T U R T L E A R L U
M O K I S P I N Y L O B S T E R V B P F O L A
F C S H A R K E Y Q E A G L A F B J R C C Y Y
T T V P J T F C O N C H H P Y E E O S O N F C
H O U L P W A V E S B Z R E E X Z D G G T I R
G P O W G L O X E A L L E H T N A X O O Z S A
T U W Y A R G N I T S T O H K F W C D L U H V
M S H R I M P A X H B P L N U A H F Y H P B L
E L L C M Q B R F P R L B L E A C H I N G L K
W A G J K Y U Q V N P L A H H O Q W S D N N D

ALGAE

BLEACHING

CONCH

CORAL

JELLYFISH

LOGGERHEAD TURTLE

MARINE DEBRIS

MESOPHOTIC ZONE

NEMATOCYST

OCTOPUS

REEF

SHARK

SHRIMP

SPINY LOBSTER

SPONGE

STINGRAY

WAVES

ZOOXANTHELLAE

REEF VOCABULARY

ALGAE - A simple, nonflowering, and typically aquatic plant of a large group that includes the seaweeds and many single-celled forms. Algae contain chlorophyll but lack true stems, roots, leaves, and vascular tissue.

BLEACHING - An absence of coral polyps due to the loss of their symbiotic algae (zooxanthellae). Bleaching is usually caused by stress events such as high water temperatures.

MARINE DEBRIS - Trash found in the ocean.

MESOPHOTIC ZONE - A deeper part of the ocean (often about 300-500 feet deep) where some light still penetrates and photosynthesis may still take place. Meso = middle, Photo = light.

NEMATOCYST - A stinging cell found in the tentacles of coral polyps, anemones and jellies.

WAVES - Vertical moving water that projects above the sea surface. Waves are most often caused by wind.

ZOOXANTHELLAE - Symbiotic algae that live within the tissue of coral polyps and give corals their colors. They produce food for the corals through the process of photosynthesis.

Kanisha Cocom



Wavemaker
HIGHLIGHT

At the beginning of 2020 I had been notified, by my colleague Ryan, that a Wavemaker in Santa Elena wanted an Oceana presentation for an environmental club at St. Ignatius High School. I was then put in contact with Ms. Kanisha Cocom, who looked forward to having her club learn about Oceana’s work. She shared that she had founded the group and wanted to engage students on local environmental issues. I also learnt that she was a past Corozal Wavemaker, so it was great to know that her love for the environment never faded and thought life may have gotten busy, she is still a very active Wavemaker.

In the past, Ms. Kanisha has hosted cleanups with her club, even taking them on an expedition with REDD+ - to learn about both our marine and terrestrial environment. Even with such a drastic shift in life due to COVID-19, she has managed to do her best to be an active Oceana supporter. As we continue to engage Wavemakers online, Ms. Kanisha makes sure to always be present. For the online HATS event and our zoom discussions, she always actively participates, so much so that she even managed to win herself an exclusive Oceana Ecoffee cup.

She has now moved on from St. Ignatius High School, taking on new endeavors where she hopes to lead more environmental stewards. Even with her absence, I am sure her past students and the club she created, have been left with an undeniable appreciation for the environment thanks to Ms. Cocom’s passion.

Submitted by: Kyle Montero, Outreach Assistant, Oceana

Answer Key

. S P O N G E R
 . . . M E S O P H O T I C Z O N E E
 . . M A R I N E D E B R I S E
 T S Y C O T A M E N F
 . L J .
 . A E .
 . . . L O G G E R H E A D T U R T L E . R L .
 . O . . S P I N Y L O B S T E R O L .
 . C S H A R K . . . E A G L A C Y .
 . T C O N C H F .
 . O . . . W A V E S I .
 . P E A L L E H T N A X O O Z S .
 . U . Y A R G N I T S H .
 . S H R I M P .
 . B L E A C H I N G . . .
 .



WHAT'S NEXT?

St. George's Caye Day

September 10th

Zoom Film Discussion: Before The Flood

September 18th

Independence Day

September 21st

Virtual Ocean Hero Award Ceremony

October

Virtual Wavemaker AGM

October

Pan American Day

October 12th

Garifuna Settlement Day

November 19th



BECOME A WAVEMAKER TODAY!



SCAN ME!



**THE OCEANA STAFF
WISHES ALL SENSATIONAL
BELIZEANS A SAFE AND
HAPPY SEPTEMBER
CELEBRATIONS!**

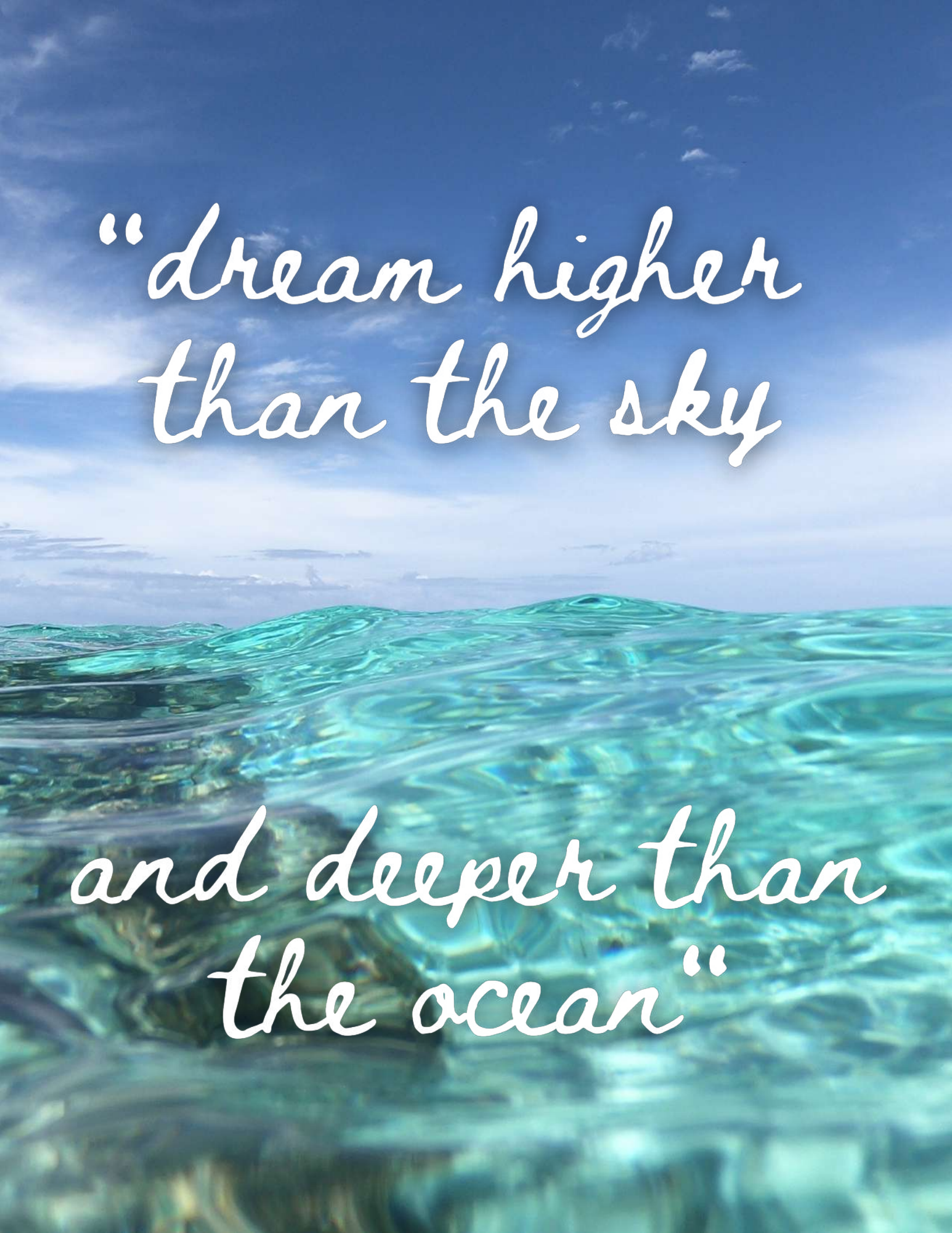
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*"dream higher
than the sky*

*and deeper than
the ocean"*