

Our Flourishing Kelp attracts Dolphins

Welcome & Update from Founders

Addressing climate disruption is so inconvenient. Sometimes it feels easier, SO much easier, to turn a blind eye to global warming and want to settle down in a comfortable community and call it done. BUT the chances of that community suffering a massive environmental calamity are ever increasing - no matter where we are in the world. There really is no safe place to run away to any more. So we live out of suitcases, (currently in Singapore) work long hours and hope - hope that we will be able to build the funding necessary to scale up Marine Permaculture in time to save this very precious planet of ours.



marine visitors!

Fortunately, there are other like-minded people out there. For example take a look below at what some individuals, nonprofits and companies are doing to help us help the planet. And, our theories are proving right - check out our

Brian and Rebecca

Remember: The single most important thing our American supporters can do this quarter is to vote.

Note from Rosie (the newsletter compiler): It was so exciting to help Rebecca put this newsletter together because it is full of heart-expanding progress.

Philippine news

Have we mentioned what brave people we have on our Philippine team? They have persevered to work on the Marine Permaculture deployment during the middle of the Filipino military lockdown! Two of our guys were bitten by a distraught dog and have been undergoing rabies shots - which are brutal. Plus, their hearts were hammered when two of their dogs died. It's been rough. In addition, Covid has slowed the acquisition of parts and hampered our ability to travel to our seaweed trials - even around the town.

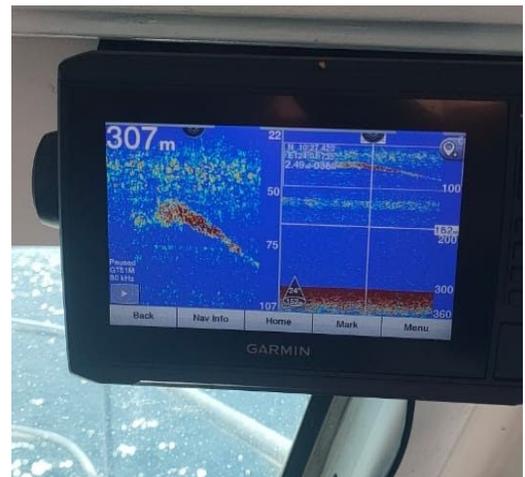
But our staff are prevailing! They did a great seaweed trial showing that the ocean waters around the Philippines are now too hot to grow seaweed in the summer. However, seaweed grown during the hot summer season with Marine Permaculture can not only grow, but is also healthier than the control group. In the control group, the seaweed lost color and deteriorated.

All of our hard work is paying off

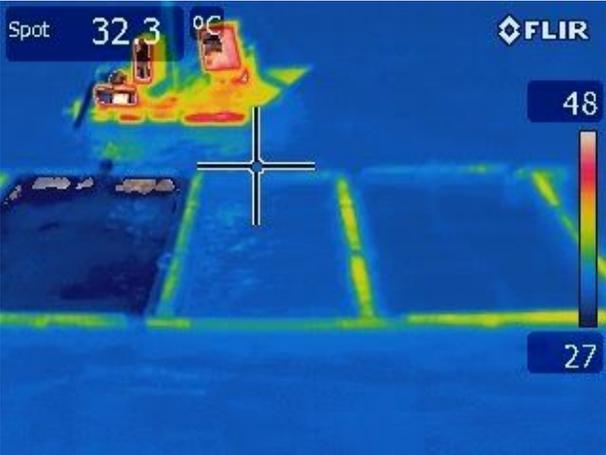
For three days, a whale shark took up residence around our Marine Permaculture - we think she viewed it as a personal grocery delivery system for algae. We never had a camera in our hands when she was near the surface, but we did capture a sonogram only a mother could love! of her below the water (see the sonar image). The locals tell us that they believe that this whale shark swam from a tourist site 200 km away to visit us ... and our algae-rich waters.

Dolphins have *not* been seen in Camotes Sea for over 20 years - until recently. We are excited to report that a family of dolphins have started hanging out around our Marine Permaculture!!! You can see the first time we caught them on video here-- they have spent over a month near our Marine Permaculture, enjoying fish and making themselves feel at home!

<https://www.climatefoundation.org/newsletter.html>



Research



We did a cool little test. Our team in the Philippines put six strands of seaweed in two massive troughs and floated them in the Camotes Sea. One trough had regular ocean water (light blue) The other trough had upwelled Marine Permaculture water (dark blue water) . We measured the ocean temperature of the ocean with a Pyrometer. And it was frighteningly warm at 32.3 C(90.14F) in the hot summer season - which explains why seaweed is dying.

Below is a photo (taken by a drone) of the same troughs as above.



If you look at the trough on the left you will see that the seaweed is a healthy dark brown. In the trough on the right the water is the same temperature as the ocean and the high temperatures were killing the seaweed on the right.

These high ocean temperatures are killing the seaweed all around the equator, which is destroying the ecosystems and the income for the locals. But - if you look back at the trough on the left - there is hope! The happy news is

that seaweed is growing two to three times faster under Marine Permaculture than the baseline control group.

Biostimulant

With the successful growth of summer seaweed, we have moved onto step two - what can we do with it? The answer for us is biostimulant. Despite all the challenges in the Philippines, we are now hunting for a building to start a biostimulant factory.

What is biostimulant? Well, it's pretty darn exciting! Our seaweed biostimulant can improve rice by at least 11% to 20% (!) which is important because climate change is already making crop growing increasingly challenging. (For example, Iowa just lost 14 million acres of crops (see more [here](#)) and a province in China lost their rice crop (see [here](#))). Also, this will hopefully become a source of backup revenue for us beyond the valuable grants, donations and goodwill provided to get us this far so far.

Kelp Coin (™)



Thanks to volunteers Daniel, Cameron and Matthew, we are doing a soft launch of Kelp Coin. For each \$100 donation made on the kelp coin [page](#), we are providing a kelp coin blockchain security token certificate as a token of our appreciation. The kelp coin is a forward contract representing a ton of living seaweed forest biomass on a Marine Permaculture. After maturity of the kelp coin, the token will be available for retirement, which will sink a ton of

seaweed to the middle and deep ocean as a blue carbon sink. For more information, check it out [here](#):

Rosie note: It's worth it just to see the wonderful banner video.

AND, by the way, carbon capture companies are contacting us!



Wikipedia

WIKIPEDIA
The Free Encyclopedia

Great news! Thanks to the persistence of our Volunteers, Sam Zak and Cade, we got into Wikipedia! Check out the page [here](#).

Australian News



The famous Australian based, multinational MinterEllison is a fabulous law firm which is volunteering to help the Earth by helping us through its Community Investment and Pro Bono Program. And we are very, very grateful!



AND more good news! Dr Brian Von Herzen has been accepted as an Australian Global Talent Visa recipient, which will make it possible to establish our international headquarters in Australia. Many thanks to MinterEllison for invaluable help with all of the paperwork that it took to make it happen."

Tasmania



Remember when we reported that the University of Tasmania (UTAS) helped our regeneration project grow kelp from spores, collected from 'wild' specimens in remnant populations and developed them in the laboratory? Well, here is an update:

"The giant kelp we outplanted in Storm Bay are continuing to grow, and during this visit we were able to accurately quantify and measure them, despite the swelly conditions. There are still more than 100 juvenile giant kelp growing on each of the three arrays, but now the average size of our juvenile kelp is about 25 cm, with some of the

largest individuals longer than 65 cm! They all look very healthy, and are free from bleaching and fouling, which is amazing considering they have been out there all summer, when water temperatures and the associated stressors are typically highest. “ Many thanks to Dr. Cayne Layton and Prof. Craig Johnson, both part of the UTAS team, for these results on our Marine Permaculture Tasmanian Project Phase 1.

Rosie note - Once the water visibility clears up, we should get another update. Watch out for it in the next newsletter.

How you are helping

HATCH

We are grateful to the global engineering firm [Hatch](#) who has volunteered to design our scaled Marine Permaculture platforms for the irrigated offshore seaweed forests! We love companies who take action to help save the planet!



Dear Bob, (Bob leads our fundraising outreach efforts)

Thank you for your kind message. The donation was made by my 11-year-old son, (Desmond) who earned the money himself by making and selling soap. His self-initiated business model includes donating 1/3 of his earnings to the environment and combating climate change. He found your organization online on his own, researched what you are doing and decided to donate his hard earned money to you. Keep up the good work!

Be well, Deirdre



Amanda Bronkhorst was trying to figure out how to save our planet when she came up with an idea. How about if everyone plants just one tree? From that hatched the non-profit “JUST ONE Tree”. JUST ONE Tree has made it so that you can buy just one tree for £1 / \$1 / €1. Amanda partners with well established and well respected reforestation partners which have to go through a strict due diligence process and be ratified by herself and her team of

advisors. Once approved, Amanda donates money to these tree growing and planting groups. Upon learning that 100 hectares of Marine Permaculture fixes a ton of Co2 every hour, Amanda decided to contact us to investigate donating to us to help us grow kelp trees and other seaweed forests from the equator to the temperate latitudes. And she is! And boy do we appreciate it! And she made a gorgeous ocean web page [here](#).

Creatives



Musicians

We were contacted by Formidable Vegetables who use their musical talents to talk about the climate. This one is their latest and it is set to rap music. - [check it out here](#)



Movie

And if you haven't seen it - 2040 is a darn good movie that shows people how we can save this planet. Check out this [trailer](#)
Image from 2040. ©GoodThing Productions/Regen Pictures



You Tube Video Filmmaker Fritz Moser of Vienna, Austria, found us in Woods Hole and made this wonderful short film on Marine Permaculture (he made The Good American). [Check it out here.](#)



Podcast

Brian was invited to have an online chat with [The Ecology Hour](#), which has been a long running program on **KZYX**, (USA) produced locally by a rotating group of hosts including Anna Halligan, Bob Spies & Tim Bray, and Hannah Bird.



Seaweed Salsa Recipe

For the adventurous cook, Bill and Jaye from the Ecology Hour podcast sent us this seaweed salsa recipe:

3 parts Fresh Wakame

3 parts Fresh Nori

2 parts Tomato

.5 to 1 part Garlic (we are garlic freaks; could use less; scapes that had made the pearl-like balls is what I used) 1.25 part Onion (and/or leek)

1 part jalapeno pepper

1/2 part Cilantro

Amounts are very approximate and by volume. Roughly puree the seaweed in a good blender. Then coarsely chop the rest of the ingredients (low speed). They think any seaweed would work, (but bull kelp might be a bit slimy); the 2 seaweeds above are a bit more robust.

Volunteers

We are increasing our outreach to our volunteers - we need your help! So if you receive an email from us - it's just us asking for your help with regards to the talents that you listed in the volunteer sign up sheet.

And if you are not already on our volunteer list and have a cool talent to share, you can find the volunteer sign up sheet [here](#)



Our Reddit community is growing and there is some great material being posted on it - if you want to hang out with other like minded folks that want to help save the planet - drop in at <https://www.reddit.com/r/ClimateFoundation/>

Companion update

So we discovered why the stray cat we took in (yes, we are softies) has been so CATankerous... And yes, somebody is getting neutered! ⇨.



Remember Musty who was rescued in February? In hindsight, it was probably not a good idea to have the little puppy ride around on our shoulders..cause she weighs a lot more now!



Talking about Climate change can help

By Ann Paterson, a behavioural ecologist

The Yale Program on Climate Communication (YPCC) has been researching changing attitudes towards climate change and have found a complex picture.



They divided people in the United States into six groups whose attitudes towards Climate Change ranged from dismissive to alarmed. The alarmed group take the issue very seriously and are actively looking for ways to make a difference. They understand that this is a crisis. In contrast, people who are dismissive are certain that there is nothing wrong with the climate. However, they are only a small percentage of people (even if they seem numerous in comments on online articles). Most people fall into groups somewhere in the middle, meaning that they may not be actively concerned but may be open to learning about these issues. [More information here.](#)

Between 2014 and 2020, the percentage of people who are in the alarmed category has risen from 11% to 31% of survey participants, making them the single largest group.

The dismissive group has dropped from 12% to 10%. [Publication here.](#)

Although the exact breakdown may be different from country to country, data like this shows that the efforts to increase understanding of climate change are making a

difference. It shows those who are not very worried about the problem or unsure about it, are open to learning if we are willing to start conversations about our own concerns and talk about the changes we are making in our own lives.

Climate scientist Katharine Hayhoe says that one of the most important things that anyone can do is to start being open about their thoughts and feelings regarding climate change – in other words, they should talk about it with family, friends, and others who may be willing to listen and express their fears, worries, and hopes for the future. That can be intimidating, but the YPCC data show that there are many people willing to listen if we are willing to try.

See Katharine's Ted Talk [here](#)
