Help Us Protect Our Children’s Future

For the past five years, there has been a strong plea from Te Ipukarea Society, a long-standing Cook Islands environmental organisation, for the Cook Islands Government to ban the use of drifting Fish Aggregation Devices (FADs) by purse seiners fishing in our waters, to help conserve bigeye tuna. These tuna are overfished in the region, and are caught in much higher numbers as juveniles when drifting FADs are used. Drifting FADs are also a major source of marine pollution, with as many as 100,000 drifting around in our ocean. When no longer useful to the fishing vessel, they are abandoned. There also significant concerns about the effect that industrial fishing has had on local Cook Islands fishers.

The wider Cook Islands community supported the concerns about the fishery. In 2015 they called for a total ban on purse seine fishing, through a national petition, signed by more than half of Cook Islands residents of voting age, over 4000 people. This was presented to Parliament, sending a very clear message that the public do not want purse seine fishing to continue in our waters.

Although a select committee was established to consider the petition, nothing changed. The Government has ignored the people, and issued more licences to fish using FADs. In addition to an increased allocation to the US purse seine fleet, the Government signed an agreement with European Union (EU) early last year for the Spanish purse seine fleet to fish here. The Spanish are considered among the worst of the purse seine fleets, as they have the largest boats and fish almost all the time using FADs. Te Ipukarea Society has joined with the Aronga Mana, the traditional leaders in the Cook Islands, and issued proceedings in the Cook Islands High Court in relation to the expansion of purse seine fishing and the fishery agreement with the EU.

One of three public anti-Purse Seining protest marches held in the past 3 years, this one was lead by our former Patron, Makea Margaret Karika Ariki who passed away last year.

Our case is that the Government failed to conduct an Environmental Impact Assessment and to apply the precautionary approach in making the fishery plan and entering the EU agreement. The precautionary approach says that if there is uncertainty about the impacts of an activity then it should not take place. These were requirements the Government had to comply with under international law and under Cook Islands law. We also say that the Government failed to consult with the Aronga Mana, who were tiaki (guardians) of the moana and kai moana (sea and seafood) under traditional Cook Islands custom, before making the fishery plan. Further, the Government has failed to review the fishery plan and consult with key stakeholders, including the Aronga Mana and Te Ipukarea Society.
The High Court’s judgment was issued in December 2017. Although the Court expressed reservations and concerns about the Government’s approach and the caution taken by the Secretary for Marine Resources, it declined to grant the relief we were seeking. After careful consideration of the Court’s decision, we formed the view that there were grounds to appeal. Our appeal will be heard by three judges in the Cook Islands Court of Appeal on 30 April and 1 May.

Our lawyers have again agreed to fight the case for us for no fee. However, we do need to cover the costs of their airfares and accommodation, as well as some administrative costs. To date this is a total of NZ$6320. We are grateful for any support you are able to give.

To sign up your organisation for Year of the Bird Activities:  
https://docs.google.com/forms/d/e/1FAIpQLSeiK8JsO9plOfoXGFleEz8sELfF59T4uUFvdmUFVeev6zw/viewform

For more information on the YOTB and Individual sign up:  
https://www.nationalgeographic.org/projects/year-of-the-bird/

Te Ipukarea Staff Attend Diplomatic Expo

On the 8th March Alanna and Liam represented Te Ipukarea Society at a “mini-expo”, which was attended by a delegation of New Zealand ministers, MP’s, Civil Servants, and NGO representatives. This was part of the Prime Minister Jacinda Adern’s “Pacific Reset” visit to Rarotonga and other Pacific Islands.

It was a good chance to network with members of the NZ Pacific Delegation at Coastal Kitchen in Tupapa and talk to them about the work Te Ipukarea Society does here in the Cook Islands.
Liam Travels to Atiu to Complete Ara Pepe Survey

Te Ipukarea Project officer Liam Kokaua was on Atiu from the 17th-21st March supporting the work of the Cook Islands Natural Heritage Project (CINHP) and Cook Islands Ridge to Reef Project. The main purpose of the work was to survey the endemic ‘Ara Pepe (Ngaputoru Pandanus) plant on Atiu, and support the newly established Moko’ero-Nui Nature Reserve which was created with the Atiu landowners’ support in 2016. The team also included Cook Islands biodiversity expert Gerald McCormack (CINHP), local Atiu biodiversity expert George Mateariki, and Dan-Olaf Rasmussen of the Cook Islands National Environment Service.

Preliminary findings from the ‘Ara Pepe survey are that the plant’s range on Atiu is much larger than previously thought, as prior to the survey it had only been recorded at two individual sites. This mirrors findings from last year’s ‘Ara Pepe survey on Ma’uke, which Liam also participated in, and which significantly increased the known range of ‘Ara Pepe on that island. The plant is only known to be found on the islands of Atiu and Ma’uke, and therefore considered a Cook Islands endemic. It is typically found in rugged raised coral (makatea) environments. The team were able to see the rare plant in fruit, and noted differences in the structure of the plant between the different habitats such as those found in the makatea and a small number of plants which grow under forest canopies. Drone technology was utilised to survey areas made inaccessible by the makatea. The two younger team members were also mentored by the two more experienced experts in the names (common, māori, and scientific) and uses of the many native and introduced plants found on Atiu.

Meitaki ma’ata to Gerald and Ridge to Reef Project Cook Islands for supporting Liam’s participation in the survey.

Conservation Team Visit Kopeka Cave on Atiu

While in Atiu the ‘Ara Pepe Survey team made a quick trip to visit the geological wonders of Ana Takitaki cave. Thanks to Atiu Environment officer Kau Henry for guiding them. This is one of only two caves in the world where the Kopeka (Atiu Swiftlet) is found, the other is the lesser-known Vai Tupuranga which TIS staff Liam and Mary Ra’ui-McDonald visited with George Mateariki in 2016.

The bird lives in complete darkness of the cave, finding its way with echolocation which can be heard by humans as a series of loud clicks. During the day it leaves the cave to hunt for insects around the island. The bird's main natural predator is the lārave (a long-legged land crab which also lives in the cave).

The team saw a handful of Kopeka during their trip. It was noted by Gerald, who has lead scientific expeditions to Ana Takitaki between 50 and 100 times, that there were fewer Kopeka in the cave on this trip compared to any of his previous visits. Whether this was a merely a coincidence or a result of a new threat to the bird is uncertain.

Is that bio-plate, cup or straw really compostable?

This article from Te Ipukarea Society is adapted from a larger publication published by the 5 gyres institute, which can be found here:


There is much confusion surrounding terms such as biodegradable and compostable, as well as bioplastic, bio-based, bio-polymer, etc. While all these terms have specific meanings, they are confusing to consumers. This confusion is often created by misleading advertising by the manufacturers. Terms such as “compostable”, “biodegradable” or “ecofriendly” are used frequently on packaging in ways that confuse the public. This problem is made worse by the use of similar images and terms on plastics derived from fossil fuels in an attempt to trick customers who are seeking environmental attributes they believe bioplastics have.

Bioplastics and bio-based plastics are made from renewable plant material like the leftover pulp from harvesting sugarcane. However, this doesn’t determine the products compostability or biodegradability, the molecular structure does. Therefore using the word “Bioplastic” doesn’t tell you anything about its performance in the environment, or its recyclability.

Let’s break it down. Bio-based plastics are produced from monomers derived from biomass, like fermenting plant carbohydrates into ethylene, which can then be polymerized into polyethylene (PE). You can also make PET the same way. PET is the plastic polymer that water bottles, for instance, are commonly made of, and while nearly all PET water bottles are made from fossil fuel-derived plastic, PET can also be made from biomass, and is called bio-PET. Bio-PET, bio-PP, or bio-PE are no different than PET, PP or PE, the feedstock is just different—and none of them are compostable or biodegradable.

A typical example of the range of plastic and other waste at our Arorangi Landfill.

Bio-derived plastic is a mixture of plastics derived from both feedstocks, modern plants and fossil fuels. Having some of the feedstock come from modern plants allows companies to advertise with ambiguous words like “green” and “natural”, and depicting green leaves and trees in their graphics. One example is the “Plant Bottle”, a product from Coca Cola. Derived from up to 30% plant material and 70% or more other feedstocks, it is still 100% polyethylene. While the plant bottle is recyclable,
it is not biodegradable or compostable, though the leaf in its design suggests otherwise.

Biopolymers, the truly biodegradable plastics, are made from a natural substance, such as chitin or cellulose, polyactic acid (PLA) made from plants, or the polymer polyhydroxyalkanoate (PHA), which is naturally produced by bacteria. But these biopolymers, while considered compostable, are designed to be composted in industrial compost facilities, not backyard compost bins or the environment. This leads to further public confusion about which bin those products go in, or what happens if they become litter or enter the marine environment.

Composting is very specific process that happens only in situations with the right microorganisms and environmental conditions – and it creates humus, water, and heat. Other biodegradation processes do not make humus, which is an important part of soils. If compostable products are placed in an open landfill or dump where oxygen is available, they will decompose at a rate similar to other biodegradable materials in the same setting. If compostable products are placed in the more common anaerobic (air-locked or capped) landfill and deprived of oxygen and micro-organisms, then the ability of the compostable products to decompose will be severely restricted. This is true of all biodegradable materials placed in this setting, including paper, yard waste and food waste.

So, which ones are biodegradable or compostable? Bio-based and bio-derived plastics are neither, so they need to enter the recycle stream, and must be labelled in a way that doesn’t mislead the public. When we talk about biodegradation, we mean that the polymer breaks down into smaller molecules, such as CO2, CH4 and H2O by microbial digestion. Biopolymers like PHA and PLA are biodegradable, but only under very specific conditions. These conditions are not found in soil, home compost bins or the marine environment. According to most of the companies that use PHA or PLA, the ocean or a backyard compost bin is not considered an acceptable disposal environment for their product, although terms like “compostable” and “biodegradable” are still commonly used on packaging.

In summary, there’s too much confusion. There is a need for consistent labelling on all products and packaging, and more “truth in advertising” so the public understands how to be responsible with their bioplastics, and what happens if they become litter. There are at least two commercial compost operations on Rarotonga, Baker’s Tree Services and Titikaveka Growers Association. However there is currently no system in place to connect compostable household and commercial waste with these compost operators. This is something that needs to be further explored.

How to Be a Caretaker of Our Local Environment

Article published in Cook Islands News in March

Mana Tiaki, translated basically means being a guardian or caretaker of something, and in this case, the local mana tiaki programme is all about being a guardian of our local environment.

When on holiday, studies have shown that visiting guests are becoming more aware of their environmental impacts on holiday destinations and are willing to give back to the local environment by either practicing eco-friendly solutions or supporting organisation or accommodations that practice eco-friendly measures.
There are a number of eco-friendly practices that visiting guests can keep in mind to be a mana tiaki guardian, and to ensure their favourite holiday destination remains the same for when they next return.

To be Mana Tiaki on a small tropical island, it’s important to think about your waste and how much of it you are producing. To be on top of this, buy local products, with minimal packaging, and support the local economy rather than bringing packaged food from overseas. These packaged goods tend to come with wrappers and polystyrene materials which sometimes don’t just end up in the local landfill but in the native bush and even within the marine environment.

Support local food vendors who use biodegradable containers, not plastic and polystyrene. Better yet get in behind the local school’s rent a plate initiative at the popular Muri night market, to cut down on disposable waste.

Say no to plastic straws or plastic bags, but instead take a reusable, or even your own bamboo or stainless steel straw, with you during your trips to town.

Invest in a reusable water bottle, which can be filled with water you boil the night before, filtered water at your accommodation, or from water stations around the island which display a safe to drink sign. Having a reusable water bottle can drastically cut down on your plastic bottle waste and of course save you money whilst on holiday.

Have short showers rather than baths, and support eco-friendly cleansing products to minimise waste water pollution.

When thinking about our local biodiversity, ensure all hiking boots and runners are cleaned before entering popular hiking tracks. This way you can minimize the chances of invasive species being spread into the native bush.

Finally support local accommodations who are a part of Te Ipukarea Society’s Mana Tiaki programme, endorsed by Cook Islands Tourism. Or drop a few dollars into the Mana Tiaki collection boxes which you will see at supporting businesses, bars and cafes around the island. All businesses a part of the Mana Tiaki programme show that they are environmentally conscious about how they operate and support the work of Te Ipukarea Society, a proactive Non-Government Environmental Organisation.

Accommodations that are a part of the Mana Tiaki programme include Muri Beachcomber, Ikurangi Eco retreat, Pacific Resort Rarotonga, Moana Sands, Palm Grove, Coral Sands Apartments, Little Polynesian, Sunset Resort, Royale Takitumu. An example of what some of these accommodations do to support the Mana Tiaki programme is provided by the Muri Beachcomber. This popular resort, located right next to the Muri Night Markets practices a range of eco-friendly measurers to achieve their corporate responsibility goals. For instance when it comes to appropriate waste water measures Muri Beachcomber use only Phosphate free cleaning products. They also have a natural waste water filtration system through the use of banana plants being used over soak pits. A “no service”, “No towel change”, “No sheet change” door hanger option is also made available for guests to help reduce waste water produced. They also have a planned preventative maintenance system in place whereby their septic tanks are emptied every two years.

Waste is minimised by the accommodation through the use of filtered water systems in all rooms to reduce plastic bottle waste. All green waste is delivered to the Titikaveka Growers Association on a weekly basis, to be reused and turned into compost for the local community. Recycling practices include all bottles, cans and glass being picked up twice a week and recycled by the local landfill.

Energy efficient measures include the use of solar heating for the accommodations hot water system, use of LED light bulbs throughout the accommodation, and eco-friendly washing machines that use less water and energy. And of course making the most of our sunny weather by line drying laundry as much as possible.

If you operate an accommodation and would like to get on board the Mana Tiaki Programme, get in touch with Alanna Smith at Te Ipukarea Society on 21144 or email a.smith@tiscookislands.org. To keep updated with more tips on how to be Mana Tiaki and to see how other local accommodations are keeping it green be sure to visit Te Ipukarea Society’s web page tiscookislands.org.