

# A Plastic Ocean with Jo Ruxton

**Jeremy Melder** 00:00

Hello, my name is Jeremy Melder, and on the presenter from Beaming Green. Before we start, I would like to acknowledge that this podcast is being held on the traditional lands of the Bundjalung people and paying our respects to elders both past, present and emerging. The Beaming Green podcast is a weekly podcast, which will help you to take out some of the stress and confusion about how to live your life more sustainably. And we do this by introducing you to people that have first-hand experience and expertise in all aspects of sustainability. So you can get some amazing insights. You can implement simple and practical solutions to enhance your life and the lives of your family.

Plastic is accumulating throughout the earth's environment and adversely affecting the health of wildlife, wildlife habitat and humans. It has been said that there will be more plastic in the ocean than fish by 2050. Today, I'm really excited to be speaking with Jo Ruxton, a co-founder of the Plastic Ocean Foundation in the UK, which is a registered charity. Jo was working with the BBC Natural History unit for 12 years, producing and directing underwater sequences for the award-winning Blue Planet series. She noticed that there was an increased number of plastic pollutants in the water. Feeling disappointed in the lack of conversion messages about this problem, Jo decided to leave, to work independently, and produce a film called A Plastic Ocean and it was two years before there was enough funding to begin filming. The more she learned about the subject, the more determined she was to tell the story as research was revealing a much bigger problem than she had ever imagined. It was eight years before her multi-award-winning film, A Plastic Ocean was released in 70 countries and in 15 languages. It was thanks to Sir David Attenborough telling The Blue Planet team to watch A Plastic Ocean, that plastic was included in its environmental episode. Until he did so, plastic did not feature in it at all. Jo Ruxton, welcome to Beaming Green.

**Jo Ruxton** 02:32

thank you so much.

**Jeremy Melder** 02:34

Well, I should say I was introduced to you by a good friend of mine, and I am sure it's a good friend of yours, Paul Brincat. And he's he introduced me because I was telling him about a program that my wife and I wanted to set up and not for profit, called Let's Waste Less in a small rural town called Murwillumbah. And he was telling me about your film. And we just jumped on it at the time and said, Yeah, let's if we can get Jo on and, and it was the launch of Let's Waste Less, but also in Australia, or in rural town of Murwillumbah. It was the launch of A Plastic Ocean. And we managed to show that there. And we were quite amazed at the turnout and how much of an impact it had on our little town in a lot of people were talking about it. So Jo, you know, thank you so much for being that catalyst for that change in our little town of I think is about 7000 people. But what shocked you most when you were making this film,

**Jo Ruxton** 03:41

there are many things that shocked me. And I learned an awful lot on the journey because it took eight years from deciding to make it to the film finally coming out. And during the first two years when I was researching the stories researching the whole subject, and fundraising because like it was a two year process to get the funds just to do the first shoot, which will be one. But during that time, I also went out to the center of the North Pacific Ocean, which is where people describe this so called Great Pacific Garbage Patch. And the original film was going to be based on that it was going to be a journey to it. And there was talk about a fleet of decommissioned fishing boats that were going to go out there and gather up the plastic and take it for recycling and recycling plant would be able to ship and it just sounded like it was too good to be true. And almost like the cartoon Wally. Yeah. And it was on that journey that the truth actually came out. There were a group of six scientists and the rest of us were volunteers and we were out there for a month and I The first thing that we couldn't find was the big Pacific Garbage Patch with, you know, this big island that was supposed to be three times the size of Spain. Yeah. But what we were doing, from about 400 miles out, so west of San Francisco was deploying Manta trolls. So these are very, very fine mesh nets, 300 microns, the, the, the mesh of those, and those were trailed on the surface of the water for an hour at intervals. So we did about four during the 24 hour period. And the water looks beautiful. It's you know, it's everyone's dream of the Pacific, this incredible clear blue color. And when the first one came up, there were so many tiny pieces of plastic in there, that I was really shocked. And I thought, well, this is terrible, that water looks amazing. But actually, that was nothing because the closer we got to the center, the more than that we're completely choked up with the stuff. We weren't seeing giant pieces of floating plastic, you know, the island, the so called Island is described as being 10 meters deep. But it was nothing like that. And there were occasional pieces of plastic floating around crates, and filters and things like that bigger pieces, but they looked as if they come from shipping, they're the kind of things that would be thrown overboard. But one of the things I learned on that was that 80% of plastic in the ocean comes from the land anyway. Yeah. But the other is, by the time it leaves our shores. So when it's been washed down, storm drains are coming down rivers, and so on, it takes about 20 years to get to the surface, or to sorry to get to the centers of the ocean. And during that time, because of the the sunlight and the salt water and the wave action, plastic starts to become brittle. But it doesn't break down. You know, plastic was the one thing that was designed never to break down. And all it does is becomes very brittle and weatherworn. And it starts to break up into smaller and smaller and smaller pieces. So the estimate was that it takes about 20 years to get there. And that's what we were finding the plastic had made its way to the center because of the circular current systems that you have in each of those parts of the ocean. But what's collecting in the middle isn't big pieces, you don't see big bottles and things like that it is microplastics. And they were mixed in with the plankton at the surface. And plastic will either float or sink depending on its density. So if the density is less than one, it will be on the surface, much of the plastic sinks right away. But also the plastic on the surface, little tiny microorganisms grow on it and they become heavy and start to sink. So it's estimated that about a 90% of plastic in the ocean is actually very, very deep down as tiny particles mixed in with the sediment. So the whole story took on a different meaning. Yeah. And I toyed with the idea then of making it a radio series because I couldn't see how we could make nets of microplastics. Interesting. And it was it was a real sort of consideration. I mean, we were counting. When I say we the scientists were doing the nitty gritty work. We're doing estimates of how many living organisms there were compared to the plastic and it was about 26 to one plastic to living organisms. And that was at the center. And I realized how serious it was because the

the plankton is the heart of the food chain and the phytoplankton is the plant section of plankton that provides more than half the oxygen we breathe and absorbs much of the carbon dioxide. So the whole balance was being interfered with by this plastic. And that to me was a massive learning curve. But the other one which made it even more serious, was I learned about the chemicals that not only leach from plastic but are attracted to it in the ocean. So you might have heard of things like BPA as well. Yes, there were many plastic bottles. That's just one of the chemicals that gets plastic its property there there are hundreds of them. And these chemicals are incorporated into the plastic during the manufacturer manufacture to give it either its strength or to make it flexible or clarity whatever it is these chemicals are added and those can leach out particularly if there's fatty substances stored in them like milk or food. Hmm but the other thing is when plastic reaches the ocean, it starts to attract the chemicals. They're and in a phenomenal way, it's almost as if it's got a giant magnet yet, and it just pulls them in. And one of the scientists described it to me in a very, very easy to understand way, which I like. And a visual way is that when you drop a single droplet of water into a pot of oil into a puddle, you instantly get that rainbow effect right across that puddle, you know, blink and you miss it happening. Yeah, that's what it's like with the plastic, it instantly attracts these chemicals. And these chemicals are in the ocean after decades of agricultural and industrial runoff. So if you think of something like DDT, it was banned in the 70s. But it hasn't gone anywhere. It's still out there. Yeah, so you can leave brand new plastic in the ocean per day. And the chances are very high that you'll even find DDT on that. So these are the things that have been ingested by the animals that eat the plankton,

**Jeremy Melder** 10:57

and then us as well, right?

**Jo Ruxton** 10:58

Well as I mean, them as well, we do. And it's not just the fact that the plastic is moving up the food chain, because we don't eat the guts of the fish apart from things like mussels, of course. But the chemicals, they love plastic, but they like fat even more. So once they're ingested by the fish, they are released and stored in the fatty tissues of those fish, which means just under the the skin, you know, the bits that we like to eat and crisper. And those chemicals have been linked to all kinds of critical disease in humans, including cancer, autoimmune problems, which

**Jeremy Melder** 11:37

is about which I know about Yes,

**Jo Ruxton** 11:39

yeah, and cognitive behavioral disorders, and that they are endocrine disrupting infertility. So all the things we hear more and more about, have been linked to those same chemical. So it's a two way thing with plastic, you know, it leeches them out and it attracts them onto it. So it the whole thing became a big, a big question of Gosh, this story is much bigger, I didn't at all, I thought that when I was going to make the film was what an eyesore it was. And the animals, you know, marine animals were getting entangled in it and choking on it. But the very fact that you know, it was now threatening our own health. I wanted to make the film that really reached a lot of people. And I knew it needed a story if we had to do that.

**Jeremy Melder** 12:26

And what I really created too, isn't it really, I love the fact you started off with the chasing of the blue whale. In my my homeland of Sri Lanka,

**Jo Ruxton** 12:36

We weren't chasing it. I have nothing, you know, to me, you know, like

**Jeremy Melder** 12:39

the following. You're trying to find it. Should I say?

**Jo Ruxton** 12:42

Yes. And that was because I, I thought I if I if I make this a film, it's got to have a charismatic animal in there. And there's, you know, there happens to be a very charismatic one that feeds on plankton. So that was the that's how the blue whales came into it. And yes, and then I, I contacted a friend of mine who I'd worked with when I worked for WWF in Hong Kong. And she was doing the pink dolphin studies. But she was also a real wealth of knowledge on cetaceans in general, and I thought she was doing a project with blue whale. So I asked her and she said, Yes, we are in Sri Lanka. so

**Jeremy Melder** 13:19

wonderful. So you said you felt like you were wanting to do a radio series. So what how did you end up then, you know, where did transpire? What were the obstacles you had to overcome to get into making a film?

**Jo Ruxton** 13:32

Well, it wasn't a very long thought, because as soon as I thought about Wales, then I stopped to the whole film thing and carried on fundraising. The first shoot was an expensive one. And it comes across in the film and in a very different way to actually what the reality was.

**Jeremy Melder** 13:50

Can you tell us about that?

**Jo Ruxton** 13:52

Well, it's in the film, it comes off as if it was that the character in the film is Craig Leeson. And it's told from his perspective, that he always wanted to see them which he did. But the reason that we went there was because my very good friend Lindsay was doing the study there and watch what she was doing was the the plan was to Dart the whales to get a tiny piece of skin and blubber because from that tiny biopsy, you can tell so much about the whale you can tell its nutritional levels you can look at its its hormone level, you can you can see if there are any chemicals associated with plastic in there. So it hasn't been ingesting plastic which are getting into its into it some fatty layers. So the idea was to do that and she'd had permission for two years. So this was the first time that she'd gone there. To do this, but the day we all landed and just just to let you know that shoot alone. The reason it took two years to raise the funds was that shoot cost 130,000 pounds sterling. So we had to bring people in from Hong Kong Craig was it was the directing the top side on that shoot, and, and we had the underwater teams with. So we had Craig and Lindsay and various people coming from Hong Kong, we had camera crews

coming in from the UK. And it was and we had to bring the boats over from the Maldives because the whale watching boats in Sri Lanka are very small. And we wanted to be able to live on board and be out there, you know, Dawn, right where the whales go to feed, which is the drop off the continental shelf drop off about 30 miles south of Sri Lanka. And the day we landed, the Sri Lankan government withdrew the permission to Dart the whales. And and so there we were with all these people, and I'm thinking what on earth do we do? Because And the worst part for me was that we had raised money from donations from people that cared about what we were doing. And obviously I'd given them you know, I justified the shoot by saying, this is what we're going to do, we're going to be able to find out. Yeah, and, and of course, it's it just sends you into a complete tailspin, because you've got to make the story and that it wasn't just that that happened. When you go out the whale watching boats there aren't, they don't operate under any kind of legislation, it's just a complete free for all. So they are buzzing everywhere, and they do chase the whales, they are supposed to slow down, not change direction, you know, just keep the weight glow. And if the whales will come to you, then great. And there were times actually, at the beginning when we had one on either side of our small boat. But they're just buzzing around crazily. And to put a camera crew in the water would be far too dangerous. So we did get a few top side shoot shots. But then the the terrible tsunami happened because this was March 2011. And the whales completely disappeared. We were there for 14 days. So on day three, the whales disappeared. And we went out every day. And I would assume that they're sensing the tectonic movement and just moving offshore. And it was the last morning. And we had it out there the whale watching boats have given up. We saw dolphins and things and we had to get back because we had to get back to the to the hotel to travel up to Colombo to fly out the next day. And we were literally turning the boat around. And I just had my head in my hands like you know, I can't believe all the money we spent on this and we didn't get it. And and then Lindsay, who's up on the flybridge still looking, you know, as we're turned around, and the cameras are coming out of the housings and she just yelled, that's wild. Oh, wow. And I think they'd come back hungry to their feeding ground. Yeah. And so everything that you saw in that film was taken in that sub last scrambling couple of hours before we had it back. But it wasn't just that it was the fact that there were swathes of plastic on the surface of the ocean. And I don't know if you have if you remember one little detail of the film, but it's how many liters of seawater, a blue whale will take in when it opens its mouth. It was quite

**Jeremy Melder** 18:13

phenomenal. Actually, I can't remember the number but it's huge.

**Jo Ruxton** 18:17

It's 75,000 litres. Let's say when you when you think of that, and then you look at the plastic, it was in the ocean. You know, whales just open their mouth, they don't pick and choose what they're going to eat. They take it all in, and then they push the tongues up. So the water filters through the Balian plate and everything that's there they then ingest. So we didn't have to prove that those guys were eating plastic. And actually, we then had what, what was some ended up being called the Poonami. And when when a blue well poo there is an awful lot of it. And Lindsay was able to collect some which she then took back to Hong Kong in liquid nitrogen. She was like excited about the amount that she could take. And I did find some little

**Jeremy Melder** 19:02

microplastics in there. Do we know what percentage at all that would have been? Do you have any No, no, no, no. Yeah, we just

**Jo Ruxton** 19:09

it was just this mad scramble.

**Jeremy Melder** 19:12

Yeah. Yeah. So you know, plastic is is is prolific in our in our lives in our daily lives. And as you showed, I think when you went to some of the Pacific Islands is being used in a myriad of ways. Would you like to talk us through that what you you were exposed to these I was quite overwhelmed by how plastic was being used and you know, felt really sad actually.

**Jo Ruxton** 19:37

It is. It's not just how people are using it. I think you've really got to go back and look at the history of how the idea of disposable plastic came about because it was in the 50s when we were told that we could now live very convenient lives and we didn't have to wash up anymore after our picnics. You just take all your your cups, your Your your plates, your cutlery, and then you throw it away. And we never thought about it. And then you know, the supermarket will hand you about seven plastic bags when you do your weekly shop. And what do you do you throw them away because nobody was bothering to bring them back. And it's just this idea of a way. And for those of us in countries that have waste management, systems and collection from your house, we didn't think about it anymore. And when recycling started to become a thing, we put our plastic in the recycling and that was it. We felt good about ourselves. Yeah. But it's not it's not happening in developing nations. They are using the plastic and they have nowhere to put it and they burn it because it is a fuel you know, it's made from oil. Yeah. And, and that particular island to Varley, right. I found that the hardest actually, because they have what used to be a beautiful lagoon in the center of the island, and it was created during the Second World War, and MacArthur was doing his advance across the Pacific tools pan, and he was stopping on islands to create runways for his fighter planes. And by digging out the center's of these islands, and creating the runways, and at the time, it was giving those people connections, and they and they had these lagoons, which would fill with water. And and, and it was part of at least a swim and fishing those. Yeah. And but then as as they started to import more and more goods from overseas, everything was wrapped in plastic, and where could they put it and it's just overwhelming when you don't see it taken away. But it's not just what they were importing, and and discarding themselves. That those of us that have thought we were doing the right thing by putting the plastic in recycling, very little of that was actually recyclable. And it would be sent off to countries. And those countries that took it were the ones that have no infrastructure to deal with it. So they were being paid to take it away from us, we all felt good about it. And they were being paid. So they felt good about it. But what could they do? You know? And and recycling isn't the answer anyway, because you can't perpetually recycle plastic, even the best PET can, bottles can only be recycled about 10 times and they lose quality each time. So we're still producing it exponentially. And recycling is not taking us away. It's just prolonging the time that it will end up as useless hard. Plastic that's probably too dark to be turned into many things because you can't add color to it. Once it goes. You know, very dark brown and black. And it's like when you give children paints, you know, little kids and they mix them all together. It all ends up in this dark color. So paint their rainbows and everything else. And that's what happens with plastic. It's it loses quality, it

loses value. Yeah. And when they do they, they burn it or they landfill it. So it's just delaying the inevitable to recycle.

**Jeremy Melder** 23:08

So a friend of mine that I love dearly explained this to me. He said it's like if you've got a tap that's leaking, and you try to mop it up, right? This is what plastic is doing this, that it's like the floodgates are open and you're just trying to clean it up with a single mop, and you're just not gonna get there.

**Jo Ruxton** 23:26

Yeah, it just keeps coming.

**Jeremy Melder** 23:28

It's a terrible thing. And look, as I'd said, I grew up in Sri Lanka, and my grandmother used to wash a plastic bag to reuse it because it was treasured in those days. And you know, everything was wrapped in banana leaves. And if you drop the banana leaf, the cows were dated, and there was a cycle. But now if you go to Sri Lanka or India, you'll see a cow eating a plastic bag.

**Jo Ruxton** 23:50

Yeah, I did see that when we were there.

**Jeremy Melder** 23:52

Yeah, so that's, you know, one of the things that I think, you know, we really need to put that front and center that, you know, we need to try and figure out a way to close this tab of closure.

**Jo Ruxton** 24:04

And look at why we're doing it. You know, what, what is it about us that thinks it's better to do that, you know, then then to use an alternative. And there's so many different ones. You know, the idea of, Oh, well, let's get supermarkets to give out paper bags. No, take a shopping bag. That's what we used to do. And it worked. Yeah. Yeah. And it was there was no detriment to the environment. You didn't need to chop down trees for that bag. You didn't need to take oil out of the ground for that bag.

**Jeremy Melder** 24:34

We'll be back in a moment.

**Advertising Bee Folk** 24:37

Hello, everyone. My name is Marianni from bee folk. And it is great to be joining Jeremy here on the beaming green podcast, helping us all to live more sustainably. be focusing producers beeswax wrap kits to make your own beeswax wraps at home. Our bee folk blend bar is made from natural beeswax tree resin organic coconut and hahoba oil. Make your own great looking, reusable, eco friendly reps to cover your food and keep it fresh and natural alternative to plastic wrap. And to support the good message of beaming green, and help reduce single use plastic waste, we are giving away a free Bee folk wax wrap kit. Just go to the website, beaming green.com and subscribe to be in the drawer in the second week of November.

**Jeremy Melder** 25:29

Welcome back. Then you went to Lord Howe Island, which is in Australia. Yes. And saw how it is also affecting the bird life and they're feeding their chicks. Do you want to talk us through that? That was having an impact.

**Jo Ruxton** 25:49

That was something else that I'd heard about a long time ago but not with those particular chicks which is shearwaters. I've been hearing about it for a while with albatross. And I think the reason that albatross were the first ones that people talked about was because they're such big birds that the things that they are fed are things that we recognize very easily rather than fragments of plastic. You can see photographs of birds with cigarette lighters and toothbrushes in this in their digestive tracts and it's it's something that just makes us think wow I never thought what happens to that you know what why are we using Why are we using a so called disposable lighter that when it runs out You can't even refill it? I mean it was the most incredibly stupid invention ever. And I have a jar of albatross stomach contents and it's actually got four cigarette lighters in it really and yes, but the we did we did film them in in delay San albatross in in the Hawaiian chain in Midway Island. But I The more I read about it, the more I realized that it was all seabirds and actually not just seabirds that are ingesting plastic. And Jen had been working on this island and I think it was the contrast of a World Heritage Island that's so pristine and she'd been working there for a long time and was able to tell us about how the story evolved for her because I don't know if you've been to Lord how I mean it is no I'd like to go Oh, it's beautiful, absolutely beautiful. And they are so on top of what to do with their refuse there. It's It's so different because that they they have thought about what comes into the island and what goes out from the island. And almost as soon as you land they're telling you what to do with trash. But what Jen noticed was that the the borough's, which are in the beautiful forest there and the forest can see a palm and banyang out into my favorite trees actually. And but she was noticing in the borough's she started to know this little pieces of plastic around them. And what was happening was that the chicks were being fed this plastic by the parents who go out and what the parents are looking for is something that will reflect the light on the surface, which would normally be something like a squid, or a little fish, and it's the plastic that's reflecting it, they scoop it up hole, they feed it to the babies, and the babies vomit out a bit like an owl does when it eats a mouse it'll it'll vomit out the bones and things. So this plastic and it was getting worse and worse. So Jen started to go out and look for what was happening when the chicks were coming out of their barrows and just flexing their wings and building up their muscles for their their big flights once they got to the ocean. And she started to put a tube into their stomach and feed them with ambient temperature sea water, which would make them sick. And she realized that they were vomiting up so much plastic and she would then give them a good meal of squid to try and give them some energy for that long flight. But she couldn't get around all the birds. And the situation was getting worse over the years. And certainly, when we were there. We were out with her on a few nights and these birds were just vomiting up so much. And then we went in the morning as they were starting to make their way down the beach and the particular morning that we filmed. We collected 10 dead birds and if you look in the film, there's a lot of them lined up on the bench. Yeah, and she dissect the first one. And we had planned on being there for all the dissections just to get all the shots that we needed just to make sure that we've got a complete sequence. But actually it happened just as you saw in the film, you know she opened that one up and the stomach was so distended and misshapen. before she even opened it. You could tell there was something in there that shouldn't have been And

then watching her open, it was just even though I knew what to expect, and I'd seen photographs, when you actually see it happening in front of your eyes, it was just incredible. And even things like the noise of the plastic when she takes it out, and then drops it down onto the, onto the bench, the noise of that plastic as it hits the bench. You'll never forget it. And though we had all of the footage we needed, we stayed around while she opened the rest of the birds and every single one was as bad as the first.

**Jeremy Melder** 30:34

I don't know, it's really, you know, confronting for me that, you know, we are doing this, you know, as humans we've done

**Jo Ruxton** 30:42

and what one of the one of the things that was happening towards the end of the film was, I mean, my background at the BBC was was what the department was called specialist factual. So you had your specialism. Mine was underwater. And you were following stories as they happened in nature. So you were telling a real story. And I realized that if we did that with this film, it would only reach the kind of people that already watch wildlife documentaries and care about the environment. And we needed something more to reach people who would rather be entertained, then think about doom and gloom environmental stories, and we approached Adam Leipzig. And he was the person who produced who was one of the producers on March of the Penguins. And he turned what would have been a very well known environmental document and what like not even environmental at wildlife documentary, into that beautiful love story. And so many people ended up seeing that film that wouldn't normally watch nature documentaries. And Adam really liked the sequences that we sent to him because we had them ready, we just had trouble weaving them into a story that was going to draw everybody in. And that's why it became the story of Craig's mission to see these whales and and turning it around. And that work. So that's how the story was told. And, and your engagement and of course, Tanya, as well, because she was so much a part of that film, someone who loved the ocean, so much, who'd grown up at a time when it was clean and seen all the changes and then became concerned about the future of her children and her talking to the the mother in Tuvalu. I, you know, I've seen it so many times, and I within tamale, but it still gives me a lump in my throat every time I watch it. And it's one of the sequences I show when I give talks in, you know, in schools and events in different countries. And it's it's I always have trouble carrying on with my delivery. After that. That sequence is shown. Yeah. Because what are we doing? You know, it's, this isn't a case of our convenience anymore. This is this is the future of every one of us. And this is something that we can change. And that's that's the beauty of this topic, you don't feel helpless, you don't feel as if you're on a roller coaster heading down, you know, this is something we absolutely can change. And it's something that kids get right away. And I think it's the groundswell from people realizing, wanting to do something about it that actually drives production and consumption and will drive policy change. Because the scientists have been talking about the plastic thing since the 70s. I met one who'd been collecting plastic pellets on beaches back in the 70s. And it seen it all grow. And whilst you might get the occasional, friendly journalist who will do a story often in local news, or a scientist that will, oh, well, sorry, or a television, that station that might suddenly suddenly want to put the story out, getting the politicians on board is difficult, because, you know, the Green Party's and notoriously the smallest policies and governments around the world, and I think they're the most important. So even getting a politician on board, it's still hard to change policy, but once you get everyone talking about it, they're almost embarrassed into doing something but in this

case, most people just didn't know. You know, I've drunk water out of plastic bottles, and not since 2009. But I used to do that. So if I was thirsty, when I was going, I'd grab one. It's, it's just something I would even consider

**Jeremy Melder** 34:32

doing now. And that's the thing I wanted to ask him about, is the production of plastic bottles. Now I as you know, Sri Lanka, Indonesia, you know, islands or third world countries, some of them rely on water, bottled water.

**Jo Ruxton** 34:52

I think the whole the whole problem of not having clean water in Certain nations is a very, very difficult one to solve. The only thing I would say is that when I was young, we grew up in Singapore before Singapore became as clinically clean as it is these days. And we can drink the water out of the taps then, and we used to boil it, and then let it cool down and keep it in the fridge, oddly enough in gin bottles, and my sister and I did once make a milkshake out of an entire new bottle of gin. Didn't like the taste and throw it away. (Laughter) But that's it. We have the Milo and the milk powder to make a million to this. You know, that didn't wasn't normally the state, we would, you know, we would fill our little flasks when we went to school with the water from the fridge. And that's what we were drinking there were there were fountains at the school as well. So filtering water, and boiling it is the solution that was used before everyone had water and plastic bottles. And I can see it to you certainly in these places where you just don't know if you can trust the tap water and you might not have to have the facilities to boil it and so on. But I think there is no excuse for countries that have clean water coming out of their taps. And actually the whole Tuvalu story really brought it home to me, because I'm sure your friend Paul Brincat has told you that the crew was stuck on Tuvalu for 10 days. And I had got away two days before the shoot ended because it was my mother's 90th birthday. And I didn't want to miss that. So I've gone home early they stayed on for another two days of filming. But then there was a cyclone in Fiji. So the plane from Fiji couldn't get out to Tuvalu to pick them up. And they ended up being delayed. Now when they got back to Fiji. The flooding was so bad that the the drinking water was contaminated. And there's an aquifer in Fiji where they have the Fiji water that comes in the little square bottles with the pink hibiscus on it. That's one of the most popular bottled waters in America and they at the time would pay \$4 for a bottle. So the people who couldn't get clean water did not have access to the water in their own aquifer that was being sent to America. So yeah, so it would go to the dock side where it would sit in the sun, you know, think of leaching chemicals. Yeah, transport 6000 miles across the ocean sit in warehouse or send another dock side, then in warehouses, then on supermarket shelves, people would then pay \$4 for one of those bottles when they could cross their kitchens and terms and get perfectly clean water. And that is the madness. The reason that we started drinking it out of bottles was because the the carbonated drinks industry plateaued when it became knowledgeable in the 80s. Or the knowledge was was the information was put out there that there was so much sugar in there that 16 spoons of sugar. But it shocked everybody. There you go. And so some bright spots. And I'll tell you what were bottled water and everyone's going Yeah, right. He said, No, we will tell people that it's more healthy than that it's full of minerals, and all of this and then you get some celebs to run around with their evianne and their Fiji water looking cool. And suddenly everyone was hooked. And don't get me wrong. I'm just as guilty. Oh, am I bored? But what do you think about it? And you think about that was

because of them? And look what we're doing? It is madness. And that's what's going to start I think that every country where they have clean water coming out of the taps should ban the sale of bottled

**Jeremy Melder** 38:36

I totally agree. I think you know we've got a container refund scheme that's in Australia now in in a few of the states or most of the states now. But I still think that we should take away plastic from the whole scheme in like not from the scheme but take away plastic cut up as you bring back you know, do it all on glass or aluminum. You know, why can't we do that? Because those are all recyclable materials.

**Jo Ruxton** 38:59

Yeah, aluminum, you can recycle it and yeah,

**Jeremy Melder** 39:02

so I know that you're short on time, but I just wanted to find out from you. What are the things that you're working on now in terms of you've set up a foundation is it that you're doing which is plastic set?

**Jo Ruxton** 39:16

Yeah, set up Plastic Oceans in 2009 as a as a UK charity, it's now Plastic Oceans UK. Exciting news is that we have a rebrand coming up in February. So So watch this space. But if you do want to know more about what we're doing, please go to [plasticoceans.uk](https://plasticoceans.uk) We also have a sister organization in Australia so that some classifications Australasia, and they are doing some fantastic work and they also mirror the work that we're doing with education and so on. We're now developing a program for businesses called the plastic intelligent framework not just for businesses, but we're trialing it with some big corporations. And it actually looks at the mindset of why we buy plastic in disposable containers. And there's actually three mindsets and five habits. And once you start to work through these, and actually analyze what you're doing and why, if you can get on board with that, you will never let plastic go into the environment, because you'll understand everything about it, you'll understand the lifecycle of plastic, and why it's such an incredible material, because it was designed to learn and understand all the ways that it's escaping, and you will want to do, it's a fun way of actually wanting to do something about it and realizing that you can, but we're also going to be expanding into other areas. So plastic will be very much part of our work, but also moving on to other ocean issues. And I'm also at the moment in early stages of production of a new film, which isnt about plastic

**Jeremy Melder** 40:58

Now, I want to ask you a couple more questions. And one is about the film that, you know, David. Sir David Attenborough did, which is a life on planet which I, which I love. And he talks about, you know, how in his lifetime, he's seen, you know, the environment or the extinction of animals and plants go down? Would you say you've noticed that as well, Jo in terms of your, your time underwater and your time of traveling? profusely? Yeah,

**Jo Ruxton** 41:27

yes. I mean, I started diving in the 80s. And the difference now in the health of coral reefs, for example, and the numbers of fish, and the general water quality is heartbreaking. And we are an incredible at an incredible time on this planet. Because this is the chance we have to turn things around. Anybody

who's on the planet now can be part of making that change. And the film that that you're talking about with Sir David, is an incredible story. But it's a very hard watch, because it's a very long way into the film, before he starts to turn things around. And he does it beautifully. But what concerns me is that a lot of the audience just wouldn't bear to watch it, particularly when you get the close up when his heads down, and His eyes are shining. And he seems to be mourning, the loss of nature. And I'm sure he has days when he does. But the incredible thing about that man is his positivity, his enthusiasm, and his belief in the power of people. And it's so true. Because we can turn this around, there's so much that we can do just in our daily lives, and encourage others to do to stop this spiral that we're on. Because you know what is more important than then the planet the water, we drink the air we breathe, and that's exactly what we're affecting. And I have grandchildren now. And and I remember when I had my, my children, I started to care about another 30 years beyond my life, because I wanted their lives to be easy and good and happy. And you know that the environment would be as perfect as it was when I was growing up. And now I've got my grandchildren and I care sort of 60 years beyond my life and where their lives will go and how it's going to affect them. And we live in Cornwall, and I used to come here as a child and I remember being on the beach and playing in the shallows and the rock pools and how perfect it was. And now when we go there, my little granddaughters are bringing, bits of plastic thing, you go down and we've collected this and, you know, they're decorating their sandcastle with, not just with shells as we used to, but there'll be bits that they found and, and I find that quite heartbreaking. And as beautiful as the beaches are here, sadly, because I've been working in this for 11 years now I can't help noticing microplastics pellets, all of these things, you know, which most people just you look out the VISTA and it looks gorgeous, and we're lucky it still does he very rarely see big pieces of plastic. But in the span line, I see them all

**Jeremy Melder** 44:17

I share that with you as well. You know, like I've got two kids and you know, I want to see them have some children of their own and they're in the you know, if they choose to be I don't know where the most kids are wanting to do that these days. I think they're a bit wary of it because of the planet.

**Jo Ruxton** 44:33

But I love not just the planet but because the I mean that so David Attenborough, his big thing is how we've overpopulated so now we don't have the resources to support a growing population and it will ever

**Jeremy Melder** 44:46

Yeah, and I love his positive positivity and I love your positivity. And I want to also share that positivity and hopefully we we can only start with ourselves, you know what we do what we empower ourselves and And then being an example of someone else. And so I love the example that you're showing Jo, and, and keep up the great work. And thank you so much for being on Beaming Green.

**Jo Ruxton** 45:11

It's an absolute pleasure. Thank you for inviting me.

**Jeremy Melder** 45:15

Thank you for being part of the Beaming Green podcast. The music for this podcast is produced by Dave Weir. Now we need more people to get on board and raise awareness about sustainability and climate change. The more of us that are shining the light on these issues, the more government and business will listen. We would love you to subscribe to our podcast, and share and engage in social media so that we can have some traction. Let's support one another in an efficient and broaden future. Thanks for listening. We'll see you next week.