



Pristine expansive seagrass meadows (marine flowering plants) in Shark Bay, Western Australia. Photos: Martin Breed and Sahira Bell

Breaking the plastic pipeline

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What did we use before single-use plastics became ingrained in our everyday lives?

We used paper bags and cardboard boxes at the supermarket, people enjoyed their morning coffee at the local coffee shop and drink containers were made of glass or aluminium.

In 2019 excessive plastic use feels not just normal, but necessary to sustain our hectic lifestyles. From takeaway containers and supermarket packaging to cheap, low-quality goods, plastic permeates our daily lives.

The Australian Marine Sciences Association held its national conference in Fremantle this year and took up the challenge of holding a plastic-free conference (see article link on page 26) – not a single takeaway coffee cup or plastic water bottle was used by delegates during the event.

Delegates embraced the idea of being part of the solution rather than contributing to a global problem.

Plastic fragments are now found in some of the most pristine environments on the planet – from

the Arctic Ocean, to remote tropical islands and deep ocean trenches. Our precious wetlands and vast oceans are often the final stop for much of the world's plastic products, although some are less impacted than others.

Each week provides a new headline about plastic:

'Eight million tonnes of plastic are going into the ocean each year'

'Plastic proliferates at the bottom of world's deepest ocean trench'

'414 million pieces of plastic found on remote island group in Indian Ocean'

'The world's oceans are projected to have more plastic than fish by 2050'

'You're eating microplastics in ways you don't even realise'

'Microplastics found in most bottled water'

However, with every passing year the scale tips further against the immediate convenience of single-use plastics and towards the extreme inconvenience of piles of waste.



Plastic containers used for growing plant shoots in tissue culture are washed and reused many times.
Photo: Tony Scalzo

The true cost to society and the environment of a 'disposal economy' is becoming increasingly stark. Humans cannot recycle their way out, as less than 10% of plastic waste is recycled. Eighty per cent of plastic found in our oceans comes from land-based sources. It finds its way to the oceans via river systems and urban drainage networks.

So you might ask what does this have to do with me? You can turn off the tap at the source.

Finding solutions to eliminate plastic in everyday life at home, in the office, outdoor activities and large events presents challenges.

Many varied solutions will be required to reduce our reliance on plastics. The most important step is recognising that every one of us is empowered to make a difference, from a simple decision not to use takeaway coffee cups, purchase unpackaged fruit and veggies and using a refillable water bottle.

Get some early 'wins' on the board and then tackle some of the more challenging items. There are plenty of great ideas around when you start looking and sharing conversations.

Kings Park Science is based in the WA Biodiversity Conservation Centre at Kings Park. What are we doing to help?

In the office

We reduced the number of office rubbish bins, improved recycling, provision of kitchenware items for meetings, meals, coffee breaks.

In the laboratory

Containers used for growth of plant shoots in tissue culture are washed, sterilised and reused many times, saving money and reducing plastics going into land-fill.

In the field

Scientists are evaluating the use of biodegradable pots to reinstate iconic

and conservation important species in the arid north. Added practical benefits (besides not creating plastic waste) is quicker and more efficient planting in remote mining regions (e.g. there is no need to remove and double-handle pots) and it eliminates root damage that normally occurs removing plastic pots.

The Growing Friends reuse plastic pots that have been pasteurised and have taken the initiative of providing reusable bags at plant sales and encouraging customers to bring their own boxes or containers. Once you've planted your plants in your garden we encourage you to take your empty pots to nurseries participating in pot recycling programs.

Next time you attend an event at Kings Park consider how you can help make a difference. Refuse Reduce Recycle. Here's a few tips to get started.



Biodegradable pots being trialled in large-scale mine restoration to reinstate iconic and conservation important species in the Pilbara. Photo: Todd Erickson

Plan ahead

Bring your own water bottle or coffee cup or sit in at one of the park's cafes rather than get takeaway items. Going against the grain can take a bit of work, but there are usually easy plastic-free options. Take the time and find a solution, use it and share it with others.

Get everyone involved

Create a shared goal, whether it's a family barbeque, the office Christmas party, a business meeting or going to an outdoor concert. More ideas make better solutions. This creates a ripple effect, not only for your group but in developing more sustainable practice for other events.

Never assume

Not everyone understands and is knowledgeable about sustainable materials, so make an effort to talk about what plastic-free and zero-waste really mean.

The Friends of Kings Park offer reusable carry bags for customers who do not have their own boxes or carry bags. The Friends stopped offering single-use plastic bags many years ago.

The Friends of Kings Park Growing Friends Group and BGPA staff pasteurise and reuse pots and carry trays. (The Friends cannot accept pots from customers after plant sales because of hygiene reasons).

Photos: Tony Scalzo

Useful links

The Conversation article:
<https://theconversation.com/we-organised-a-conference-for-570-people-without-using-plastic-heres-how-it-went-120157>

Plastic Free July campaign:
<https://www.plasticfreejuly.org> ■

