

A blurred, long-exposure photograph of a beach. The sky is a pale, overcast blue. The ocean is a soft, teal color, meeting the horizon. The sand is a light, warm tone. In the lower right quadrant, a small, bright red object, possibly a piece of plastic, sits on the sand. The overall mood is serene yet somber, reflecting the theme of the exhibition.

# vanishing point

unseen

AN ART / SCIENCE COLLABORATION AND EXHIBITION ON THE IMPACT OF MICROPLASTICS IN OUR OCEANS

# FOREWORD

2019 marks a special milestone for Burnie's Makers' Workshop, which celebrates its 10th anniversary this year. Sitting proudly next to the ocean, as part of the City's spectacular waterfront precinct, the architectural masterpiece designed by Terroir, was completed in November 2009, on the foundations of the much-loved Burnie High School, tragically destroyed by fire in 2007.

Funded through federal, state and Burnie City Council contributions, Makers' Workshop quickly established itself as a symbol for the city's post-industrial ambitions; a place to celebrate the histories and futures of Making, in all its forms.

Part tourism attraction, museum, handmade paper mill and arts centre, this important building is a hub for the region's cultural and creative activities and home for members of the Makers' Program, a dedicated group of local artisans who present their broad range of creative skills to the many visitors the Makers' Workshop attracts annually.

In 2015 Makers' Workshop became part of the University of Tasmania's Cradle Coast campus, which brought an inspiring new-style of community-centric learning space to the site. New student accommodation and learning facilities were added to the site, in addition to establishing Makers' Space; a new, contemporary gallery designed to deliver a broad range of exhibitions and learning experiences for its communities.

**PROFESSOR RUFUS BLACK**  
*Vice-Chancellor, University of Tasmania*

*Vanishing Point Unseen* is archetypal of the high-quality outputs the University of Tasmania seeks to present at Makers' Space. The cross-disciplinary nature of the exhibits work together to deliver a range of sophisticated, educational content.

As an island state, the work presented in *Vanishing Point Unseen* is highly relevant for our communities and shows us a way-forward, where marine life and human beings can live in harmony. *Vanishing Point Unseen* comes at a time in our history where such learnings are essential.

The University of Tasmania is proud to present *Vanishing Point Unseen*, and I congratulate Makers' Workshop on reaching this important 10-year milestone.

AN ART / SCIENCE COLLABORATION AND EXHIBITION ON THE IMPACT OF MICROPLASTICS IN OUR OCEANS

# vanishing point unseen



Makers' Space, Makers' Workshop  
University of Tasmania  
2-4 Bass Highway,  
Parklands, Burnie  
OCTOBER 2019  
[www.vanishingpoint.net.au](http://www.vanishingpoint.net.au)

# THE VANISHING POINT COLLABORATION

KATHERINE COOPER

Bas Strait islands were my home for many years. During any beach walk, it was not unusual to find wave born detritus, pieces of broken china from shipwreck debris, discarded shampoo and assorted bottles bearing instructions – written in languages indicating there was another world ‘out there’.

Later, the years were spent photographing, documenting and painting island bird life in particular the seabirds. Over time more and more plastic waste began littering the beaches and childhood intrigue turned to adult concern as the impact of this material became increasingly obvious.

Years later I travelled to the Shetland Isles for a six month art residency – a unique opportunity to observe and paint Shetland’s incredible wildlife.

North Sea storms are a significant feature of island life and seeing the sheer volume of debris and ocean born plastic deposited on Shetland shores after one powerful gale was overwhelming.

It was here I became aware of the work of Raymond Bessant (Orkney) and Dr Jan van Franeker (Netherlands). Their collaborative documentary ‘The Flying Dustbin’, highlighted the impact of ingestible plastic waste on seabirds, in particular the Northern Fulmar, and marine life in general.

It was indeed an eye opener.

Numerous discussions with field staff working with the Royal Society for the Protection of Birds UK further highlighted the growing enormity of this issue.

These experiences led to the formation of the art/science collaborative group ‘Vanishing Point’ comprising 3 scientists – Drs Heidi Auman and Frederique Olivier and Associate Professor Patti Virtue and 5 artists – Sophie Carnell, Ron Moss, Toby Muir Wilson, Peter Walsh and myself.

In 2015 Vanishing Point’s first exhibition was held at the Institute for Marine and Antarctic Studies. The exhibition focus was to demonstrate the perceived inherent beauty and value of colourful plastic and its intrinsic appeal to both humans and wildlife alike.

The 2017 exhibition included the work of two new artists, Diane Masters – multi media artist and Gerhard Mausz – sculptor and designer. The exhibition expanded on the 2015 project by embracing the theme of *Unseen*.

In 2019 *Vanishing Point Unseen* travels to Burnie, North West Tasmania to help encourage conversations about microplastics.

From microbeads in personal care products, microfibres in synthetic clothing, and fragments derived from the breakdown of larger debris, microplastics are increasingly invading our marine systems and food chains. This is now recognised as a serious global environmental issue.

The works emerge from an inquiry-based pursuit that is common to both art and science, presenting a commentary on the multifaceted nature of both scientific research and artistic expression.

It's possible to engage viewers through visual beauty and simplicity, leading them through a deeper story to raise awareness of the issue at hand; the dangers of plastic in our marine environment.

We can all make a difference if we are mindful and small changes to our behaviours can have a positive impact. Our oceans ARE worth protecting.

*“Even if you never have the chance to see or touch the ocean, the ocean touches you with every breath you take, every drop of water you drink, every bite you consume. Everyone, everywhere is inextricably connected to and utterly dependent upon the existence of the sea.”*

**Sylvia A. Earle**



## THE SCIENTISTS



### DR HEIDI AUMAN

Dr Heidi Auman is an Adjunct Lecturer at IMAS and has studied human impacts on seabirds for much of the past thirty years. A pioneer on the research of plastics ingestion, she lived on remote Midway Atoll for seven years, studying plastic debris and contaminants in albatross. Heidi has also explored the effects of plastics in subantarctic and Tasmanian seabirds, contaminants in Great Lakes waterbirds, and junk food on Hobart gulls. As a science communicator, Heidi describes how our environmental footprint has reached the farthest corners of our planet, often with disturbing consequences.

HEIDI AUMAN | FREDERIQUE OLIVIER | PATTI VIRTUE

Microplastics pose an insidious threat to fragile marine ecosystems.

DR PATTI VIRTUE

### *Garbage Guts*

*Garbage Guts* was inspired by Heidi's research on the impacts of marine debris on Midway Atoll's Laysan albatross. She hopes to educate a future generation about the danger of trashing our seas. Signed copies are available from her website.

[www.garbageguts.net](http://www.garbageguts.net)





### DR FREDERIQUE OLIVIER

Dr Frederique Oliver is a marine scientist with 15 years of experience in Antarctica, the Subantarctic, the Southern Ocean and Pacific seas, Fred has spent over 2 years bobbing around on the Southern Ocean and about 3 in tropical seas on her own yacht or research vessels on the Great Barrier Reef, witnessing the plastic issue in all its forms. Growing up in Europe, she was well aware of the marine pollution issues and in 2001, as she started a PhD on marine debris at UTAS, it revealed even birds nesting on the pristine shores of Antarctica are affected by the problem.

### DR PATTI VIRTUE

Dr Patti Virtue is a marine scientist and an Associate Professor at the University of Tasmania and CSIRO. She has been involved in many Antarctic expeditions undertaking research with her students.

Her research incorporates aspects of biological oceanography, sea ice ecology, and studies on zooplankton – particularly krill – which form the basis of the Antarctic marine food chain.

Patti was involved in a circumpolar Antarctic expedition looking at the potential impacts of microplastics in the zooplanktonic community.

Working in such a precious environment such as Antarctica, she is only too aware that microplastics (the size of krill food) pose an insidious threat to fragile marine ecosystems.



## WHAT THE SCIENTISTS SAY

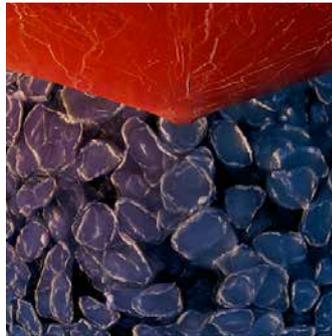
An estimated 5 to 13 million metric tons of plastic end up in our oceans each year. Microplastic debris begins the journey to the sea as consumer and industrial products like exfoliants, cosmetics and industrial abrasives, or breakdown of larger plastic items. Even synthetic fibres shed from our clothes during washing contribute to this unseen but now widespread marine pollution.

Microplastics can affect wildlife in many harmful ways. Ingestion and physical obstruction can reduce feeding by marine life and lead to starvation. Microplastics act like sponges to chemical pollutants, and when eaten can affect growth, endocrine function and reproductive success. These contaminants also bioaccumulate through the food web.

Plastic pollution on our beaches is obvious; however, microplastics in our oceans are often invisible. The aim of this exhibition is to help visualise this insidious problem. By raising awareness of the threats of microplastics, we can work together to find solutions to this unseen marine pollution.



**DR HEIDI AUMAN**



**DR FREDERIQUE OLIVIER**

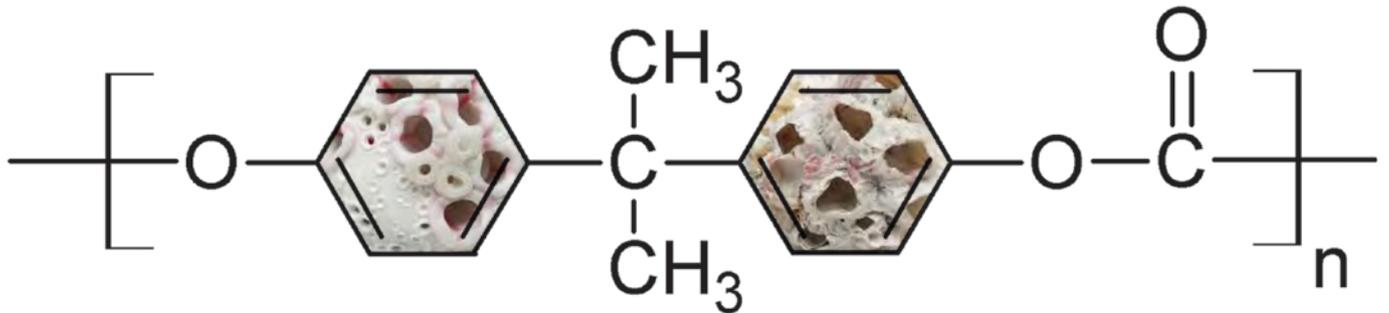


**DR PATTI VIRTUE**

“As many as 51 trillion microplastic particles – 500 times more than stars in our galaxy – litter our seas, seriously threatening marine life.”

UNITED NATIONS REPORT

*Phthalates (pronounced “thah-lates”) are a group of chemicals that make plastic flexible and durable. They are linked to asthma, attention-deficit hyperactivity disorder, breast cancer, obesity, type II diabetes, low IQ, neurodevelopmental problems, behavioural issues, autism spectrum disorders, altered reproductive development and male fertility issues.*



## THE ARTISTS



**SOPHIE CARNELL**



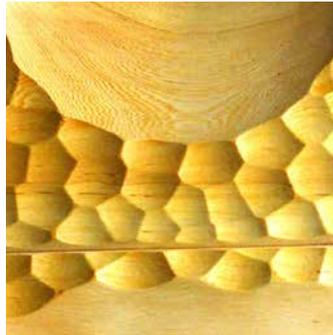
**KATHERINE COOPER**



**DI MASTERS**



**GERHARD MAUSZ**



**TOBY MUIR WILSON**



**PETER WALSH**

**Sophie Carnell** *The ocean is crying* (neckpiece detail), found fishing line, recycled sterling silver, plastic straws, plastic water bottle, W90cm x H75cm x D5.6cm



# SOPHIE CARNELL



## ARTIST BIOGRAPHY

Sophie is a contemporary jeweller who works from her studio on Bruny Island while being inspired by the stunning landscape of Southern Tasmania. Having initially completed short courses in jewellery design after finishing her Fine Arts degree Sophie has gone on to teach herself an array of skills in jewellery creation using a diverse range of media.

I am learning how these infinitesimally small particles have an enormous effect...

Materials are combined and transformed into objects and wearable tokens that carry an essence of this beautiful land in which we live.

Her practice explores relationships to landscape, place and interconnections with our environment – whether her own or of people long gone. Her works speak of the effects that landscape can have on people and conversely the effect that humans can have on their landscape.

Sophie has exhibited widely in Tasmania as well as being a finalist in the Toowoomba Contemporary Wearables Award (2017) – where her work was acquired, the Woollahra Small Sculpture Prize (2015) and The Waterhouse Art Prize (2018, 2014). Sophie has been a member of FIND Contemporary Jewellery Collective in the Salamanca Arts Centre for seven years.

## ARTIST STATEMENT

From walking along coastlines and collecting bags of big bright ocean debris for the 2015 Vanishing Point exhibition and thinking about their effect on fish and sea mammals, my focus has now been narrowed down to particles of plastic we often can't see without the use of a microscope. The dichotomy between the size of the microplastics and the harm they do is startling.

I am learning how these infinitesimally small particles have an enormous effect; not just on marine life; not just by working their way up the food chain to humans and causing massive health issues; but also by endangering the oceans themselves. For if the oceans become sick, then so do we all.

My work for this exhibition focusses on the chemical interactions of the phthalates (plastic additives) with the ocean. The repeated hexagonal shapes represent the chemical symbol for phthalates, the hormone inhibitors.

The works have been made entirely from ocean debris, plastic rubbish & fishing line already in the waste chain, glass beads and recycled sterling silver.



*Morphing*, recycled sterling silver, plastic forks, plastic knives, ping pong ball, straws, cottonbud sticks, coral., 4x4x2cm each

# KATHERINE COOPER



## ARTIST BIOGRAPHY

Katherine is a Tasmanian artist working in watercolour/gouache and graphite. Her works are dedicated to raising awareness for our wildlife and their habitats. Having lived on Bass Strait islands for many years, her work is particularly drawn to the birdlife that inhabit those islands and the surrounding oceans.

Katherine has exhibited in solo and group exhibitions nationally and internationally

Katherine was a finalist in the BBC Wildlife Artist of the Year 2011/12; Winner of the National Holmes Art Prize 2015; Finalist National Holmes Art Prize 2016 and 2019; Peoples Choice – Wrest Point Art Award 2017; Finalist – Society of Animal Artists 59 Annual Exhibition – San Antonio, Texas, USA.

Associate Member of the Society for Animal Artists USA; Art Society of Tasmania; Australian Guild of Realist Artists; Wildlife and Botanical Artists, ACT; Wildlife Art Society of Australia

[www.katherinecooperart.com](http://www.katherinecooperart.com)





## ARTIST STATEMENT

I've lived on Bass Strait islands most of my life. Island life fuelled my passion for the wildlife and the environment allowing me the luxury of time to extensively study these creatures in their respective habitats. Many hours were spent photographing and documenting the islands' birdlife, in particular the seabirds, but over time more and more plastic waste began appearing on our island beaches and our concerns grew as we observed the impact.

It has become increasingly obvious that plastic is now a significant environmental threat – from the obvious larger items breaking down into smaller and smaller pieces to the more significantly disturbing microplastics and microfibrils – the tiny 'unseen' particles that affect the very beginnings of the oceans' food chain. Plastic ingestion doesn't discriminate, impacting on one of the largest marine creatures, the Humpback Whale to one of the smallest ocean faring seabirds – the Southern Fairy Prion.

**Creating greater community awareness of this enormous problem has become a priority in my work.**

# DIANE MASTERS



## ARTIST BIOGRAPHY

Diane is a multi-media artist from Tasmania who works primarily as a printmaker. She regularly uses natural elements as the basis for her multi-layered prints. Her images are often drawn from her experience of living and working in small rural and remote communities (islands) and address ideas of migration, cultural shift and environmental impact.

Plastics never  
decompose, they  
just become smaller  
and smaller.

Diane has regularly participated in solo and group exhibitions and been a finalist in many national art prizes. Her work is held in private collections both nationally and internationally.

[www.dianemasters.com.au](http://www.dianemasters.com.au)

[www.handmark.com.au](http://www.handmark.com.au)





## ARTIST STATEMENT

I was born on the island state, on the island continent and have chosen to live on much smaller and remote islands for much of my life. As a scuba diver and island dweller, I have observed the direct impacts of plastics pollution in our oceans.

When asked to join the Vanishing Point team of scientists and artists focussing on microplastics, I swiftly remembered my encounters with one of the largest and most majestic creatures in the ocean, the whale shark. I pondered the problem of providing a nutrient rich food source into the future rather than a lean plastic replacement for filter feeders such as whale sharks and other sea creatures.

Plastics never decompose, they just become smaller and smaller. In addition, many facial and body scrubs contain microbeads which are flushed into our waterways and ultimately into our oceans.

For this exhibition, I have created images which represent the start of a problem and draw attention to the beautiful plankton, which are not only the start of the oceanic food chain but a major part of that cycle of oxygen exchange which we are so dependent on.

# GERHARD MAUSZ



## ARTIST BIOGRAPHY

Gerhard is an experienced visual artist (BFA UTAS 1996) working in three dimensions. He completed his pattern maker apprenticeship in the German car industry in the early 80s, and has a multitude of skills in the designing and making of objects.

His work utilises many different materials including upholstered, shaped foam; steel and other metals; wood and cardboard; cast and sandblasted concrete, cast and polished terrazzo, on their own and in various combinations.

Since 1996 Gerhard has completed 21 public arts commissions and many private commissions. Amongst his clients are Hobart City Council, Glenorchy City Council, Arts Tasmania, Tasmanian Department for Education, Salamanca Arts Centre, Moonah Arts Centre and Kickstart Arts.

[www.gerhardmausz.com](http://www.gerhardmausz.com)



## ARTIST STATEMENT

*Kelp* is inspired by the countless snorkelling adventures I have been lucky enough to experience over the last 30 years living in Tasmania.

*Kelp* is my friend when the waves hit the shore, I hang on to the stems so I don't get dragged out to the ocean, swaying under water in the graceful movement of the sea.

I love the silence when I pause and just float in this underwater forest, and watch the rays of sunshine illuminate the kelp with contrasting dark shadows and voids – it's a little bit spooky, but is also a soothing experience and one that I have tried to capture with this work. I hope the viewer will feel something of this when they stand close and see the detail.

The process of *Kelp* started when I observed a plastic bag caught in the kelp when snorkelling.

The sculpture evolved from a single kelp leaf shape drawn on a piece of steel sheet, then two more leaves and a stem that was shaped with great difficulty moment by moment.

I am grateful to be part of this exhibition and hope to inspire more people to become aware of the single use plastic we use every day and how we dispose of it – recycle, reuse and avoid altogether.

I wonder how this environment will change in the next fifty years.

# TOBY MUIR WILSON



## ARTIST BIOGRAPHY

Toby Muir Wilson is a Graduate of Parnham College in England, an institution steeped in the Arts and Crafts ethos of 'the hand, the head and the heart going together'.

Plastics – their pervasiveness and their convenience – have slowly entered every sphere of ours and the planets existence.

Since 1980 he has created furniture and wooden objects which have become more narrative in nature expressing his, and his clients' responses to our physical and social environment

Tasmania, its timbers, its light and colour, geology and geography are the primary resources for the photographs and drawings which inform these works.

His work is represented in National collections including the Powerhouse in Sydney; the Museum of Applied Arts and Sciences, Darwin; TMAG in Hobart; and the Design Tasmania Wood Collection in Launceston. The most recent publication to feature his work is *Beyond Parnham* (2017), published in the UK.

## ARTIST STATEMENT

As an artist I have a responsibility to make social comment. At any point in history there are matters which concern humanities future, the environment it exists in or the way it sees that environment.

Plastics – their pervasiveness and their convenience – have slowly entered every sphere of ours and the planets existence. It is becoming apparent this may not be without cost, possibly existential.

*Poison Chalice*, *Bouy*, and *Vortex* refer to the vastness of space and the depth of time in which the effect of plastics may continue to occur.

I hope this show provokes thought and action, not fear and alarm.



*Poison Chalice*, timber, iron and copper, 24x12x12cm

# PETER WALSH



## ARTIST BIOGRAPHY

Peter has a diverse and busy background including photographer, researcher, musician, sound engineer and software developer. These days Peter spends his time working in marine research and following his passion for photography.

[www.petewalsh.net](http://www.petewalsh.net)

With a particular interest in wilderness/landscape photography, he strives to include a message of conservation and care for the environment and collaborates regularly on conservation projects and with scientists working in environmental research.



## ARTIST STATEMENT

Almost daily, I find myself reading an article, watching the news, looking at social media on topics related to plastics pollution. Increasingly, the focus of these media is on microplastics. In our drinking water, deep in the southern ocean, in the sediment of local estuaries and in the digestive system and muscle tissue of wildlife.

My wish is that people coming to this exhibition leave with a better understanding of the issue and a desire to contribute to solutions. Whether that's by minimising your use of plastics and contributing to microplastic pollution, spreading the word to others or making a contribution to enable more research – every act, small or large, makes a difference.

## It's easy to feel overwhelmed.

*A Day at the Beach* is a series of more traditional seascapes with an element of plastic introduced in a way that is difficult to ignore. In reality, microplastics on our beaches are rarely visible without directing your attention specifically to find them. A beach may be the perfect example of living in blissful disassociation of the impact our lifestyle is having on our us and our environment.

*Food for Thought* (see inside back cover) is a piece derived from a study by IMAS scientists. Small pieces of colourful plastic were taken from the stomachs of fledgling short-tailed shearwater chicks (confiscated from poachers at Clifton Beach near Hobart).

Of the 171 chicks sampled, 96% had plastic in their stomachs. Each circle in the artwork is a petri dish containing the plastic taken from a single chick.

The extent of the problem is obvious, what we understand less is the impact it has on these birds. Of the 23 birds represented, is it reasonable to assume at least one might die from plastics ingestion? Will the rate of mortality be higher? Is this just one small example of a larger problem plastic pollution poses for us and the environment?

Food for Thought.



## WITH HEARTFELT THANKS

The *Vanishing Point Unseen* artists would like to thank everyone who encouraged and supported them on their Vanishing Point journey.

Thank you to the University of Tasmania and the Institute for Marine and Antarctic Studies, for their assistance, contributions and continued support.

A very special thank you to Dr John Hunter for his ongoing generous support and enthusiasm for the Vanishing Point Collaboration and message.

Thank you to our generous financial supporters: University of Tasmania and the Institute for Marine and Antarctic Studies, Burnie City Council, 2A4, Cradle Coast Waste Management Group as a member of Rethink Waste Tasmania.

Peter would like to thank Roger Imms for his advice and guidance.

Many thanks to the scientists Dr Heidi Auman, Dr Patti Virtue and Dr Frederique Olivier for their indispensable assistance, expertise and generosity of spirit.

The Vanishing Point Collaboration would like to sincerely thank Beverley Waldie of Coalface Design & Production for her expertise, talent and patience in coordinating our graphic design.

Special thanks to Joanna Gair, Arts and Public Programs Coordinator at the University of Tasmania, for inviting *Vanishing Point Unseen* to Burnie, and for her invaluable help in coordinating and curating the exhibition and facilitating the educational outputs.

Toby and Di acknowledge Handmark Gallery. Particular thanks from the artists and scientists to Katherine Cooper for initiating and driving this collaboration with such passion and good humour.

THANK YOU TO OUR SPONSORS AND SUPPORTERS



2A4

burnie shines

COALFACE  
DESIGN & PRODUCTION



# WHAT YOU CAN DO

## Simple steps to reduce your plastic footprint

- **Most importantly, reduce your consumption!** The vast majority of plastic materials consumed by society are not recycled or recovered.
- **Refuse goods supplied in single use plastics.** Voice your concern to shops and contact suppliers requesting alternative packaging.
- **Recycle within your own home** – how many new uses can you find for a plastic container? Go to the tip shop or second hand shop instead of buying new.
- There are over 300,000 microplastic beads in one tube of facial scrub.  
**Don't buy cosmetic, cleansing products and toothpastes containing microplastics.**
- **Use natural fibres such as cotton or wool** in clothing, linen, furniture covering etc. A major source of microplastics in the ocean is from washing our synthetic fabrics. Microplastics are very small and pass through the sewage treatment systems. Consider installing a filter on the waste water line from your washing machine.
- **Say no to plastic-ware, plastic straws, disposable lighters and even plastic toothbrushes.** Bring your own produce bags when you shop. Bring your own water bottle, coffee cup, eating utensils and containers when you order takeaways. Say no to that takeaway coffee plastic top if you haven't got your own cup with you.
- **Buy in bulk if possible,** and buy products in boxes, not plastic.
- **Don't let plastic waste reach the ocean in the first place!** If you see a bit of plastic rubbish on the ground, pick it up.
- **Participate in or initiate community clean ups at your local beach, river banks and road sides.**
- **Educate yourself and others.** What happens to your plastic waste? Check out the curriculum, activities, posters and fact sheets here: [epa.tas.gov.au/sustainability/resources-for-schools/waste-education/plastic-waste-teaching-resource](http://epa.tas.gov.au/sustainability/resources-for-schools/waste-education/plastic-waste-teaching-resource)  
[www.coastwatchers.com.au](http://www.coastwatchers.com.au)



