



## Department of Water and Environmental Regulation

## Indian Ocean Territories Marine Debris Project tackles ocean plastic

2018 saw the second year of the Indian Ocean Territories Marine Debris Project with a team of volunteers and locals collecting and analysing marine debris from the beaches of the Cocos (Keeling) Islands and Christmas Island.

The project was initiated in 2017 by the Commonwealth of Australia through the Western Australian Department of Water and Environmental Regulation (DWER) in partnership with the Tangaroa Blue Foundation (TBF) and the Shires of Cocos (Keeling) Islands and Christmas Island. The project is funded by the Commonwealth Government, Department of Infrastructure, Regional Development and Cities. The project aims to collect data on the amount, type and origin of marine debris that washes up on the beaches of these islands.

For two weeks in late April and early May 2018, 11 off-island, self-funded volunteers and over 150 local residents joined staff from DWER and TBF to undertake nine collections and audits of marine debris on seven beaches: four on Cocos (Keeling) Islands and three on Christmas Island. The debris was then analysed and the results entered into the Australian Marine Debris Initiative database.



Marine Debris volunteers and community members on Cocos Island

Volunteers spent a week on Cocos (Keeling) Islands and a week on Christmas Island. Marine debris collections and analysis were led by Tangaroa Blue while DWER's Indian Ocean Territories (IOT) team co-ordinated and managed logistics and volunteers. The team of off-island volunteers and locals had worked tirelessly conducting collections in the mornings and analysis in the afternoons, adding vital data to the Australian Marine Debris Initiative database.





Auditing marine debris on the Cocos (Keeling) Islands.

Overall in 2018; 138,781 items were collected weighing 4,270 kilograms. The top 5 items collected were:

- 1. 36,778 pieces of foam insulation
- 2. 21,309 plastic remnants (small pieces of plastic that remain when larger items break up)
- 3. 15,188 rubber remnants
- 4. 9,754 plastic lids from bottles
- 5. 9,011 thongs.

Other notable items included plastic drink bottles, plastic food wrappers, personal care items (tooth brushes, shampoo bottles etc.), straws, rope and shoes.

Data from the last two years can be found in the table below.

Marine Debris Project data

Year	Items	Weight (kg)
2017 Cocos (Keeling) Islands	50,236	2,038
2017 Christmas Island	12,241	564
2018 Cocos (Keeling) Islands	46,901	1208
2018 Christmas Island	91,880	2191
Totals	201,258	6001

The extent of the problem of marine debris hit home to the volunteers over a three day period on Christmas Island. In conjunction with students from the Christmas Island District High School, the team collected over 800 kilograms of debris on a Monday leaving the beach clear of debris. The team returned to Greta Beach three days later to be confronted with as much debris as was collected a few days earlier. This was a very 'in your face' moment and demonstrated the relentlessness and the sheer magnitude of the problem, but was also galvanising as after the initial shock and disappointment, the team got to work and collected another 700 kilograms of debris on the second day, once again leaving the beach clean, as it should be.



Greta Beach on Monday after clearing 800kg of marine debris



Greta Beach three days later.

The Marine Debris Project aims to audit and track the origin of the debris to its source. Heidi Taylor from TBF says "If all we do is clean-up marine debris, that's all we'll ever do. We hope to use the information from the huge amount of data in the Australian Marine Debris Initiative database to build evidence to work with governments, communities and corporations on mitigation strategies and alternatives to plastic packaging, but also to educate and encourage communities to change their waste disposal behaviour and plastic usage."

DWER compliance and IOT manager Tim Francis said "It is great to have people who are prepared to travel and volunteer their time to work hard to assist with projects such as this, but it is equally important that local residents are engaged and continue to carry on the work. The fact that 150 locals from the Cocos and Christmas Islands joined us is extremely pleasing."

The Indian Ocean Territories Marine Debris Project is a five year project. For more information or to be kept informed on future projects and volunteering opportunities please email <a href="mailto:kabc@kabc.wa.gov.au">kabc@kabc.wa.gov.au</a>. Read more at <a href="https://www.kabc.wa.gov.au/get-involved/volunteering/iot-marine-debris-project-2018">https://www.kabc.wa.gov.au/get-involved/volunteering/iot-marine-debris-project-2018</a>