

**REPORT TO THE MINISTER ON THE**  
**“CAPE TO CAPE BEACH CLEAN UP 2005”**

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**SUMMARY:**

With ever increasing pressures being pushed onto the world’s marine environment and ocean, it is vital for Australia and Western Australia to take early and proactive steps to protect this fragile and important ecosystem for future generations.

The Cape To Cape Beach Clean Up was a way to involve the community, industry and authorities with a focus on addressing the marine debris problem with a goal of finding practical ways to reduce the amount of marine debris on the Western Australian coastline.

The data collected from the clean up provides important information on the types of marine debris found on our shores and will be used to identify and monitor pollution trends.



## **1. BACKGROUND**

Marine debris is an enormous and growing problem. Marine Debris is one of the top five marine pollutants around the world. Every year **1 million seabirds** and **300,000** marine mammals are killed by marine debris worldwide. In every square kilometre of ocean, there are more than 18,000 pieces of plastic. These are a danger to 20 Australian threatened species including the Southern Right and Blue Whales, Loggerhead Turtle and Tristan Albatross.

The issue of marine debris was brought to the South West Marine Conservation Network (SWMCN) by Heidi Taylor (nee Palmer) from Tangaroa Blue. Heidi has collected over 900 kilograms and 24,000 pieces of marine debris from several local beaches in the last fifteen months and raised her concerns about the amount and origins of debris that washes up along the coastline and beaches of the Capes region in Western Australia.

The Network decided that a community beach clean up should be organised to achieve the following goals:

1. Raise public awareness
2. Clean up the beaches
3. Take a 'snapshot' of the types of marine debris that washes up by counting and cataloguing it
4. Engage the broader community in a workshop to determine the origins of the waste and; develop some strategies or recommendations for its abatement

Over 100 people from 20 community and environmental groups were involved in the Clean Up on October 1<sup>st</sup> 2005 between Cape Naturaliste and Cape Leeuwin. 30 people attended the workshop held on the 28<sup>th</sup> of October. The workshop group comprised representatives from the local commercial and recreational fishing sectors, local environment groups, a representative of the Department of Environment and other interested parties.

## **2. CLEAN UP RESULTS**

Below are the major findings of the report on 2005 Cape to Cape Clean Up along with some recommendations for reducing the amount of marine debris and protecting the marine environment and its species from the threat of marine debris in the State of Western Australia, and Australia as a whole.

### **2.1 Marine Debris Items Found**

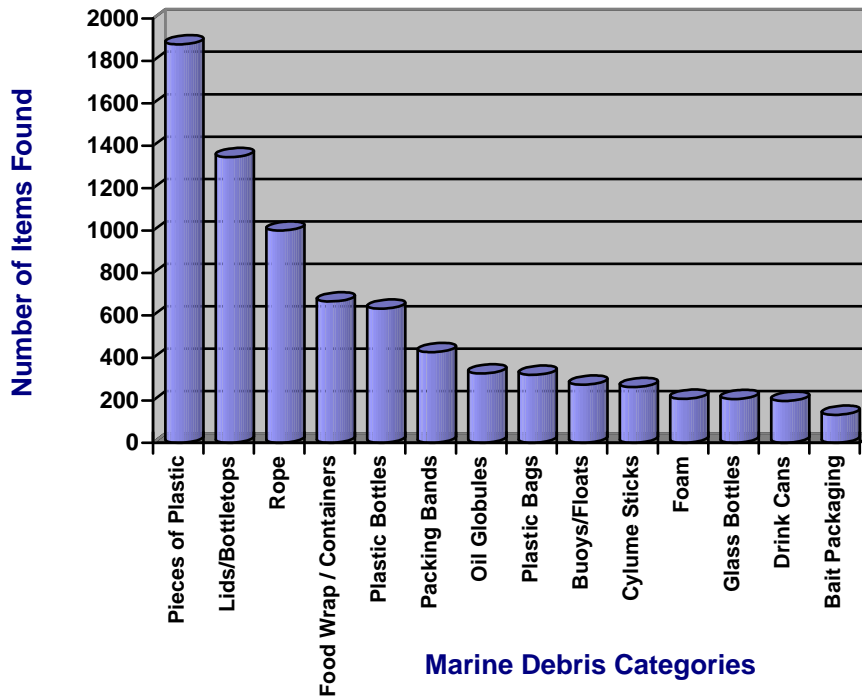
Marine debris was collected from along more than 30 beaches between Cape Naturaliste and Cape Leeuwin, as well as along the Busselton and Dunsborough foreshores.

A summary of some of the findings/results are given below:

- More than 9244 individual pieces of marine debris were collected – Appendix Fig 2
- Weighing over 1044 kilograms,
- Over 140 bags filled with many other items too large and heavy to be placed in bags,
- 3 dead seals, 4 dead birds including one young Yellow Nosed Albatross, 7 dead fish including one porcupine fish entangled in shredded plastic packaging were also found.

Plastic was the predominant source of debris collected. In fact, it comprised 90% of the total items collected.

**Table 1: Major Debris Items Found During Cape To Cape Beach Clean Up 2005**



**2.2 Debris sources**

During the clean up, the participants not only removed the debris but recorded and catalogued what they collected. After the clean up a workshop was organised to analyse the source of origin of the marine debris. The workshop aimed to: a) identify the most commonly found items, b) determine their source and uses and c) finally to identify possible changes in the design or use of those items, relevant policy, legislation and community education campaigns to prevent these items from becoming marine debris. A series of recommendations (see section 2.3) were developed by the groups.

The majority of the marine debris found during the Cape to Cape Beach Clean Up was found to have originated from six main categories:

1. Commercial Fishing Industry
2. Recreational Fishing Industry
3. Shipping Industry
4. Recreational Beach Users
5. Stormwater Runoff
6. Illegal Dumping

### **3. RECOMMENDATIONS**

Below is a summary of the recommendations from the community groups

#### **3.1 Commercial Fishing Industry**

- The current model of bait boxes should be replaced by law with self-locking boxes. The technology exists to utilise bait cartons that are free of plastic strapping and lining. Plastic free bait cartons are manufactured in Australia, are cheaper and easier to use, and their exclusive use is a significant first step in managing a large proportion of plastic marine debris off our coastline.
- **Producer responsibility:** It is important to ensure that producers of environmentally unsafe forms of packaging are required to amend their products to low risk or are required to pay for the damage caused.
- **Polluter pays principle:** Codes of Conduct should become mandatory. Fishing vessels should be “severely” fined and/or punished and reprehended (MARPOL Convention) if caught polluting and/or dumping items into the sea.
- **Identification of waste:** Vessels should have all plastics brought onboard stamped with their vessel’s description as a way of making the identification of any item traceable.
- **Better policing:** Such a serious issue deserves better resources to catch polluters.
- **Revenues:** Revenues from commercial fishing activities should be used to clean up the refuse resulting from this industry and for having an impact on other industries such as tourism and local communities.

#### **3.2 Recreational Fishing Industry**

- A need for a greater focus on the issue of marine debris: Alongside reinforcement of catch, the Department of Fisheries and VFLO’s should focus on the issue of marine debris and should be afforded the power to fine polluters.

#### **3.3 Shipping Industry**

- We need to be more proactive in enforcing the International Convention for the Prevention of Pollution from Ships - MARPOL 73/78. Australia is a signatory to this convention, which is enforced in over 100 countries. In Australian waters, the regulations are applied by the Maritime Safety Authority (AMSA). Its regulations are implemented through Commonwealth and State/NT legislation. Penalties for not complying with the law are up to \$260,000 for individuals and \$1.3 million for companies. The Australian MARPOL regulations apply to Australian fishing vessels wherever they are operating. Australian laws can be applied against foreign fishing vessels operating anywhere within Australia’s 200 nautical mile exclusive economic zone.
- Oil globules have been washing up on the Capes coast for some years. The DPI has offered to establish a database on reports from these globules. Some effort is needed in tracking down the sources and establishing whether it is local or not.

### **3.4 Recreational Beach Users**

- **Educational programs at primary and secondary school level on marine debris and coastal issues:** Training and teaching teachers may also be an appropriate option.
- **Plastic bag laws:** Since plastic bags comprise a significant amount of the debris found and cause the death of many different marine animals, laws pertaining to plastic bags and supermarkets need to be passed ASAP.
- **The Tourism Industry needs to get involved:** The industry should be actively promoting environmental awareness and initiatives that educate visitors on the impacts of their activities and behaviours on the coast and marine environment in the best interest of the resource they use as well as for the long term future of the tourism industry.
- **Adequate Facilities:** Local Shire and Government agencies as well as the Department of Conservation and Land Management should provide rubbish bins (with large and well signed lids) which are emptied regularly.
- **Enforcement:** The Department of Environment (DoE) has a Litter Report Scheme where registered people can report people they see littering. This needs to be workable and actively promoted as a disincentive to littering.

### **3.5 Stormwater Runoff**

- **Stormwater management:** Filtering systems need to be appropriate to the area and carefully maintained. Funding should be provided to local authorities to ensure this occurs.
- **Community education:** A campaign to engage the community in the issue and the effects of poor stormwater management. This has already been developed on the East Coast.

### **3.6 Illegal Dumping**

- **Greater enforcement of fines:** Catching people out and advertising the fact.
- **Community empowerment:** Give the community the right and the power to police this issue.

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**APPENDIX**

**TABLE 2 - DEBRIS FOUND DURING THE CAPE TO CAPE CLEAN UP**

**SHORELINE AND RECREATIONAL ACTIVITIES**

<b>Total</b>	<b>Item</b>	<b>Total</b>	<b>Item</b>
320	Plastic Bags	61	Cups, Plates, Cutlery
14	Balloons	666	Food Wrappers & Containers
632	Plastic Drink Bottles	19	Pull Tabs
206	Glass Drink Bottles	4	6-Pack Holders
197	Aluminium Cans	2	Shotgun Shells/Wadding
1347+	Lids, Bottle Tops	182	Straws/Stirrers
178	Clothing & Shoes	35	Toys
207	Foam	1878+	Pieces of Plastic
1	Aerosol Can	1	Plastic Chair

**OCEAN/WATERWAY ACTIVITIES**

<b>Total</b>	<b>Item</b>	<b>Total</b>	<b>Item</b>
76/131	Bait Containers/Packaging	28	Light Bulbs / Tubes
60	Bleach/Cleaner Bottles	14	Oil / Lube Bottles
273	Buoys/Floats	12	Pallets
73	Crab/Lobster/Fish Traps	37	Plastic Sheeting / Tarps
88	Crates	1000m	Rope - metres
23+	Fishing Line & Nets	427	Strapping Bands - metres
262	Cylume Sticks	6	Fishing Spool
23	Fishing Floats	39	Rubber
3	Broom & Scrubbing Brush	327	Oil Globules
7	Buckets		

**SMOKING-RELATED ACTIVITIES**

<b>Total</b>	<b>Item</b>	<b>Total</b>	<b>Item</b>
48	Cigarettes and Filters	1	White Goods - Stoves/Fridges
49	Cigarette Lighters	57	Batteries & Electrical Wiring
16	Tobacco Packaging/Wrappers	49	Building Materials
		5/10	Cars/Car Parts/Boat Parts
		1	55-Gal. Drums
		1	Tyres
		2	Hessian Bags

**DUMPING ACTIVITIES**

**MEDICAL/PERSONAL HYGINE**

<b>Total</b>	<b>Item</b>	<b>Total</b>	<b>Item</b>
2	Condoms	2	Sunglasses
2	Nappies	9	Paper
2	Syringes	76	Wood
	Tampons + Applicators	22	Metal - 1 x 7ft long cylinder metal
22	Toothbrushes + Brushes	6	Pen
		4	Bubble wrap

**OTHERS**