

# Single-use debris on the Israeli coast



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# Marine Debris on the Mediterranean Coast of Israel

## Types, Origin and Distribution in Space and Time

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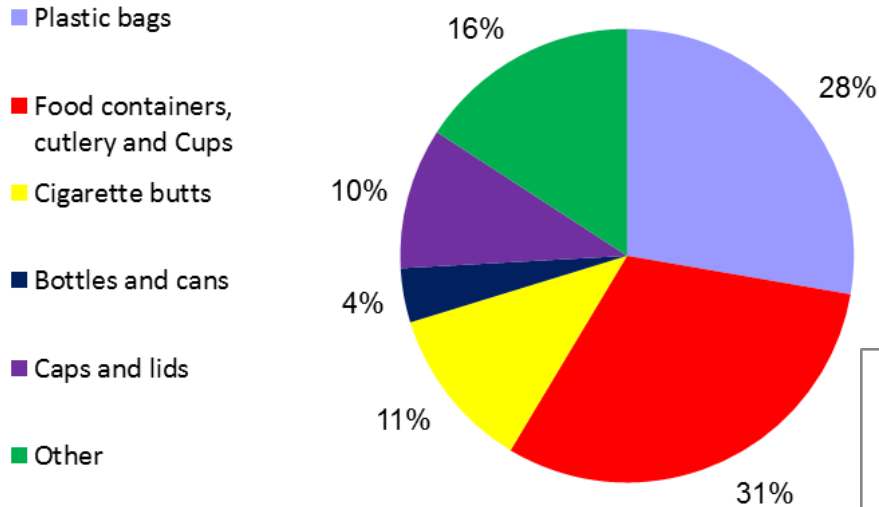
# Marine Debris Coastal Surveys Summer 2012 – Spring 2015

- Items >2.5cm counting in 100m long section
- Width measured from the waterline to the first physical border on the backshore, to calculate density.
- Debris is classified according to material and use, based on UNEP protocol (Cheshire et al, 2009)
- The debris is also classified to possible source and country of origin according to it looks and labels.



# Us and the world

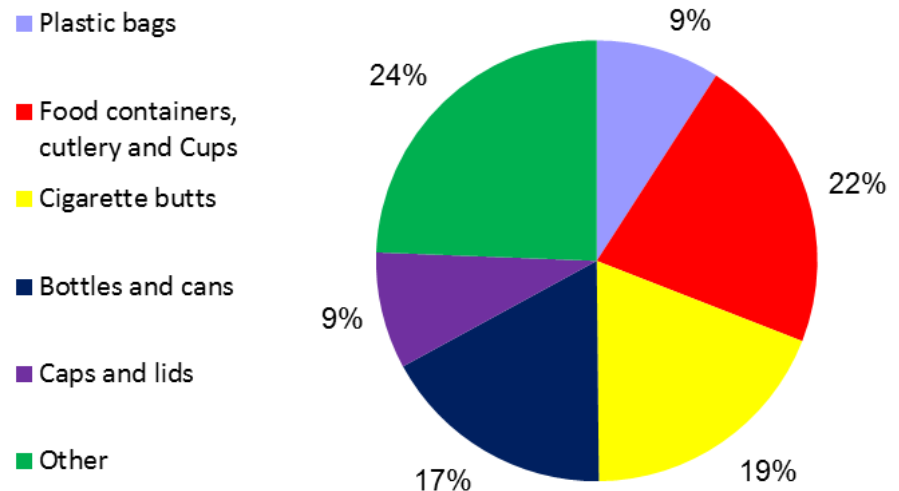
## ISRAEL 6.12-8.13



Preliminary results presented in 2013, show that the percentage of bottles on the Israeli coast is low compared to the rest of the world. On the other hand, I found much more plastic bags than the world average.

At that time, Israel had a "recycling law" which charges 10 cents on small bottles and cans, which are refunded when these items are returned to grocery shop. Big bottles are voluntarily recycled in big mesh containers which are well distributed throughout the country.

## ICC 2012



# Plastic Bag Law

## **Consumers will have to pay a levy of ~3 cents for plastic bags at large supermarket chains**

- Nov. 2014: The Knesset (Parliament) prepared the Plastic Bag Law with an awareness as the law was about to be active in January 2015
- The legislative process was halted with the dissolution of the parliament a month later.
- July 2015: Plastic Bag Law returned to Knesset for consideration, and as we learnt later from the general manager of the ministry of environmental protection, they actually used our comparison to convince the current Knesset that imposing a levy on plastic items helps reduce them.
- March 2016: The Knesset approved the Plastic Bag Law
- Jan. 2017: Plastic Bag Law takes effect

**80% Reduction in plastic bag use at large supermarkets 6 month after law passed**

# Top 5 Items Found along the Israeli Coast

■ Cigarette butts

■ Food wrappers and disposables

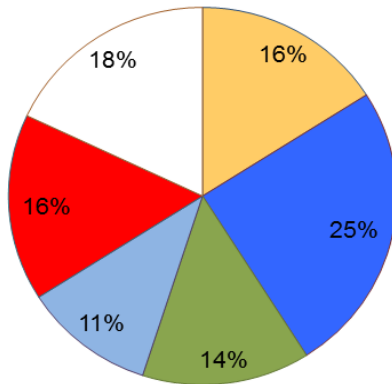
■ Beverage Bottles and cans

■ Plastic bags

■ Bottle caps

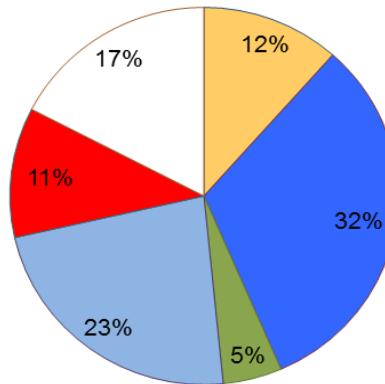
■ Other

### Mediterranean



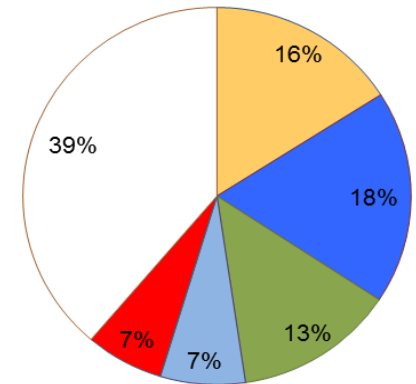
UNEP (2015)

### Israel



(2012-2015)

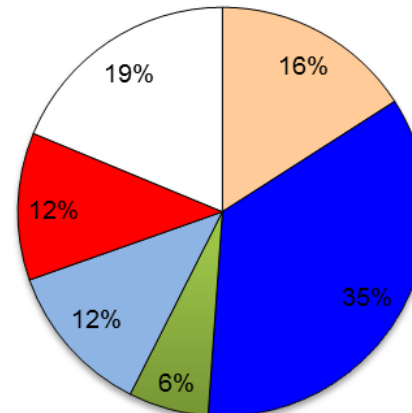
### Global Average



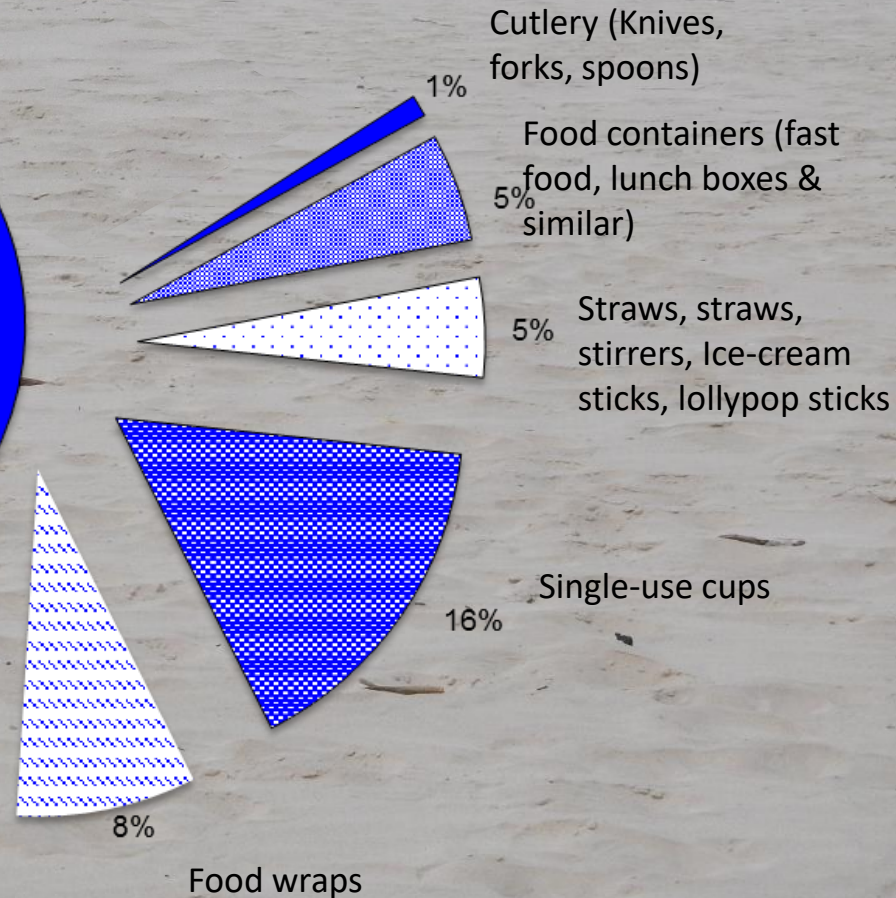
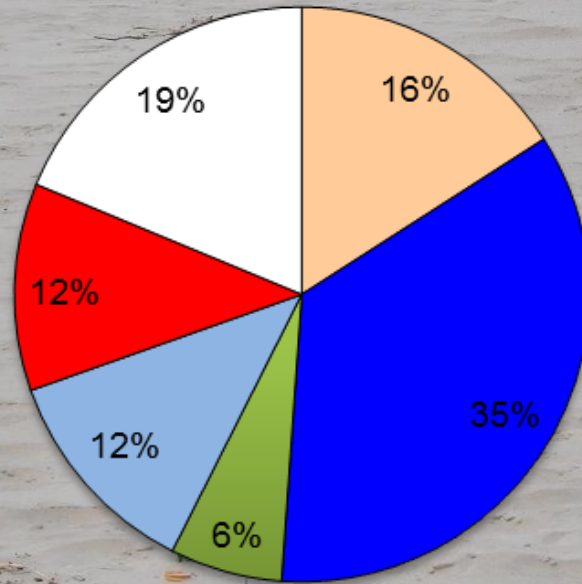
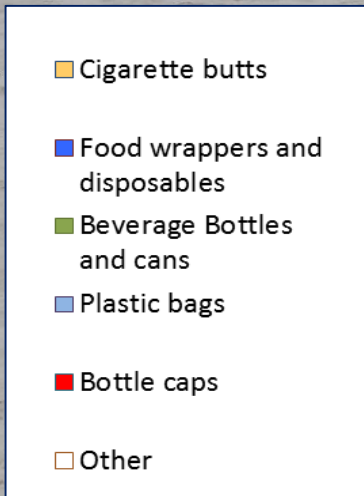
Ocean Conservancy (2013-2015)

Comparing the 5 top items found on 2017, to the ones collected between 2012-2015, shows that the relative amount of plastic bags dropped to almost half of what it was. Israel has much more single use utilities.

### Israel 2017



# Top 5 Items Found along the Israeli Coast



We broke the single use utilities to smaller groups, to know what we are dealing with, and found that amount of single use cups on the beaches is equivalent to the number of cigarette butts - 16% - and that is my next target.

There's a lot we can do





# Working with the coastal businesses

Through conditions in the contract / permit:

- Stop provide straws on the beach
- Reduce caps by selling only cans, or bottles without the lids
- Handing / selling multi-use cups in the coasts
- Offering rewards to people who bring beach collected debris
- Make sure they clean their area



# Public awareness

Local communities

Personal trash bin and ashtray distribution

Signage, vocal announcements, apps and websites

Joining the Blue Flag program

Campaigns

Legislation



# But How Do You Fight This?



# Thank you!

We are doing it for them...



Wish you peace