



# How to monitor marine litter and tourism waste: results from BLUEISLANDS project

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# BLUEISLANDS IN A NUTSHELL

- 14 partners from 8 countries in a systematic effort to properly **identify**, **address** and **mitigate** the effects of the **seasonal variation of waste generation on MED islands**
- Waste Characteristics Study (quantification and characterization of waste generated by hotels, restaurants, bars, etc., in selected impact areas). **2018**
- Monitoring and reuse of wastewater discharges in coastal marine ecosystems. **2017**
- Monitoring of marine litter in 24 beaches of 8 islands (micro- and macroplastics). **2017**



# BLUEISLANDS Monitoring Marine Litter



**Hypothesis:** marine litter on beaches of Mediterranean islands is increasing seasonally due to the increase of visitors during the high touristic season.

→ **3 beaches** x **8 islands** (highly touristic – used by locals – remote)



# Monitoring Marine Litter **Touristic beach**





# Monitoring Marine Litter Beach used by locals





# Monitoring Marine Litter Remote beach



# BLUEISLANDS Monitoring Marine Litter



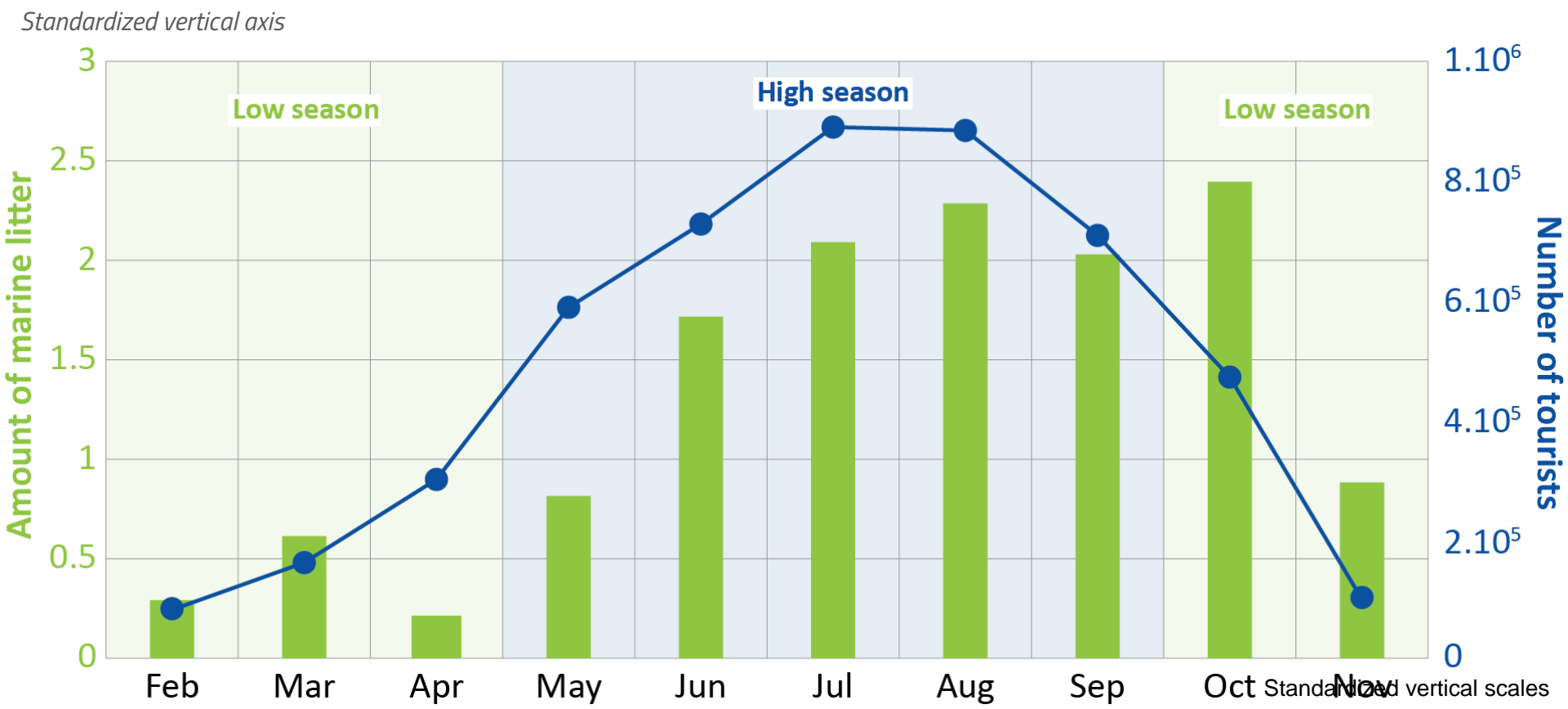
**Hypothesis:** marine litter on beaches of Mediterranean islands is increasing seasonally due to the increase of visitors during the high touristic season.  
→ **3 beaches** x **8 islands** (highly touristic – used by locals – remote)



**Method:** fixed 100m portion of beach is periodically monitored during both low and high touristic seasons. *The OSPAR guideline for monitoring marine litter on beaches* was adapted to BLUEISLANDS needs (inclusion of the microplastics (<5mm))

# BLUEISLANDS Monitoring Marine Litter – Overview

**147** surveys on 100m of beach  
**24** beaches monitored from February 2017 to November 2017  
**172 255** items collected (**64%** during high touristic season, **1200** items per survey)

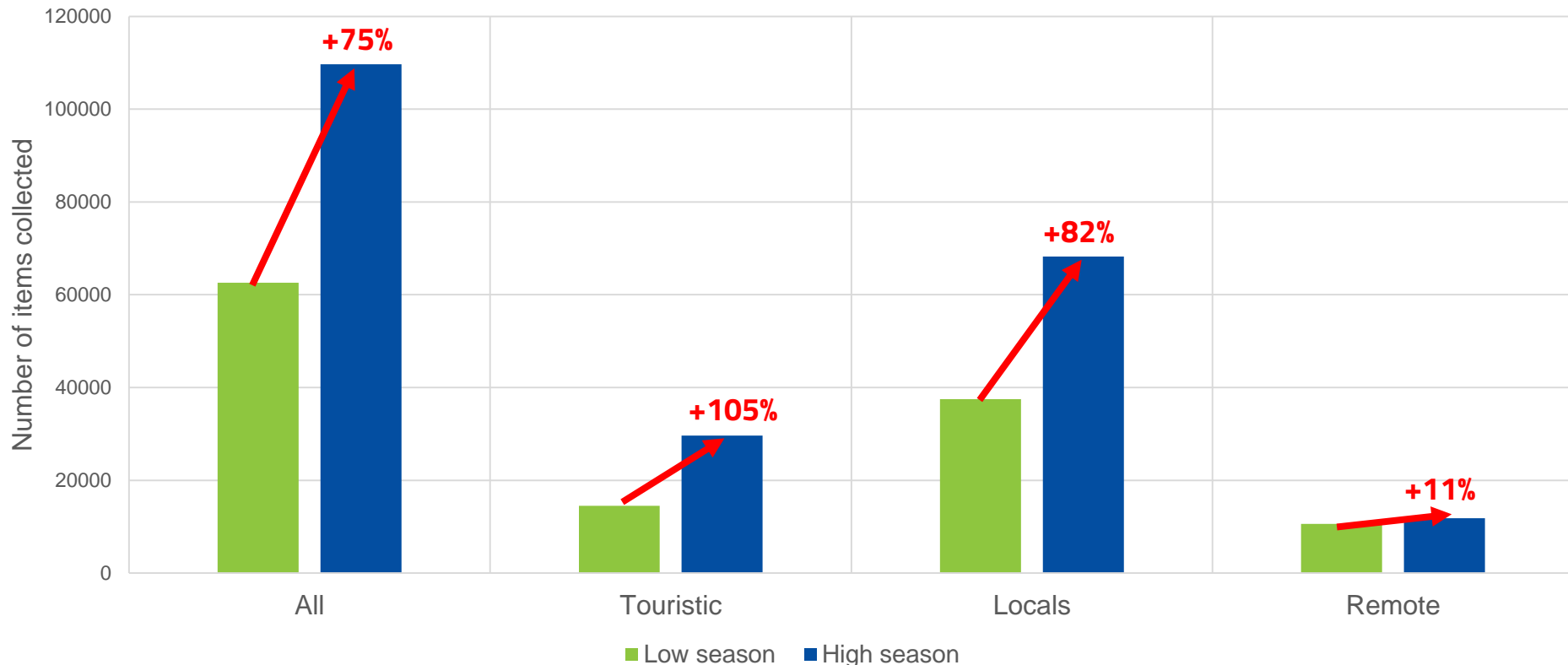




# BLUEISLANDS Monitoring Marine Litter – Overview

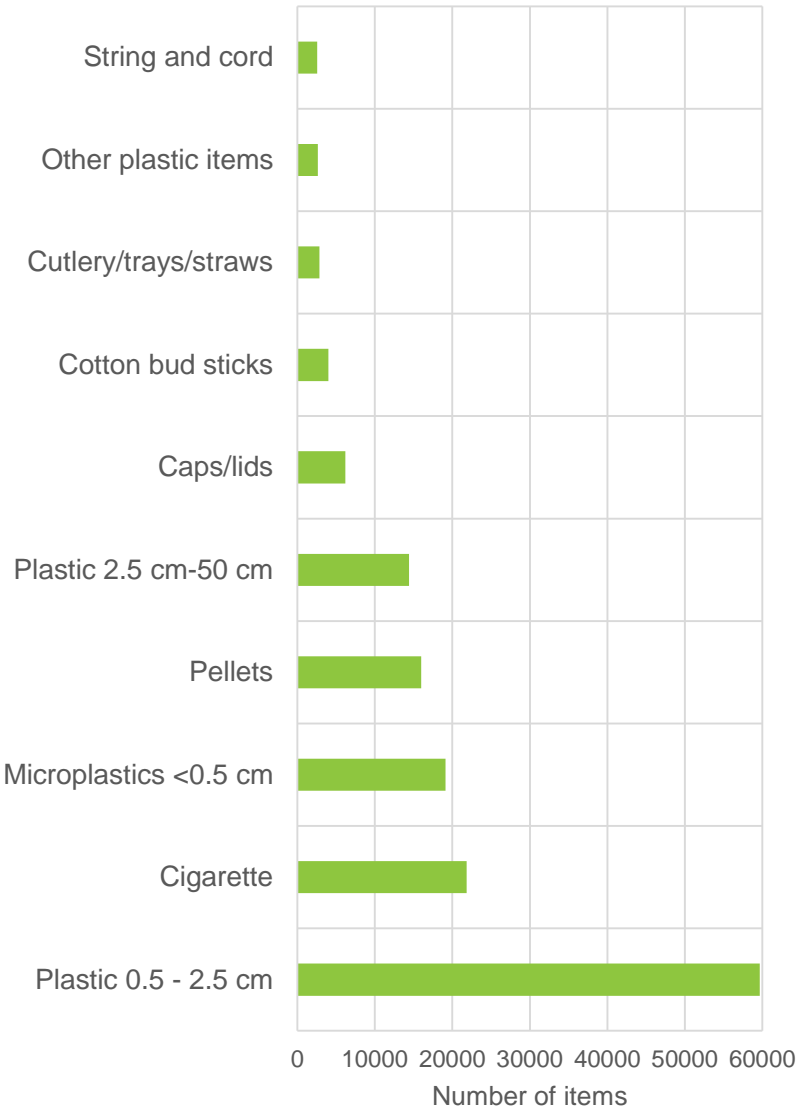
Average increase of **75%** in summer (**11% - 105%** depending the type of beach)

Beaches used by locals more impacted (**61%** of the total), followed by the touristic beaches (**26%** of the total) and the remote beaches (**13%** of the total)



# BLUEISLANDS Monitoring Marine Litter – Overview

10 most abundant items

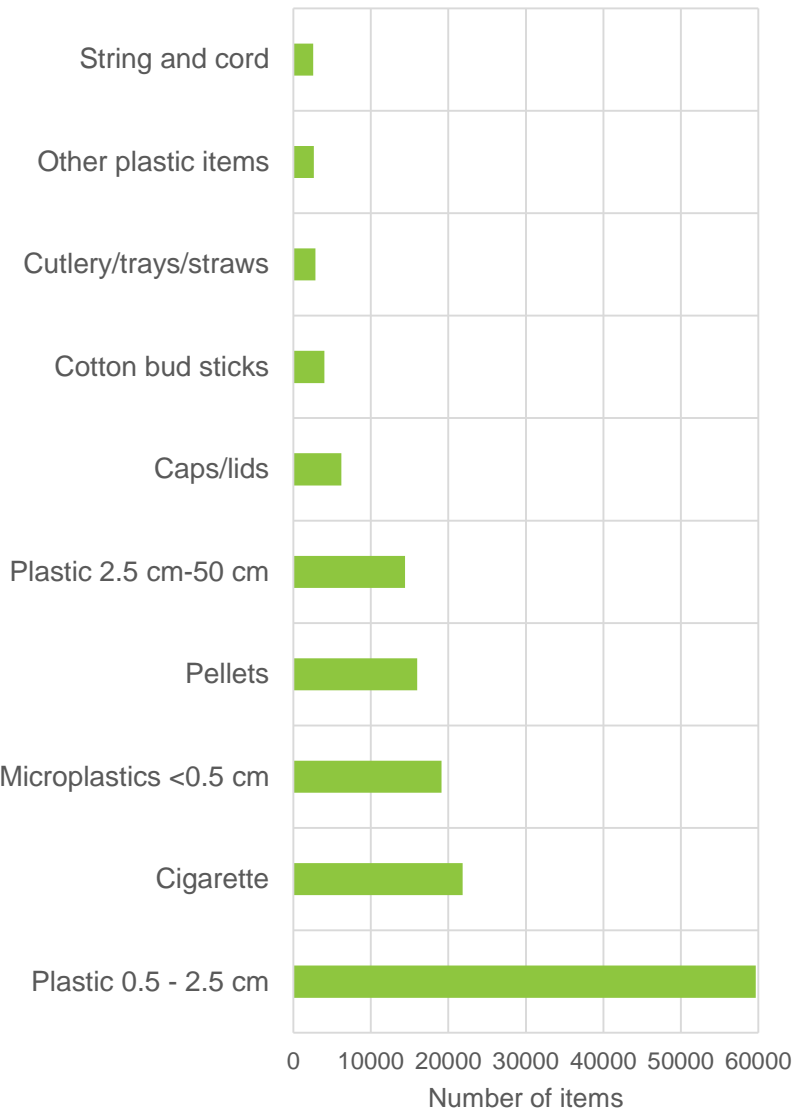


→ 87% of ML

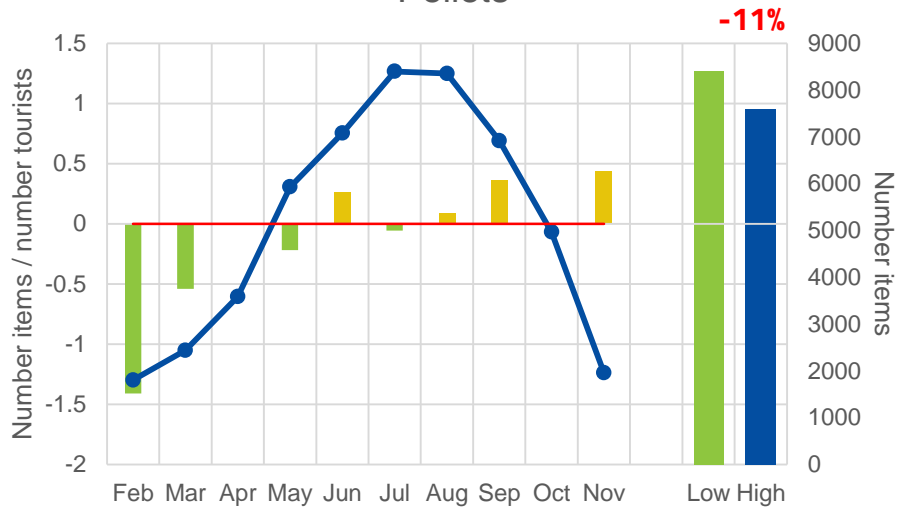


# BLUEISLANDS Monitoring Marine Litter – Overview

Total



Pellets

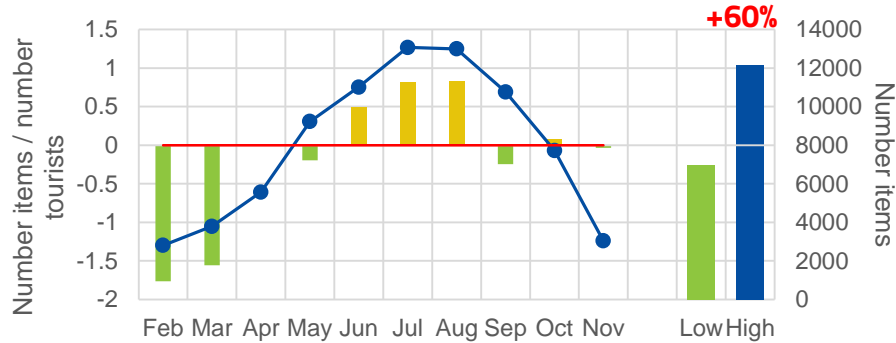


→ 9% of ML



# BLUEISLANDS Monitoring Marine Litter – Overview

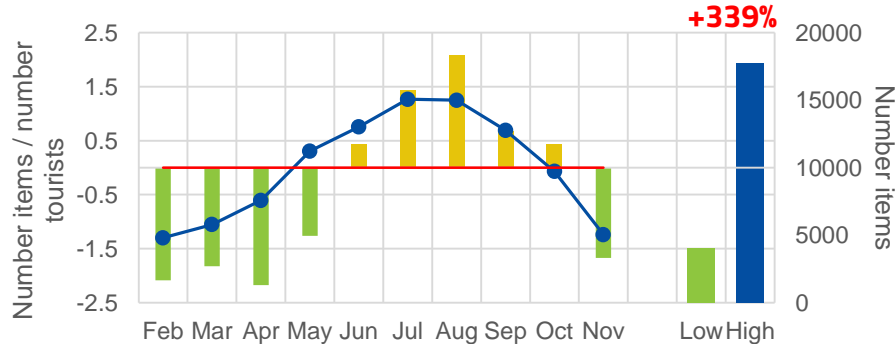
Microplastics (<0.5cm)



→ 11% of ML



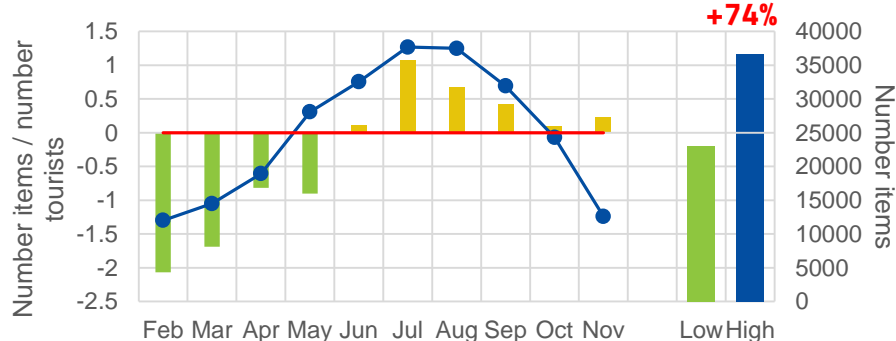
Gigarette filters



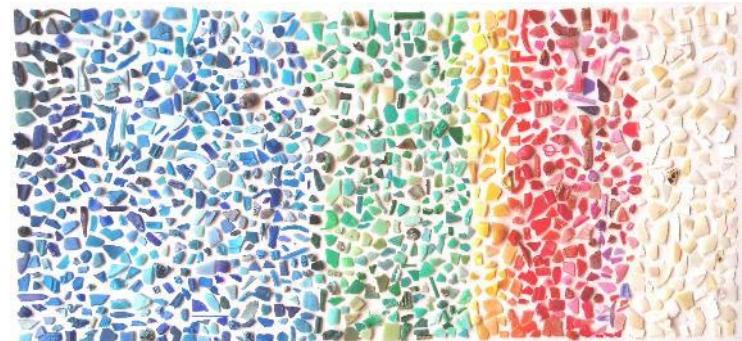
→ 13% of ML



Plastics (0.5 - 2.5cm)



→ 35% of ML





# Take-home messages:

Increase of the marine litter  
during the high touristic season in  
the 3 different types of beach

Beaches used by locals are more  
affected

Pieces of plastic <2,5 cm and  
microplastics show a seasonal  
increase

## Thanks



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