

12 - 17 SEPTEMBER 2022



BEACH AND UNDERWATER CLEAN-UP 17 SEPTEMBER – SCOTTBURGH, KZN SOUTH COAST

Presented by John Dory's Zero Waste Initiative and Plastics SA, supported by ScubaXcursion, NAUI, Faith Divers, AquaAmazing and Keep Scottburgh Beautiful

Introduction

The land-based plastic waste issue in Africa

Africa is experiencing unprecedented population growth with predictions that it will add 1.3 billion people to the planet by 2050. This is the equivalent of 3.5 million more people per month, or 80 additional people per minute, thus making Africa the biggest contributor to the future global population growth.

Furthermore, the highest rates of population growth and urbanisation are expected in the coastal zone with an estimated 49 million more people in low elevation coastal flood plains by 2060. Alongside this rapid rate of urbanisation, Africa's growing middle class is creating large consumer markets for plastic goods and those packaged in plastic with supermarkets now replacing informal shops and markets.

The increasing trend in per capita consumption, urbanisation, and population growth is concerning when combined with a lack of sufficient infrastructure to manage the increased waste generation. Plastic waste presents not only an environmental issue for African countries, but also a major socio-economic development challenge, which impacts biodiversity, infrastructure, tourism and fisheries' livelihoods. The lack of clean drinking water only exacerbates the problem, as in many city centers, even drinking water is packaged in single use sachets and plastic bags.

A recent study estimates the quantity of mismanaged plastic waste available to enter the ocean from each of Africa's coastal and island countries. Of particular relevance are Egypt, Nigeria, South Africa, Algeria and Morocco which are estimated to be among the top 20 countries around the world contributing to marine debris each year.

A change in consumer behaviour and growing population has resulted in increasing plastic consumption in Africa

With growing plastic consumption and weak municipal solid waste collection systems, Africa is at risk of increasing plastic and other packaging litter in the environment. If Africa does not put measures in place to mitigate the flow of plastic and other waste, increasing pollution is likely to negatively impact African countries economies.

Solutions and innovation for Africa

Education, litter awareness and clean-up campaigns

Research has shown that education and awareness raising programs are correlated with reduced litter. Fast-tracking education and understanding to promote behavioural changes while creating a platform for sharing educational resources and best practices could prove beneficial towards reducing waste inputs to the environment. Working with manufacturers, distributors, retailers, government and NGO's to increase understanding of the impacts of plastic losses to the environment could also help to identify and reduce leakage points.

International Coastal Clean-up

Plastics SA, together with Ezemvelo KZN Wildlife, partnered with Ocean Conservancy in 1997, with the aim to address the problem of plastics pollution on our beaches and ocean. Ocean Conservancy has been the custodian of the International Coastal Clean-up for more than 40 years and it takes place on the third Saturday of September.

Clean-up and Recycle SA

Clean-ups along the coastline had to be extended to inland areas as most litter originates from land based sources and is transported via rivers and waterways to the ocean. In 2000, Plastics SA initiated Clean-up and Recycle SA Week, which takes place annually, during the week before the coastal clean-up.

This clean-up week is a national event and includes:

- National River Clean-up Day (Wednesday)
- Recycling Day SA (Friday)
- International Coastal Clean-up Day (Saturday)
- World Clean-up day (Saturday)

Partnerships and collaboration

Support from organisations and individuals is essential if the Clean-up and Recycle SA Campaign, National Recycling Day, World Clean-Up Day and International Coastal Clean-up Day are to be successful.

John Dory's (John Dory's Zero waste Initiative) and Plastics SA partnered in the 2022 Cleanup and Recycle Campaign with a beach clean-up, underwater clean-up and shark dissection (marine pollution education) at Scottburgh, KwaZulu Natal South Coast.

Identification of clean-up location

The focus was on a beach and underwater clean-up at Scottburgh, at the well-known reefs of Aliwal Shoal, located on the KZN South Coast. The reefs are situated in a Marine Protected Area.

Marine Protected Area (MPA)

Marine Protected Areas aim to conserve marine life and promote the conservation and effective management of biodiverse areas.

Aliwal Shoal

The offshore reef in the MPA is made up of soft and hard corals including sponges and fossilised sandstone. The reef lies 5 km offshore from the Umkomaas River mouth, close to the coastal village of the same name. The marine protected area extends 18.3km along the

coast between the Mzimayi and Umkomaas river mouths, and extends 7km out to sea, and there are shipwrecks within the MPA borders.

Being such a popular dive site and fishing area, the seas are inundated with divers, ski-boat fishers, charter fishers, spear fishers, rock/surf fishers and commercial fishers.

Scottburgh

Scottburgh is a bay situated on the South Bank of the Mpambanyoni River, a short river that culminates in a lagoon. It is one of the best geographical examples of a bay on the South African coast. Mpambanyoni mouth has fluctuated in surface area and volume dramatically over the years, largely due to the frequent droughts, occasional cyclones, and other extreme weather conditions that affect KwaZulu-Natal.

The summer season sees many tourists from inland flock to the beaches of the South Coast. There are many activities that contribute to Scottburgh being a popular destination such as microlight flights, diving and shark cage diving, sea rides, rock and surf fishing, surfing, Umdoni Park run and bicycle trails.

Actions for the day – 17 September 2022



The team agreed to support the following activities on International Coastal Cleanup Day and World Clean-up Day on 17 September 2022.

River clean-up

Coordinated by Keep Scottburgh Beautiful

The week started with the Mpambanyoni river clean-up on National River Clean-up Day, Wednesday, 14 September, supported with kayaks, 18 crew from Legend Kayaks and clean-up bags and gloves from Plastics SA.

The 18 strong clean-up team collected 63kgs along a 2.6km stretch of river.

- Underwater clean-up

Coordinated by ScubaXcursions (Scottburgh based)

An early morning dive took 27 divers with 3 boats to 3 Aliwal Shoal reefs for an underwater clean-up. Aliwal Shoal is a well-known destination for divers globally. The litter collected included fishing line, clothing, bottles, caps and some unusual items such as a sock, cable tie and soap.









- Beach Clean-up

Coordinated by Keep Scottburgh Beautiful

On Saturday morning over 90 volunteers from the community, business and schools supported a beach clean- up at Scottburgh main beach towards the north. As a beach clean-up (International Coastal Clean-up), one of the actions was to capture the data of what was collected. The data sheets were supplied by Ocean Conservancy. The data will be captured by Plastics SA who compile the South African ICC Report for Ocean Conservancy.





- Shark dissection

Marine Education by AquaAmazing

Marine Education plays an important part in highlighting the effect of litter on marine life. AquaAmazing used a juvenile Scalloped Hammerhead shark to present an informative and entertaining session, enjoyed by young and old.



DATA CAPTURED:

UNDERWATER CLEANUP

SCUBAXTREME - SCOTTBURGH - KWA-ZULU NATAL

17 SEPTEMBER 2022

Trash collected	Butchers Reef	Fern Reef	Castle Reef	Total
Volunteers	9	7	11	27
Kg collected	3	1	2	6
Distance	250m	250m	750m	1250m
Bags filled	3	1	1	5
Fishing line	30m	2m		32m
Beverage bottles (plastics)	3	3	1	7
Beverage bottles (glass)	1			1
Plastics bags	5			5
Plastics pieces - other	1			1
Bottle caps (metal)	5			5
Food wrappers	4			4
Fabric pieces	6	4		10
Paper bags		1		1
Plastics film		1		1
Diving weight			1	1
Hygiene items -tampons	1			1
Unusual items:				
Sock, soap, cable tie, fabric				

SCOTTBURGH BEACH AND RIVER CLEAN-UP

KEEP SCOTTBURGH BEAUTIFUL SCOTTBURG BEACH AND MAPAMBMYONI RIVER, UMDONI

Trash collected	Beach clean-up	River clean-up	Totals
Volunteers	96	15	111
Total number of bags	42	9	51
Wight of trash (kg)	151 kg	18 kg	169
Distance cleaned (Km)	1.5 km	3 km	4.5 km
Cigarette butts	243	10	253
Food wrappers	32	25	57
Take away containers (plastics)	12	10	22
Take away containers (foam)	68	17	85
Bottle caps (plastics)	131	30	161
Bottle caps (metal)	119	10	129
Lids (plastics)	35	7	42
Straws (plastics)	56	12	68
Fork, knifes, spoons (plastics)	53		
Beverage bottles (plastics)	93	28	121
Beverage bottles (glass)	72	32	104
Beverage cans	38	8	46
Grocery bags (plastics)	23	16	39
Other plastics bags	17	7	24
Cups, plates (paper)	6	1	7
Cups, plates (plastics)	4	5	9
Cups, plates (foam)	39	9	48
6 pack holders	6		6
Other plastics bottles	9	3	12
Strapping	6		6
Tobacco wrap/packaging	6	11	17
Other foam packaging/plastics	27		27
Fish net pieces	7		7
Fishing line (m)	28 m		28m
Rope (m)	2 m		2m
Appliances	1		1
Balloons	9		9
Construction materials	8	5	13
Tyres	7		7
Covid masks	12		12
Earbuds	3		3
Tiny trash:			
Foam pieces	250	7	257
Glass pieces	26	39	65
Plastics pieces	210	21	231

Unusual items: hot iron, backpack, tricycle, plastics pipe, carpet, diapers in river

Items of concern: cigarette butts, lollipop sticks

THANK YOU TO OUR CLEAN-UP TEAM AND SPONSORS!

John Dorys and their Zero Waste Initiative

Plastics SA

ScubaXcursion

NAUI

Faith Divers

Keep Scottburgh Beautiful

AquaAmazing

Our great volunteers, our camera teams who provided videos and pictures



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