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## Report Brings to the Surface the Growing Global Problem of Marine Litter

### UNEP Head Calls for World-Wide Ban on Pointless Thin Film Plastic Bags

**Washington DC/Nairobi, 8 June 2009** – From discarded fishing gear to plastic bags to cigarette butts, a growing tide of marine litter is harming oceans and beaches worldwide, says a new report.

The report, the first-ever attempt to take stock of the marine litter situation in 12 major regional seas around the world, was launched on World Oceans Day by the UN Environment Programme (UNEP) and Ocean Conservancy.

Achim Steiner, UN Under-Secretary-General and UNEP Executive Director, said:

“Marine litter is symptomatic of a wider malaise: namely the wasteful use and persistent poor management of natural resources. The plastic bags, bottles and other debris piling up in the oceans and seas could be dramatically reduced by improved waste reduction, waste management and recycling initiatives”.

“Some of the litter, like thin film single use plastic bags which choke marine life, should be banned or phased-out rapidly everywhere—there is simply zero justification for manufacturing them anymore, anywhere. Other waste can be cut by boosting public awareness, and proposing an array of economic incentives and smart market mechanisms that tip the balance in favor of recycling, reducing or re-use rather than dumping into the sea,” he said.

The report’s findings indicate that despite several international, regional and national efforts to reverse marine pollution, alarming quantities of rubbish thrown out to sea continue to endanger people’s safety and health, entrap wildlife, damage nautical equipment and deface coastal areas around the world.

“This report is a reminder that carelessness and indifference is proving deadly for our oceans and its inhabitants,” says Philippe Cousteau, CEO of EarthEcho International and Ocean Conservancy board member. “Offered here are more than mere facts and figures. The time for action is now, and true change will require taking a bold and courageous stand. There are solutions that everyone, everywhere in the world, can adopt to make a positive difference for our water planet.”

### **Plastics and cigarettes top the “Top Ten” of marine debris**

Plastic – especially plastic bags and PET bottles – is the most pervasive type of marine litter around the world, accounting for over 80 per cent of all rubbish collected in several of the regional seas assessed.

Plastic debris is accumulating in terrestrial and marine environments worldwide, slowly breaking down into tinier and tinier pieces that can be consumed by the smallest marine life at the base of the food web. Plastics collect toxic compounds that then can get into the bodies of organisms that eat the plastic. Global plastic production is now estimated at 225 million tons per year.

Plastics can be mistaken as food by numerous animals, including marine mammals, birds, fish and turtles. Sea turtles in particular may confuse floating plastic bags with jellyfish, one of their favorite treats.

A five-year survey of fulmars found in the North Sea region found that 95 percent of these seabirds contained plastic in their stomachs. Studies of the Northeast Atlantic plankton have found plastic in samples dating back to the 1960s, with a significant increase in abundance in time.

Smoking-related activities also receive top rankings when it comes to sources of marine litter. Cigarette filters, tobacco packets and cigar tips make up 40 per cent of all marine litter in the Mediterranean, while in Ecuador smoking-related rubbish accounted for over half of the total coastal litter ‘catch’ in 2005.

“The ocean is our life support system – it provides much of the oxygen we breathe, the food we eat and climate we need to survive – yet trash continues to threaten its health,” said Vikki Spruill President and CEO of Ocean Conservancy. “The impact of marine debris is clear and dramatic; dead and injured wildlife, littered beaches that discourage tourism and choked ocean ecosystems. Marine debris is one of the most widespread pollution threats facing our ocean and it is completely preventable.”

### **The two sides of tourism**

The tourism and recreation sector has a significant impact on the state of seas and coastlines around the world:

- In some tourist areas of the Mediterranean, more than 75 per cent of the annual waste production is generated during the summer season.
- In Thailand, it is recognized that marine litter affects tourism – a high-value industry for the entire region.
- Shoreline activities account for 58 per cent of the marine litter in the Baltic Sea region, and almost half in Japan and the Republic of Korea.
- In Jordan, the major source of marine litter is recreational and leisure usage contributing up to 67 per cent of the total discharge, while shipping and port activities contribute around 30 per cent and the fishing industry three per cent only.

- Tourism is the third most important source of revenue in Egypt, while one-fifth of the country's hotels are located along the Red Sea coast.

If well-managed, tourism can contribute to maintaining the pristine appearance of beaches and waters, as demonstrated by Seychelles and Mauritius which contribute almost nothing to the marine litter load in the Western Indian Ocean despite being popular tourism destinations.

However, ocean winds and currents may carry unwanted marine rubbish far from its point of origin. For instance, Seychelles have reported an accumulation of rubbish on the east coast of the Mahé Island during the southeast monsoon, while items dumped off the west Australian coast have been retrieved on the east coast of South Africa.

### **From source to sea**

Land-based activities are the largest source of marine litter. In Australia, surveys near cities indicate up to 80 percent of marine litter originating from land-based sources, with sea-based sources in the lead in more remote areas.

The problem of marine litter is likely to be particularly severe in the East Asian Seas region –home to 1.8 billion people, 60 per cent of who live in coastal areas – which is experiencing simultaneous growth in both shipping activity and industrial and urban development.

Oil-based economics and an associated construction boom in the coastal areas of the Caspian Sea have made marine litter a new and emerging concern in the littoral states, particularly Iran and Azerbaijan.

In South Asia, the growing ship-breaking industry has become a major source of marine debris and heavy metal pollution to the adjoining coastal areas.

In Gujarat, India – one of the largest and busiest ship-breaking yards in the world – operations are carried out on a 10-kilometer stretch on the beaches of Alang, generating peeled-off paint chips, iron scrap and other types of non-degradable solid waste often making its way into the sea.

The Southeast Pacific has important ports and intense maritime traffic. In the five littoral countries, wastes from marine-based sources have been reported, but there is very little information regarding the origin and volume of these wastes. According to one estimate, the Colombian fishing fleet generates approximately 273 tons of marine litter each year.

The lack of adequate solid waste management facilities results in hazardous wastes entering the waters of the Western Indian Ocean, South Asian Seas and southern Black Sea, among others.

### **The cost of rubbish**

Unightly and unsafe, marine litter can cause serious economic losses through damaged boats, fishing gear, contamination of tourism and agriculture facilities. For example:

- The cost of cleaning the beaches in Bohuslän on the west coast of Sweden in just one year was at least 10 million SEK or \$1,550,200.
- In the UK, Shetland fishermen had reported that 92 per cent of them had recurring problems with debris in nets, and it has been estimated that each boat could lose between \$10,500 and \$53,300 per year due to the presence of marine litter. The cost to the local industry could then be as high as \$4,300,000.
- The municipality of Ventanillas in Peru has calculated that it would have to invest around US\$400,000 a year in order to clean its coastline, while its annual budget for cleaning all public areas is only half that amount.

At the same time, flexible and economic incentives and deterrents need to be put in place to address the growing problem of marine litter.

At the moment, port authorities sometimes unwillingly discourage ships from bringing their galley waste back to shore – as seen in the East Asian Seas region where ships are charged on a fee-for-service (user pays) basis. Some vessel operators therefore opt to dispose of their garbage at sea – at no cost.

Adopting a ‘no special fee’ approach to port waste reception facilities, as pioneered in the Baltic Sea region, can substantially decrease the number of operational and illegal discharges and help prevent pollution from ships to the marine environment.

The level of fines for ocean dumping also needs to be reviewed to make them a sufficient deterrent. For example in the US the cruise ship Regal Princess was fined US\$500,000 in 1993 for dumping 20 bags of garbage in to the sea. Fines of this level would act as a genuine deterrent to dumping of marine litter.

Finally, income-generating opportunities linked to collecting and recycling marine litter can make a big difference in some of the world’s poorer regions. For instance, in East Africa small-scale projects that create jobs and reduce the levels of marine rubbish need to be further promoted.

### **Notes to Editors**

The report Marine Litter: A Global Challenge is available online at:

<http://www.unep.org/regionalseas/marinelitter/publications/default.asp>

The 12 regional seas which were included in the report are: Baltic Sea, Black Sea, Caspian Sea, East Asian Seas, East African Seas, Mediterranean, Northeast Atlantic, Northwest Pacific, Red Sea and Gulf of Aden, South Asian Seas, South Pacific, and Wider Caribbean.

**Table 4.** 'Top ten' marine debris items – ICC global (1989-2007 combined)

1989-2007 'Top ten' marine debris items – global ICC totals		
Debris items	Number of items	Percent of total
Cigarettes/cigarette filters	25,407,457	24.6
Bags (paper & plastic)	9,711,238	9.4
Caps/lids	9,398,977	9.1
Food wrappers/containers	9,191,575	8.9
Cups/plates/forks/knives/spoons	7,428,964	7.2
Beverage bottles (plastic) <2 litres	5,684,718	5.5
Beverage bottles (glass)	4,991,860	4.8
Beverage cans	4,798,554	4.6
Straws, stirrers	4,508,085	4.4
Rope	2,215,329	2.1
<b>Total debris items</b>	<b>103,247,609</b>	<b>80.7</b>

*Source: Compiled from annual ICC data reports, Center for Marine Conservation/Ocean Conservancy (1989-2007).*

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