

Special Report: A Plastic Tide

Analysis by Dr. Joseph Mercola



March 11, 2023

STORY AT-A-GLANCE

- > The world now produces 299 million tons of plastics a year, most of which ends up in the oceans
- > A hard-hitting documentary from Sky News, "A Plastic Tide," showcases the urgent problem of plastic pollution and what some activists are doing about it
- > Volunteers in Mumbai, India, and other places are cleaning up the plastic pollution on beaches
- Marine animals die from eating plastic, which they can mistake for food or become entangled in
- > CT scans reveal plastic in the tissues of mussels found in Belgium

Editor's Note: This article is a reprint. It was originally published February 15, 2020.

The catastrophe of plastic pollution is growing worse. Single-use plastic bottles and bags, food packaging, fishing nets and biosolids are turning the world's oceans, seas and beaches into tragic wastelands. Microplastics from artificial clothing fibers and microbeads in personal care products add to the devastation.

Plastic is everywhere. Bottled water, grocery bags, shower curtains, garbage can liners and kitchen utensils are just a few of the ways plastic has made its way into every aspect of our daily lives. Our throwaway mentality, bred and fed by the mass production

of plastics, has created a pollution problem that now threatens the very future of humanity.

It threatens fish, birds and water supplies, including still-pristine areas completely free from industrialization. The world now produces 299 million tons of plastics a year, most of which ends up in the oceans.

Biosolids spread on cropland increase the problem as they too contain microplastics.

Once called "sewage sludge," biosolids are widely used as "natural fertilizer" in the U.S. and other countries.

In addition to plastics, biosolids contain PCBs, dioxins, pharmaceuticals, hormones, surfactants, heavy metals and disease-causing pathogens. A hard-hitting documentary from Sky News, "A Plastic Tide," showcases the urgent problem of plastic pollution and what some activists are doing about it.

Waterways Are Being Turned Into Synthetic Soup

"The ocean where life on Earth began is being turned into a synthetic soup" — so begins a dramatic Sky News documentary, "A Plastic Tide," narrated by science correspondent Thomas Moore.¹ As Moore traverses from Mumbai, India, to Plymouth, London, the Netherlands, Belgium, Indian islands and Scotland, even the most ardent environmentalist will be shocked at the plastic toll.

"We are sleep walking into a catastrophe," says Moore as Afroz Shah, an activist and beach cleaner, escorts him through Mumbai streets to show him the extent of plastic pollution on a local beach. Shah and Moore agree that it is not a beach at all but a dump site, as they wade through the plastic waste and wearing yellow protective gloves. "This isn't litter dropped on the beach; it's come from the sea," says Moore.

Shah, says the documentary started the "world's biggest beach clean" with 4,000 tons of trash cleared. He says he remembers the polluted beach as a pristine swimming area when he was young and is disheartened to see its demise and public indifference.

"People think the prime minister of this country should come on the beach and clean,"

says Shah.² They do not feel personal responsibility for the shocking amounts of plastic debris.

Especially harmful are single-use plastics such as shopping bags. Shah points out blue bags from the mall scattered across the beach. Citizens unthinkingly accept and discard them, he says, thinking it is not their problem.

Near the beach, Moore interviews some fishermen who confirm that their nets catch only plastic these days, not fish, and so they are idle. "There is no point in fishing here," says an unnamed fisherman. By 2050, the plastic in the sea could weigh more than all the fish, adds Moore.

A University of Plymouth Professor Weighs In

After the tour of Mumbai, Moore visits Richard Thompson, a professor and marine biologist at the University of Plymouth in Plymouth, England. Thompson says he recalls a book about the wonders of the new creation, plastics, that sat on his grandfather's bookshelf when he was just a child.

When plastic first surfaced, he reminds viewers, it was seen as a panacea for many uses, including automobile manufacturing. While he is reminiscing, the documentary plays old TV ads that display how easily plastic products stack and how a dropped plastic plate won't break like resin or ceramic plates.

Plastic in and of itself is not the enemy, says Thompson; the problem is single use plastics, which constitute 40% of the plastics produced. We have been trained to think of plastic as "throwaway and valueless" he says.³

Next the documentary takes viewers to London where, in 2017, crews discovered a 130-ton amalgamation of wet wipes, sanitary products and cooking fat stuck in a sewage pipe, which they called a fatberg.⁴ The fatberg weighed as much as 11 double-decker buses.

Moore interviews a sewer worker who is working underneath the Thames river, who confirms what viewers probably already know: "The only thing that should go down the toilet is paper," he says. He and Moore examine an article that looks like toilet paper but is actually plastic that has not disintegrated and will take hundreds of years to do so.⁵ Plastic waste in the Thames River flows into the sea, says a local cleanup volunteer.

Moore then joins Thompson on a boat with an apparatus to collect microplastics — plastics that have broken down into tiny pieces. There are "one or two pieces of plastic in 1 cubic meter (35.1 cubic feet) of seawater" says Thompson, and that becomes a massive amount of plastic in water bodies. Moreover, the microplastics "open up the potential of ingestion" to a wider amount of fish that would not eat larger plastic pieces, the professor warns.

Visits to the Netherlands, Belgium and Scotland

One of the most heartbreaking aspects of plastic waste is its deadly effect on marine life. Turtles suffocate while trapped in plastic, as the documentary shows, because they can't rise to the surface to breathe. Fish starve to death because the plastic they eat gives them a false sense of satiety. Plastic bags can deceptively resemble jelly fish to marine species that eat them.

When Moore visits Texel, a bird-rich island in the Wadden Sea, off the coast of The Netherlands,⁶ we learn more about plastics' toll on local wildlife. Moore interviews Jan Van Franeker, a scientist with Wageningen Marine Research, a collaboration between Wageningen University and the Wageningen Research Foundation in Wageningen, Netherlands.^{7,8}

"The wildlife tells us what we are doing wrong," says Franeker seated in front of a long table of dead birds. They are "suffering from our mistakes." The larger birds ingest larger plastic, says Franeker, holding up an entire toothbrush found in the body of an albatross.

All of the seabirds have "plastic in their stomach," he says. "It is a disgrace to mankind to find this in animals" he says while examining the dead seabirds, noting that the animals

die a slow and agonizing death.

In Belgium, Moore interviews professor Colin Janssen, an ecotoxicologist at Ghent University, about 30 miles from Brussels. Mussels, a mainstay of Belgian cuisine, are showing the effects of marine plastic pollution because of the huge amount of water they filter through their bodies, says Janssen. CT scans reveal the plastic in their tissues.⁹

The plastic is also in the stomachs of humans, adds Moore, and it crosses from our stomachs into our blood system, a phenomenon that is just beginning to be acknowledged. Janssen concurs with Moore about the seriousness of the plastic scourge and says future generations will say "they left us with a rotten plastic legacy."

Next, "A Plastic Tide" visits with an owner of a beautiful bed and breakfast located in Arrochar, Scotland. Despite the picturesque lodge, Cristina Sanchez-Navarro says so much plastic has washed up on the shores near her B-and-B, her guests have asked her, "Why do you have a landfill out there?"

Despite cleanup volunteers, the community is overwhelmed by the plastic pollution problem, she says, and even remote and isolated areas are blighted. Underscoring the crisis, a pet dog is seen with volunteers holding a plastic bottle in his mouth.

The Documentary Ends on a Note of Encouragement

After his visit to European locales, Moore returns to Mumbai and revisits Shah, the activist and beach cleaner we met earlier in the documentary. Flanked with fellow beach cleaners, Shah is now on a beach that is almost unrecognizable. The cleanup has worked. "One day we can swim again," says a volunteer after years of wading through plastic debris.

"How have you motivated the volunteers and achieved such effects?" asks Moore. We "set an example" for others and also educate the public, replies Shah. Moreover, "cleaning up rubbish is addictive," he says, because we volunteers love the ocean. "We are cleaning our hearts."

At the beginning of the documentary, during Moore's first visit to Mumbai, Shah says destroying the habitats of fish and marine life and risking their survival is just wrong. "No species has the right to destroy somebody else's house." Clearly his sentiments and those of cleanup volunteers everywhere are making a difference.

What Can You Do About Plastic Pollution?

While cleanup efforts by volunteers are valuable, each and every one of us has a responsibility to share the burden for putting an end to plastic pollution. Below is a sampling of strategies that can help:

Don't use plastic bags. Opt for reusable bags, especially for groceries
Bring your own mug for a coffee drink, and skip the lid and straw
Instead of buying bottled water, bring water from home in glass water bottles
Make sure the items you recycle are recyclable
Store foods in glass containers or Mason jars, not plastic containers or freezer bags
Bring your own leftovers container when eating out
Avoid processed foods, which are typically sold with plastic wrapping or plastic-lined paper boxes. Buy fresh produce and use vegetable bags brought from home
Request no plastic wrap on your newspaper and dry cleaning
Use nondisposable razors, washable feminine hygiene products, cloth diapers and rags in lieu of paper towels. (Old shirts and socks make great cleaning rags)

Avoid disposable utensils and straws and buy foods in bulk when you can

Buy clothes and other items at secondhand stores. Microfibers found in newer clothing can be as destructive as plastic grocery bags

Buy infant toys and even pet toys made of wood or untreated fabric, not plastic

Just as important as our own behavior, we need to demand a reduction in plastics from the companies that make and sell our food. Thanks to plastic bags, plastic food packaging and bottled beverages, grocery stores and food manufacturers are likely the largest contributors to plastic pollution problem.

They wrap every conceivable item in nonbiodegradable plastic from fresh produce to eggs, fish, bread, cheese and packaged foods. We need to vote with our wallet and simply refuse such practices. Our own conscientious behavior and persuading food purveyors to change their plastic use could go a long way toward reducing plastic waste.

Sources and References

- 1, 2, 3, 9 Sky News A Plastic Tide 2017
- 4 NPR September 12, 2017
- ⁵ The Balance Small Business October 22, 2019
- 6 Holland.com
- ⁷ Wageningen Marine Research
- 8 Wageningen Marine Research, Contact