

PLASTICS BREAKDOWN

WE USE TONS OF PLASTIC. IT'S IN EVERYTHING FROM PACKAGING TO TOYS, TO THE DASHBOARD IN YOUR CAR. MASSIVE AMOUNTS OF IT END UP IN THE OCEAN. IT CONTAINS TOXINS, AND ABSORBS MORE TOXINS. IT ENTANGLES AND KILLS SEA LIFE. IT CERTAINLY DOESN'T BIODEGRADE. BUT THERE ARE WAYS WE CAN HELP.

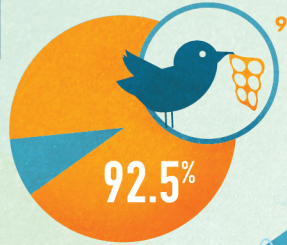


BAD FOR THE OCEAN, BAD FOR US



54%

OF THE 120 MARINE MAMMAL SPECIES ON THE THREATENED LIST HAVE BEEN OBSERVED ENTANGLED IN OR INGESTING PLASTIC.



92.5% OF DEAD SEABIRDS [NORTHERN FULMARS] IN A STUDY HAD INGESTED PLASTIC IN AMOUNTS EQUAL TO 5% OF THEIR BODY WEIGHT.

AMERICANS USE ROUGHLY 100 BILLION PLASTIC BAGS PER YEAR. PLASTIC BAGS CAN TAKE 400 TO 1,000 YEARS TO DECOMPOSE, BUT THEIR

CHEMICAL RESIDUES REMAIN FOR YEARS AFTER.

CHEMICALS USED IN PLASTICS LIKE PHTHALATES AND FLAME RETARDANTS HAVE BEEN FOUND IN FISH, MOLLUSKS, SEA MAMMALS, AND OTHER SEA LIFE

HOW BIG IS THE PROBLEM?

73.9 MILLION POUNDS OF PLASTIC ARE SPREAD THROUGHOUT THE WORLD'S GYRES.

IT'S EXPENSIVE TOO...

AS OF 2009, SOUTHERN CALIFORNIA CITIES HAD SPENT OVER \$1.7 BILLION TO KEEP WATERWAYS FROM BEING OVER LEGAL TRASH LIMITS.

HOW MUCH PLASTIC ENDS UP IN THE OCEAN?



CIRCULAR CURRENTS (GYRES) THOUSANDS OF MILES ACROSS COLLECT IMMENSE AMOUNTS OF PLASTIC IN ALL OF THE WORLD'S OCEANS.

MICROPLASTIC CONCENTRATIONS IN THE NORTH PACIFIC GYRE INCREASED 100X IN THE PAST 40 YEARS.

CURRENTS CARRY THE PLASTIC EVERYWHERE.

RUBBER DUCKS LOST FROM A SHIPPING CONTAINER IN THE NORTH PACIFIC WERE FOUND NEAR SCOTLAND, IN THE NORTH ATLANTIC. TSUNAMI DEBRIS FROM JAPAN ARRIVED IN NORTH AMERICA, AFTER CROSSING THE LARGEST OCEAN ON EARTH IN JUST 10 MONTHS.

PLASTIC IS MADE OF TOXINS



MILLION BARRELS OF PETROLEUM & NATURAL GAS LIQUIDS

WERE USED TO MAKE U.S. PLASTIC PRODUCTS, EQUAL TO ABOUT 5% OF THE NATIONAL PETROLEUM CONSUMPTION.

PLASTICS CONTAIN TOXIC CHEMICALS



PHTHALATES
FLAME RETARDANTS
BISPHENOL-A (BPA)

FACT:



MORE TOXINS ADHERE AS PLASTIC BREAKS DOWN

IN PLASTIC FROM THE NORTH PACIFIC GYRE:



40% CONTAINED PESTICIDES LIKE DDT.
50% CONTAINED PCBs (BANNED BY U.S. CONGRESS IN 1979, FOR HAVING VARIOUS NEUROTOXIC EFFECTS). 80% CONTAINED PAHs (MAY BE HIGHLY CARCINOGENIC).

FLOATING TOXIC MICROPLASTICS ARE OFTEN INGESTED BY MARINE LIFE, WHICH IN TURN IS CONSUMED BY US.

WHAT CAN WE DO TO HELP?

USE LESS PLASTIC

8 OF THE TOP 10 ITEMS FOUND ON BEACHES DURING LAST YEAR'S INTERNATIONAL COASTAL CLEAN-UP DAY WERE PLASTICS RELATED TO EATING & DRINKING.



TO GO CUPS > REUSABLE MUGS & CUPS

PLASTIC BAGS > REUSABLE BAGS, NO BAG

STRAWES > NO NEED

UTENSILS > USE NON-PLASTIC

ELECTRONICS > REPAIR OR UPGRADE. RECYCLE THE OLD ITEM WHEN YOU NEED SOMETHING NEW.

BOTTLED WATER > REUSABLE WATER BOTTLE

PACKAGING > BUY ITEMS WITH MINIMAL PACKAGING

CLOTHING > BUY NATURAL MATERIALS. SYNTHETIC FIBERS END UP IN THE OCEAN

