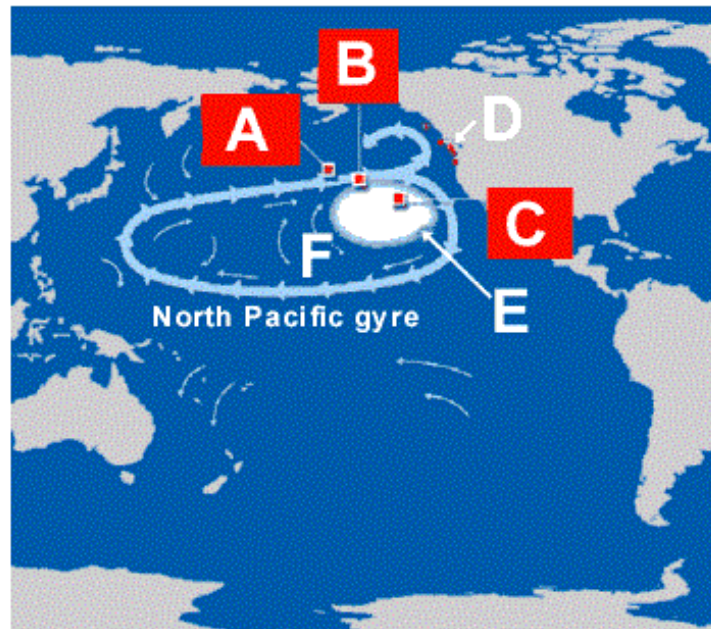


Causes of the Pacific Ocean Garbage Patch

What causes the Great Pacific Oceanic Garbage Patch?

CNN: 'Garbage patch' covers vast area of Pacific



"It is a problem of massive plastic proportions — a giant floating debris field, composed mostly of bits and pieces of plastic, in the northwest Pacific Ocean, about a thousands miles off the coast of California. It's called the Great Pacific Garbage Patch and it covers a vast area of hundreds, maybe even thousands, of miles of open ocean."

Via CNN

What type of trash makes up the garbage patch?

- Plastic! The majority of the garbage patch in the ocean is made up of several types of plastic [2]:
 - Plastic grocery bags
 - Milk cartons
 - Soda bottles
 - Abandoned fishing nets
 - Resin pellets
 - Resin pellets are small bits of plastic that are shipped for manufacturing uses and then melted and formed into other shapes



[3]

How does the trash get there?

- Trash that ends up in the ocean has to travel hundreds or thousands of miles to get where it is.
- When people litter and throw soda bottles, plastic bags, etc. out of car windows, on to the side of the road or leave them on beaches, they blow around and end up in lots of places.
 - One of those places, is in our waterways.
- Sometimes trash from our garbage dumps finds it way to waterways too.



How does it form the garbage patch?



[4]

Ocean Gyres



- Ocean gyres are huge spiral of water that are formed by currents that are colliding together. [2]
- The earth has 5 or 6 major ocean gyres.
- When the gyres and wind collide out in the ocean, they form a funnel which sucks the trash in and holds it together as a huge garbage patch. [5]

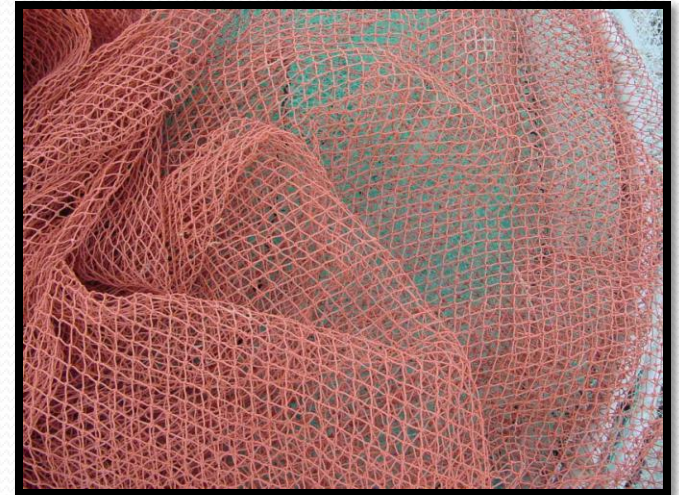
Does the plastic go away?



- Sunlight will break down the plastic fibers and break the plastic into smaller and smaller pieces....which is MUCH bigger problem!
- Sea mammals and water birds mistake those small pieces of plastic for food and eat them. [2]
- Plastic in the ocean takes much longer to break down than plastic on land because it gets covered with algae which shields it from the sunlight and makes it take longer to degrade. [5]

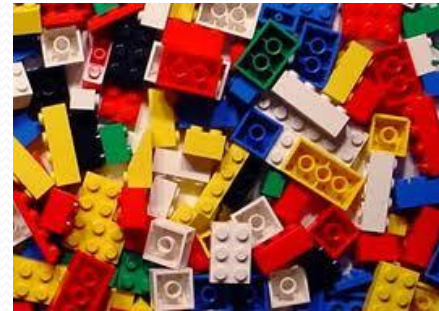
Fishing nets are also a problem!

- Commercial fishermen prefer plastic nets because they are less expensive and durable. [2]
- When they become old and are no longer needed, sometimes the fishermen will abandon their fishing nets in the ocean.
- Seals and turtles become entangled in the fishing nets and can't come up for air. They end up drowning.



Recreational boaters and cargo ships contribute too!

- Cargo ships drop about 10,000 steel containers of various items into the ocean each year. [2]



- Recreational boaters empty their trash into the waterways instead of waiting until they get back on land. [2]

What can you do?

- Don't litter
- Recycle!
- Educate your friends
- Volunteer with community members to help pick up trash off roadsides, beaches and shorelines



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