The Great Pacific Garbage Patch

By Leigh Hogle
The Great Pacific Garbage Patch is located in the Western and Eastern Pacific Ocean, drifting in the North Pacific Subtropical Gyre.
Where is it?

It is called an “oceanic desert” because of its lack of large animals, giving home to only phytoplankton and other small marine organisms.
History

- Predictions of the garbage island were actually published in the National Oceanic and Atmospheric Administration (NOAA) paper.

- Scientists saw concentration of trash building in specific areas such as the North Pacific Gyre. They warned it could lead to future problems.
There speculation were correct. In 1997 a man named Charles J Moore, who had just competed in the Transpac sailing race, was heading home and he came across the island of trash. It stunned him and brought the issue to the world's attention.

History
The garbage patch is actually two islands of trash that are together, called the Great Pacific Garbage Patch. It is estimated that the patch is twice the size of the state of Texas. The current of the oceans allows for the gyre to pull in debris from all over the world.
As the trash gets closer and closer to the center of the island it becomes permanently stuck within the patch. The trash is so dense it can hold the weight of a man and lies not only on the surface, but underneath the surface water level going down several feet. Though it is massive, you actually can not see the garbage patch from a satellite photo.
The sole reason why the Great Pacific Garbage Patch exists is because of us. We have created inorganic materials and haven’t disposed of them correctly allowing for some to make it to rivers that lead to oceans.

Why is this happening?
Our own laziness of the inability to pick up after ourselves is what litters our beaches allowing the tide to carry out every plastic bottle or bag into the open ocean.

Why is this happening?
Our own laziness of the inability to pick up after ourselves is what litters our beaches allowing the tide to carry out every plastic bottle or bag into the open ocean. The current have then carried the trash to these swirling gyres where it becomes one mass body or floating trash.

Why is this happening?
The island of trash is changing the entire environment around the mass by allowing small micro particles of plastic to drift through water lowering salinity, changing the water temperature to cooler as the sun can no longer penetrate through the trash only reaching the first several inches at most. The light beneath the island would be terrible and in some places nonexistent because of how much debris is floating at the top.

Affect: Abiotic Factors
The trash is having a devastation effect on all the living organisms, big or small. With the plastic trying to break down and decompose it is simply turning into smaller and smaller particles of plastic until it goes down to all the small molecular levels. This is what fish breathe through, the water, as they breathe the water the small plastic molecules are also entering their body harming their systems.
The larger animals are unable to sustain themselves around the area seeing nothing can live there and bottom dwellers make away with small morsels every now and again, but most animals are small and require they live closer to the surface for food.

Affect: Biotic Factors
Affects: Biotic Factors

- Other animals are extremely vulnerable to the trash and it’s harmful factors with many consuming plastic particles. They digest so much trash it kills them.

- Animals can also be easily trapped within old nets and plastic rings. Plastic rings can also strangle animals slowly killing them over a period of weeks.
Each state has littering laws trying to prevent people from dropping garbage at the side of the road or dumping in illegal sites, but there is no specific action in place to truly prevent littering. People still leave trash on the beaches, roads, and rivers, all which can lead to a dump site, or the ocean.
To fix the garbage patch it would take years of extensive work and great organization to figure out where to place all the trash.

Can it be fixed?
The way to prevent the Great Pacific Garbage Patch from growing even larger is to reduce our impact on the environment. Use less plastic, clean up after yourselves, be responsible for others picking up all trash you see on the ground.

Can it be fixed?


---

**Works Cited**


7. Plastic Paradise. Dir. Angela Sun. Perf. Documentary. 2012. DVD. Film is still a work in progress but have released a few clips and information on website.


Works Cited