

Protect the Richness of the Sea Through Beachcombing



Tokyo Metropolitan Fukagawa High School
International Volunteer Club

Beachcombing and the Issue of Marine Debris (Beach combing)

@Cape Taibusa Nature Park

Beachcombing, named for the way it resembles the gesture of combing hair, is the practice of observing and collecting **beach debris**. The most frequently seen debris are **seashells** and **sea glass**. Other marine life bones, such as those of sea turtles, are sometimes found washed up on the beach.

Sea glass is found on beaches and in large lakes. When they are washed by waves, they hit rocks and other objects, causing their corners to become rounded and surface to look like frosted glass. They are often used to make accessories.



However, we picked up not only shells and sea glass. We also found plastic bottles, plastic string, plastic fragments, and a ton of other garbage.

*Photos show some of the trash we picked up. There were many plastic bottles and other plastic trash that had drifted in from other countries, such as China.

Marine pollution caused by so-called "**marine debris**" is now a worldwide problem.



The causes of marine pollution include **oil spills** from shipping accidents, domestic **wastewater**, deteriorating water quality due to inflows of **industrial water**, and marine debris. We have focused our attention on marine debris.

Where Does Marine Debris Come From?
80% : **cities**
70% : **plastic wastes**



The damage caused by marine plastics to living creatures is serious. **More than 100,000 million mammals** die each year around the worldwith, and **15%** of them are endangered.

Our oceans are about to be overflown with garbage. It is estimated that more than **150 million tons of plastic waste** exist in the world, and **about 8 million tons (equivalent to 50,000 jumbo jets)** of such plastic waste are released into the ocean each year.

8,000,000t/year \div 50,000 planes

Amount of plastic trash in the ocean

15,000,000,000t

Microplastic Dilemma

Microplastics are one of the most hazardous types of plastics. (**Primary** and **secondary** microplastics)

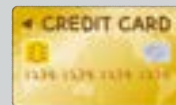
Primary Microplastics

These are plastics manufactured into **micro sizes**. Toiletries such as toothpaste, detergents, and cosmetics contain familiar primary microplastics.



Secondary Microplastics

These plastics are naturally crushed into micro-sized pieces. Plastic products such as **plastic bottles** undergo transformation into smaller sizes when exposed to **ultraviolet light** or when they **collide with rocks**.



A week



A month



The serious problem with microplastics is that they **accumulate** in the bodies of living creatures within **the food chain** and ultimately, **may be consumed by humans**. In fact, it is said that we eat the equivalent of **a credit card (5g)** each week and **a hanger (21g)** per month.

What can we do?

Japan is currently making efforts, such as charging for plastic bags and phasing out plastic straws in many cafes and restaurants. Despite these efforts, the problem of marine plastics has not been resolved to any great extent. What we can do is to ensure that **plastic does not end up in our oceans**. According to WWF, it takes a long time for plastic to break down. It is very difficult to recover microplastics that have already been washed into the ocean, so **they need to be collected before they reach the waters**. This is why beach cleanups can be an effective way to solve the issue. The ocean is an inseparable part of our lives. We believe it is important to think about the marine debris problem and do the best we can in order to coexist in harmony with all creatures on earth.



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