Tokyo Metropolitan Fukagawa High School

@All Japan High School Forum 2025

"Let's Protect the Beauty of the Ocean Through Beachcombing!"

Our activities started with beachcombing to share the issue of marine litter. Now, we focus on waste flowing into Tokyo Bay through river cleanups and awareness activities. We also take action through projects such as plastic bags that break down naturally and bottle cap recycling.

What We Do

(1)Since beachcombing*1 at Cape Taibusa Nature Park in Chiba Prefecture in the spring of 2021, we have continued cleanup activities along the coast and nearby riverbeds, including the Arakawa River.

Through these activities, we noticed that much of the trash flowing into the ocean consists of plastic bags and PET bottles, which led us to become interested in this issue as well as the problem of microplastics.

@Cape Taibusa

*1 Observing and collecting items washed ashore on the beach

(2)To help people understand how much trash and microplastics are found on local beaches and in rivers, we carry out awareness activities such as poster presentations. As part of these activities, we used a chemical called NileRed to make tiny plastics(Nano Plastics) in beach sand visible.

When the stained plastics are exposed to LED light, they GLOW ORANGE↑

Through our activities, we have learned about "zero-waste" efforts such as biodegradable plastic bags and circular and closed-loop recycling. From this year on, we plan to incorporate these ideas into our own activities. We are currently working with a company to collect PET bottle caps and recycle them into useful items for schools, such as baskets or cart platforms.

Our Vision

FROM Cleaning Up Marine Litter

TO Reducing Waste

Among the trash collected along the Arakawa River, PET bottles account for about 20%. More than half of these are drink bottles, such as water and tea.

Plastic Wastes

Plastic waste, including styrofoam, plastic bags, and plastic containers, is said to make up 70–80% of the total.

Regular cleanups help raise awareness of the waste problem. Our next step is to reduce waste itself. ↓↓

Composition of Collected Litter	Approx.
PET bottles	20%
Styrofoam	10-15%
Plastic bags & packaging	10%
Plastic containers	10%
Cigarette filters	5%
Glass, metal & cans	5-10%
paper	3-5%
Textiles (clothing & fabric)	2-3%
Other (rubber, wood, etc.)	1-3%

Based on data from the Arakawa River Clean-aid Forum (NPO)

Degradable Bags, Recycled Caps.

During a cleanup along the Arakawa River, we were introduced to marine-biodegradable plastic bags called "ENERFISH" by the Arakawa River Clean-aid Forum. These bags break down in the ocean and reduce environmental impact. We plan to use them actively and raise awareness. We are also working directly with the manufacturer, Shimojima Co., Ltd.株式会社シモジマ), on a bottle cap recycling project.

ENERFISH
~A Safer Choice for the Ocean~

- **Marine-biodegradable material**: Made from plant-based biodegradable resin. It is broken down by microorganisms in the ocean and becomes water and carbon dioxide within about one year.
- **Prevents fish from eating it by mistake**: Contains *denatonium*, a bitter substance that helps prevent fish from eating them.
- **Ordinary plastic bags are said to take 10–20 years to break down in seawater above 30° C.**

Senzoku Gakuen Students × Shimojima Co-developped to Protect Fish!

FUKAGAWA × シモジマ

*How the Cap Recycling Project Works

We are working with Shimojima Co., Ltd.（株式会社シモジマ), the company that produces and provides "Enerfish（エネルフィッシュ)," to start a new environmental project. In this project, we collect PET bottle caps from local communities, schools, and school festivals. The collected caps are recycled and turned into useful items for schools, such as shopping baskets and cart platforms. Through this project, we aim to turn waste into something valuable and help protect the environment. (Upcycling)

Our Actions Today, a Cleaner Future Tomorrow.

Recently, a nearby high school asked us to cooperate in a project to collect and visualize nanoplastics(NPs) in the air.

We hope to add a more scientific perspective to our activities.

By taking the initiative and working together beyond school boundaries, we aim to create a sustainable future with our own hands as the next generation.

We are part of the Junior Red Cross (JRC). Through this, we take part in a wide range of activities, including local initiatives such as the Koto Ward Universal Design Workshop and awareness activities on fair trade and other international issues.