

Survey of Marine Litter on Beaches

The Survey of Marine Litter on Beaches in the Northwest Pacific Region, conducted by the Northwest Pacific Region Environmental Cooperation Center (NPEC), is a collaborative initiative aimed at understanding the extent of coastal pollution caused by marine litter washed ashore. Launched in 1996, the survey has continued since 2010 under the name NEAR* Project. This international initiative brings together Japan, China, Korea, and Russia, with the cooperation of 38 local governments across the four countries. To date, surveys have been conducted on 268 beaches, with a total of 48,385 participants.

*The Association of North East Asia Regional Governments

Summary of Survey of Marine Litter 2025

Period

The survey was conducted from September to November of 2025

Participants and beaches

The survey was conducted with the cooperation of local governments, NGOs, NPOs, and elementary and middle schools.

In the 2025 survey, a total of 643 people from nine local governments in Japan, Korea, and Russia took part in surveys conducted on 23 beaches (Fig. 2).

Results

General Marine Litter

The average number of marine litter items per 100 m² (Figure 3) was 162. Among the identified categories, plastic was the most prevalent type, averaging 105 items per 100 m² and accounting for 65% of the total. The second most prevalent type was foamed polystyrene, with an average of 38 items (23%).

The average weight of marine litter per 100 m² was 1,332 grams. Of this, plastic was the most prevalent, accounting for 783 grams (59% of the total). The second most prevalent type by weight was other artificial objects, averaging 275 grams (21%).

The most prevalent types of marine litter collected from beaches were mainly lightweight and easily breakable materials, including plastic and foamed polystyrene. When examining the average numbers of marine litter items per 100 m², broken down by area (Fig. 5), Area C had the highest count at 303 items, followed by Area F at 161. Area D had the lowest count at only 20 items. Furthermore, when the results are broken down by country, beaches in Japan exhibit a marked trend of both a higher average quantity and weight of marine litter.

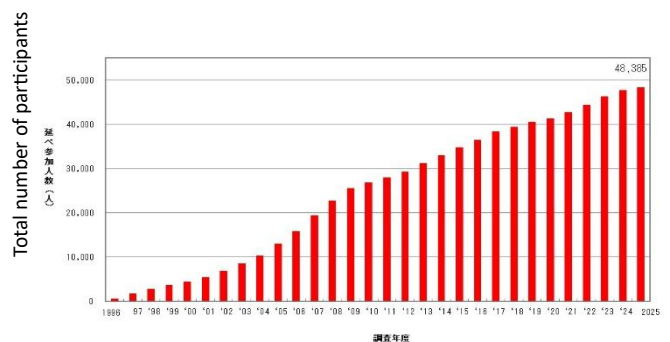


Fig.1 Change in the total number of participants involved in the survey



Fig. 2 Surveyed beaches 2025

Microplastics

The average number of microplastics found in the sand on the surveyed beaches was 1,386 items per square meter, while the average number of microplastics per unit volume was 55 items per liter (refer to Fig. 6 and Fig. 7, respectively). Both the quantity and the dominant types of microplastics showed variability across beaches.

Since removing microplastics from the ocean is extremely difficult, it is essential to prevent plastics from entering the ocean in the first place. To protect the Northwest Pacific region, all relevant organizations in the region should collaborate with citizens through continued joint surveys to better understand the current situation and to raise public awareness of marine environmental issues.

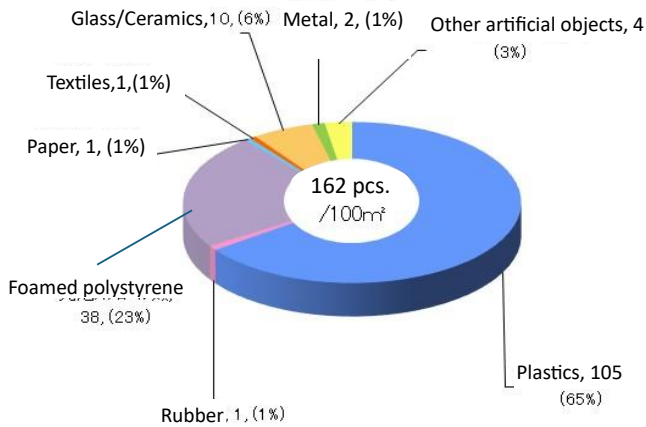


Fig. 3 Average numbers of marine litter by type per 100m², 2025

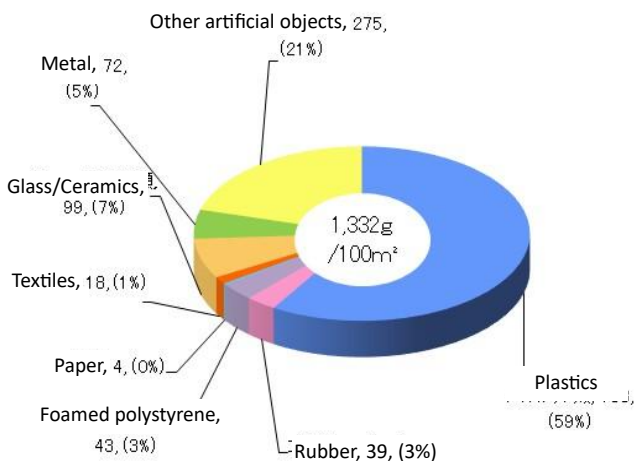


Fig. 4 Average Weight (g) of Marine Litter by Type per 100 m², 2025

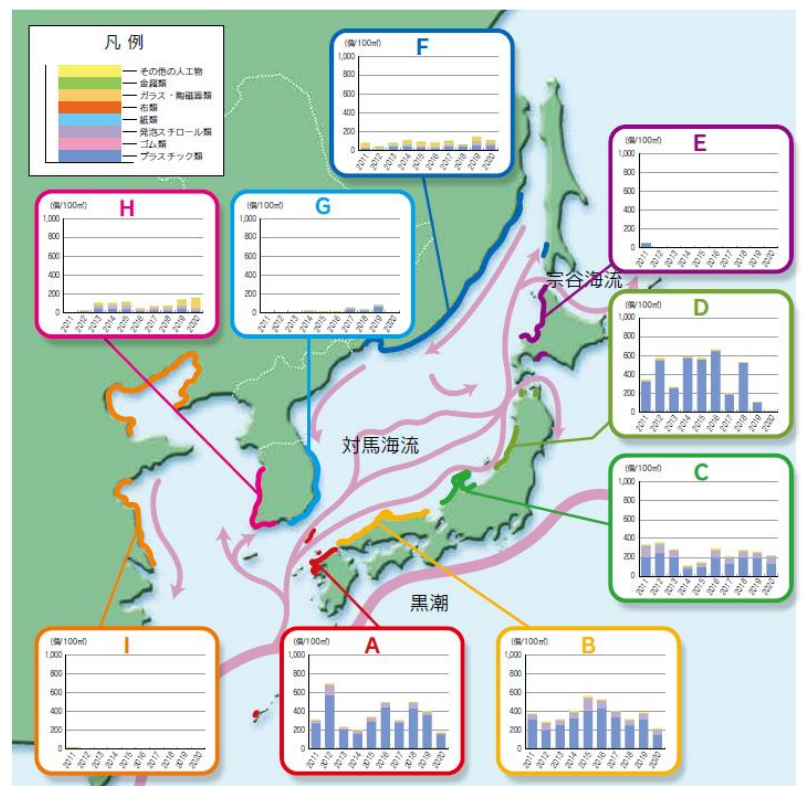


Fig. 5 Trends in the Annual Average Number of Beach Litter per 100 m² by Area

Note: 1) Areas A–I correspond to: A (Kyushu–Okinawa), B (Chugoku–Kinki), C (Hokuriku), D (Tohoku), E (Hokkaido), F (Russia), G (Korea East Coast), H (Korea West Coast), and I (China).
2) We did not conduct research in Area E (Hokkaido) or Area I (China).

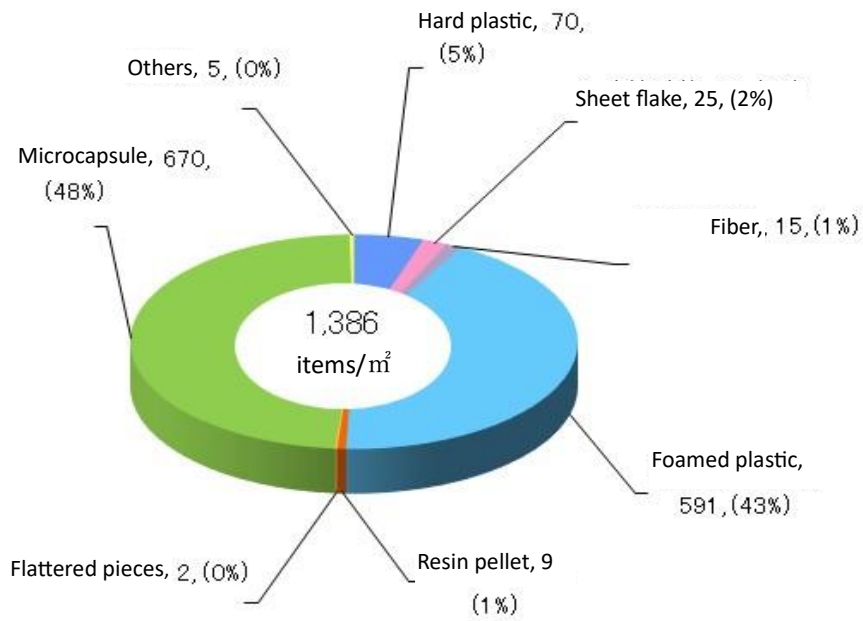


Fig. 6 Average Microplastic Count by Type per Unit Area (pcs./m²), 2025

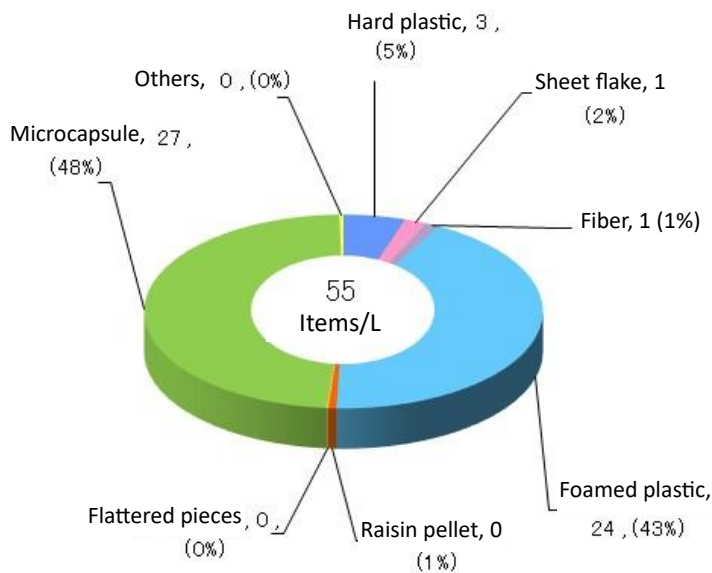


Fig. 7 Average Microplastic Count by Type per Unit Volume (pcs/L), 2025