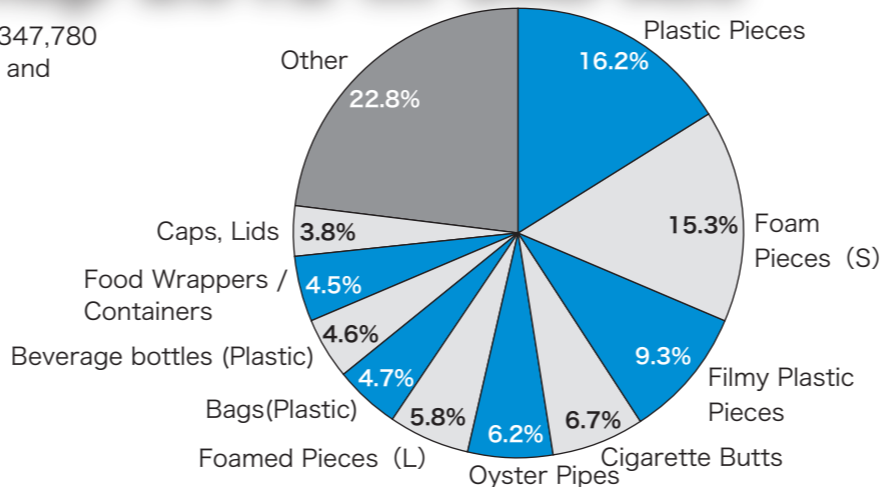
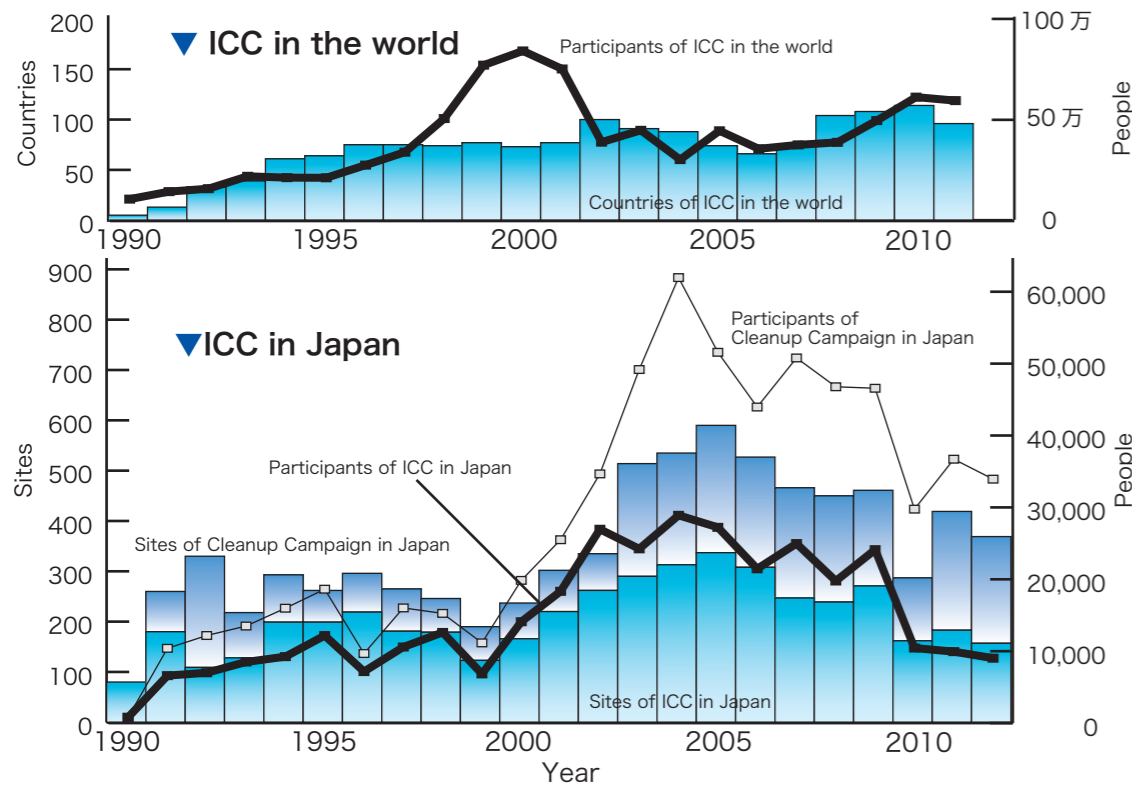


International Coastal Cleanup 2012 in JAPAN

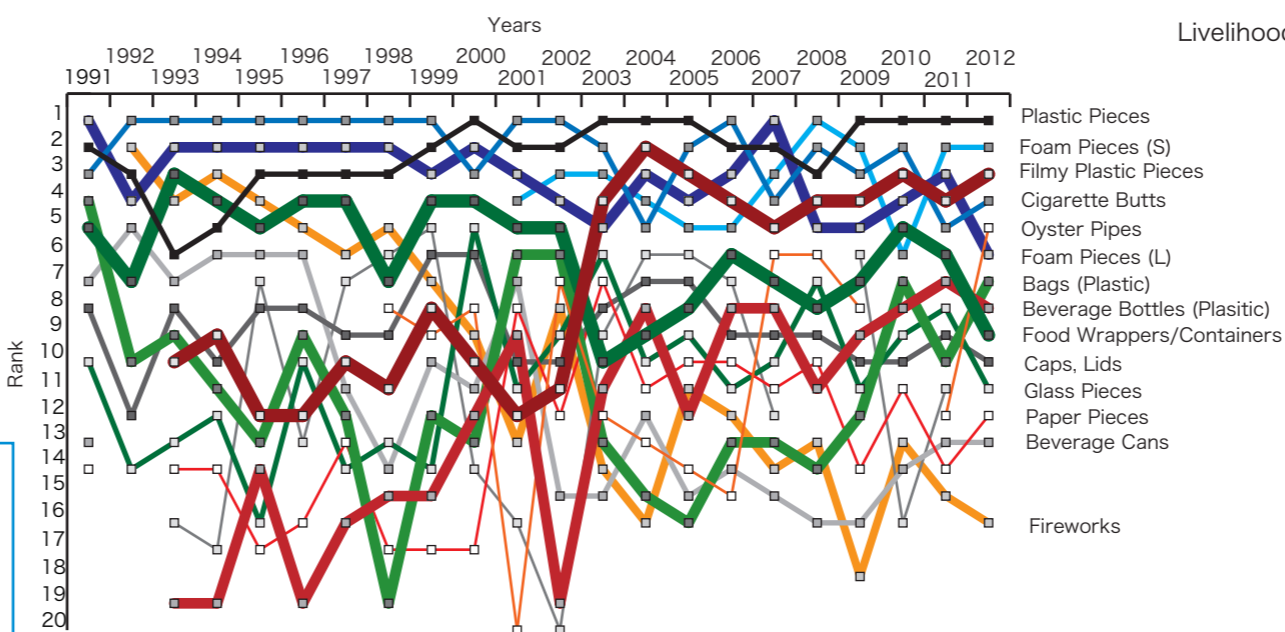
The overall results show the total from waterfront (ocean coast, river bank, lakeshore), underwater, and inland sites during the period when ICC was implemented (September and October).

In the Autumn 2012 International Coastal Cleanup (ICC), 9,029 people participated. A total of 347,780 pieces of litter was picked up carefully one-by-one from 57 km of waterfront (coast, riverbank, and lakeshore), underwater and inland areas. A summary of the overall results is presented here.



Top 10 items in Japan

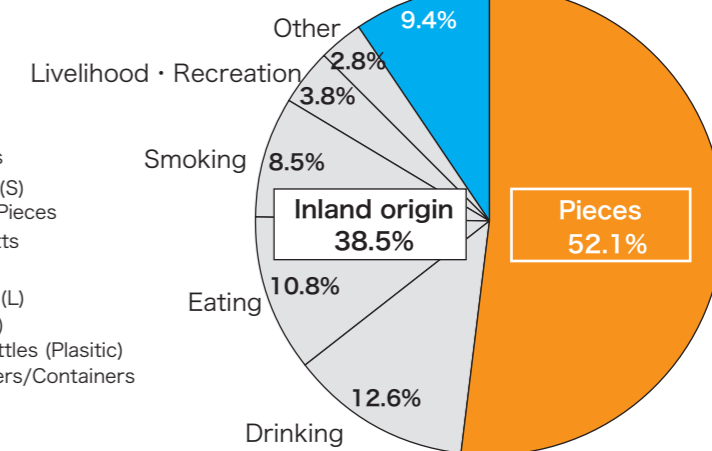
- Of the "piece" type, four of the seven items were in the top 10.
- Of the "inland origin" type, five of the 45 items were in the top 10.
- Of the "inland origin" type, the top 10 accounted for 24.4% of the overall. The top 20 accounted for 32.3%.
- "Ocean, river and lake origin" items accounted for 7.9% of the overall. Piping for oyster farming (rank 5th) entered the top 10.
- The top 10 (up to rank 16 overall) of the manufactured items were "inland origin" and "ocean, river and lake origin", accounted for 78.5% of all manufactured items, and 37.6% of the overall.



Changes in Top 10 items since 1991

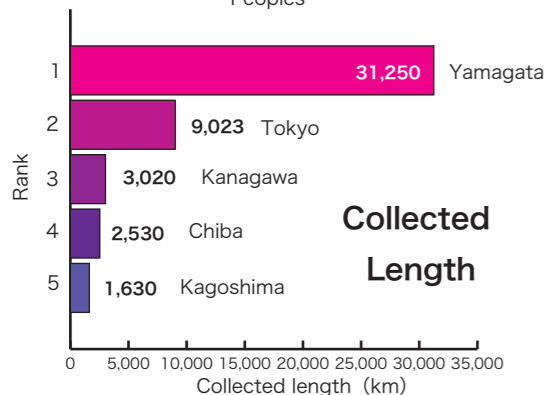
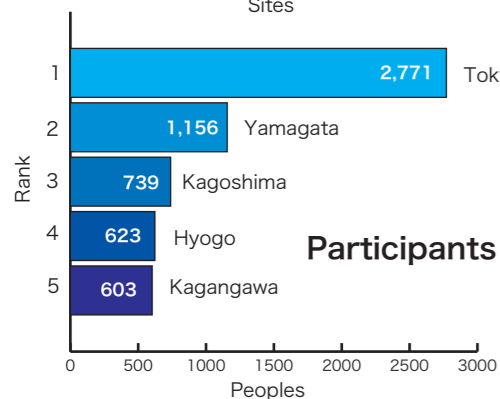
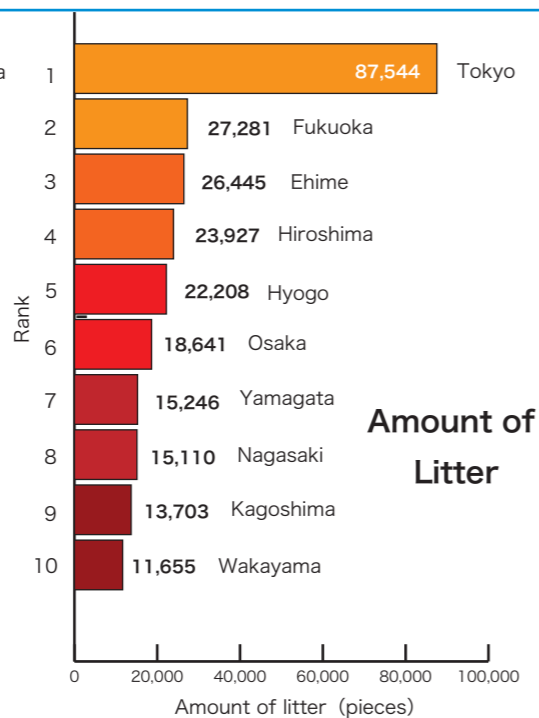
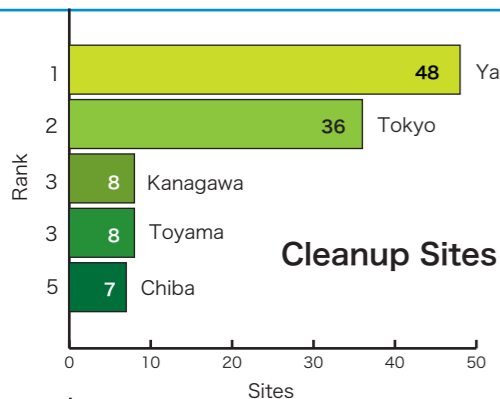
- Appearance frequency over 22 years of the top 10 items: (1) Plastic pieces (20 times), (2) Cigarette butts (18 times), (3) Foamed pieces (L) (14 times)
- Incidence of the top 10 items: No major changes over 22 years.
- Top item: Shifted from cigarettes butts (1990s) to plastic pieces (2000s).
- Items rising in rank over 22 years: Filmly plastic pieces and beverage bottles (plastic).
- Items dropping in rank over 22 years: Beverage cans, fireworks.
- Food wrappers/containers have increased again since 2000.

Ocean, river and lake origin 9.4%



Proportion of outflow by origin

- "Pieces" was 52.1% and accounted for over half.
- "Pieces" accounted for more than 50% of the items on the ocean coasts, but only 30% of the items in rivers, underwater and inland.
- The number of articles collected per item of type "Pieces" was more than 10 times that for type "inland origin".
- Of the "inland origin" type items, over 80% were attributable to daily life.
- The ratio was 4:1 for "inland origin" type: "ocean, river and lake origin" type.



ICC participation situation by prefecture: Top 5 and 10

- For the length of waterfront from which litter was collected, Yamagata (Mogami River) and Tokyo (Arakawa River), which had many sites at rivers, were first and second.
- For the amount of litter (number of pieces) collected, Fukuoka at which large amounts of foamed pieces were collected was second, and Ehime at which large amounts of piping from oyster farming was collected, was third.

Summary

- Large quantity as well as variety.
- Pieces account for more than half.
- Over the past several years, no major changes in the top ranking items.
- 4:1 ratio of inland origin items: ocean, river and lake origin items.
- Plastic products that we use in daily life (beverage, food, smoking and livelihood/recreation) account for over 80% of the inland origin items.
- The problem of piping used in oyster farms in the Seto Inland Sea has not been solved.
- The top 10 of manufactured items account for only 40% of the overall, and the marine litter problem cannot be solved by only reducing generation of these items.

Once this litter that flows out to the ocean sinks to the ocean floor, retrieval becomes very difficult. Further, litter that flows out to the ocean scatters over a wide area with the ocean currents. Litter related to industry and medicine that flows out is a major issue, but we must become aware that marine litter mainly originates from daily life activities such as "drinking", "eating", "smoking" and "livelihood/recreation". We, who live inland away from the ocean, are creating a great burden on the ocean in our daily lives.

An effective measure that is apparent from the results of the present work, is to focus on the top 10 that account for 80 percent of the whole. For this, an important key is to reduce generation of pieces that account for more than half of the overall amount. It is considered that most of the pieces are items that washed ashore on the coast, fragmented from the impact of waves or deteriorated from ultraviolet rays while drifting in the ocean over a long period of time. Therefore, it is a matter of great urgency to collect the objects from the ocean before they become fragmented. The coast is a filter for the ocean, and with each wave, the ocean carries to the shore, litter that was scattered over a wide area. Since we are the only beings on earth that create things that will become litter, and use and discard them, we have an obligation at least to always keep the coasts, which are the ocean's filter, clean as compensation.

To recover and maintain the beautiful ocean, we need to continue cleanup efforts by everyone.