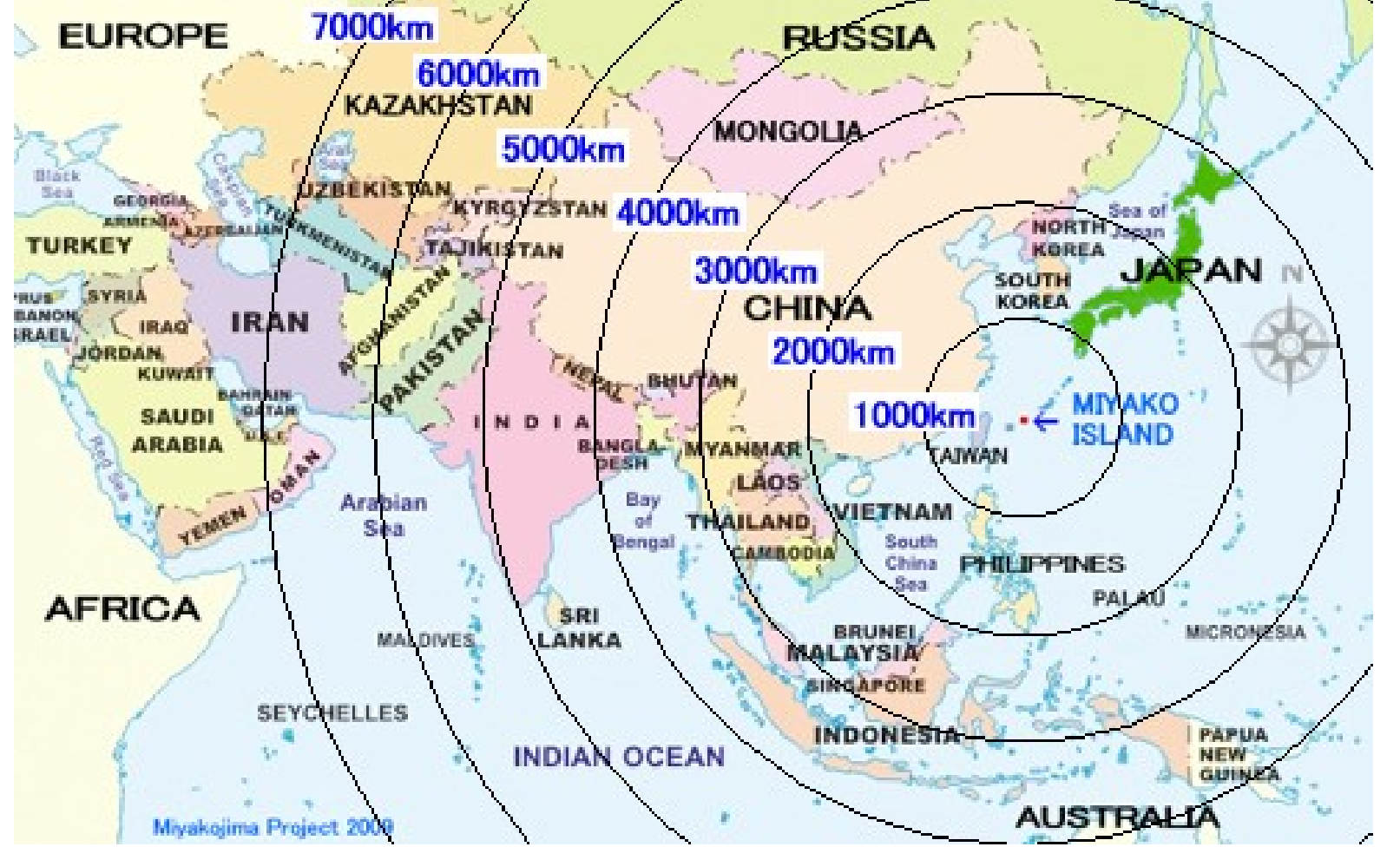


MIYAKO ISLAND

GEOGRAPHICAL CHARACTER

Miyako Island is one of the small islands in the Southwest Island Chain which stretches over about 1,390 km (869mi) from Kyushu, Japan to Taiwan. Miyako Island is located 310 km (194mi) southwest of Naha, Okinawa and 2,040km (1,275mi) southwest from Tokyo Japan. However Taipei, Taiwan is only 380 km (238mi) west of Miyako Island.



OCEAN CURRENTS NEAR MIYAKO ISLAND

Miyako Island is geographically located by two ocean currents headed north. One of those currents is the Taiwan Warm Current in the East China Sea which travels north alongside mainland China. The other is the largest current in the world called the Kuroshio (Black current). It starts east of the Philippines and travels up to the west coast of Canada and the United States. After 4-5 years, the current flows back to where it started.

PRACTICAL OBSERVATION SITE OF EXIT SURVEY

Consequently, the drifting trash in the southeast Asian region flows past Taiwan and gathers near the sea of the Ryukyu (Okinawa) basin, including Miyako Island. Miyako Island is one of the best places for the "Exit Survey Base at the Gateway" for drifting ocean trash.

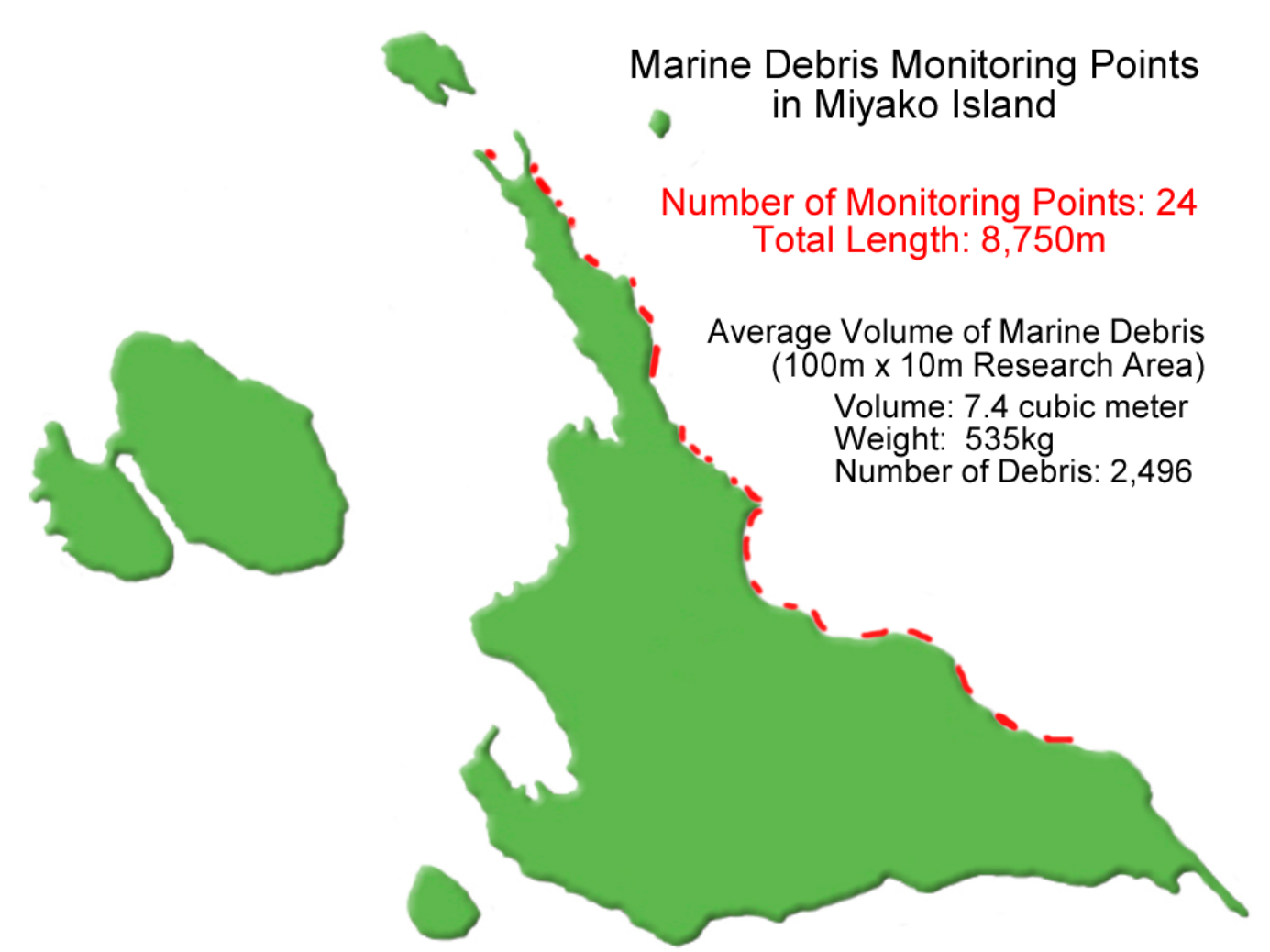


BACKGROUND INFORMATION

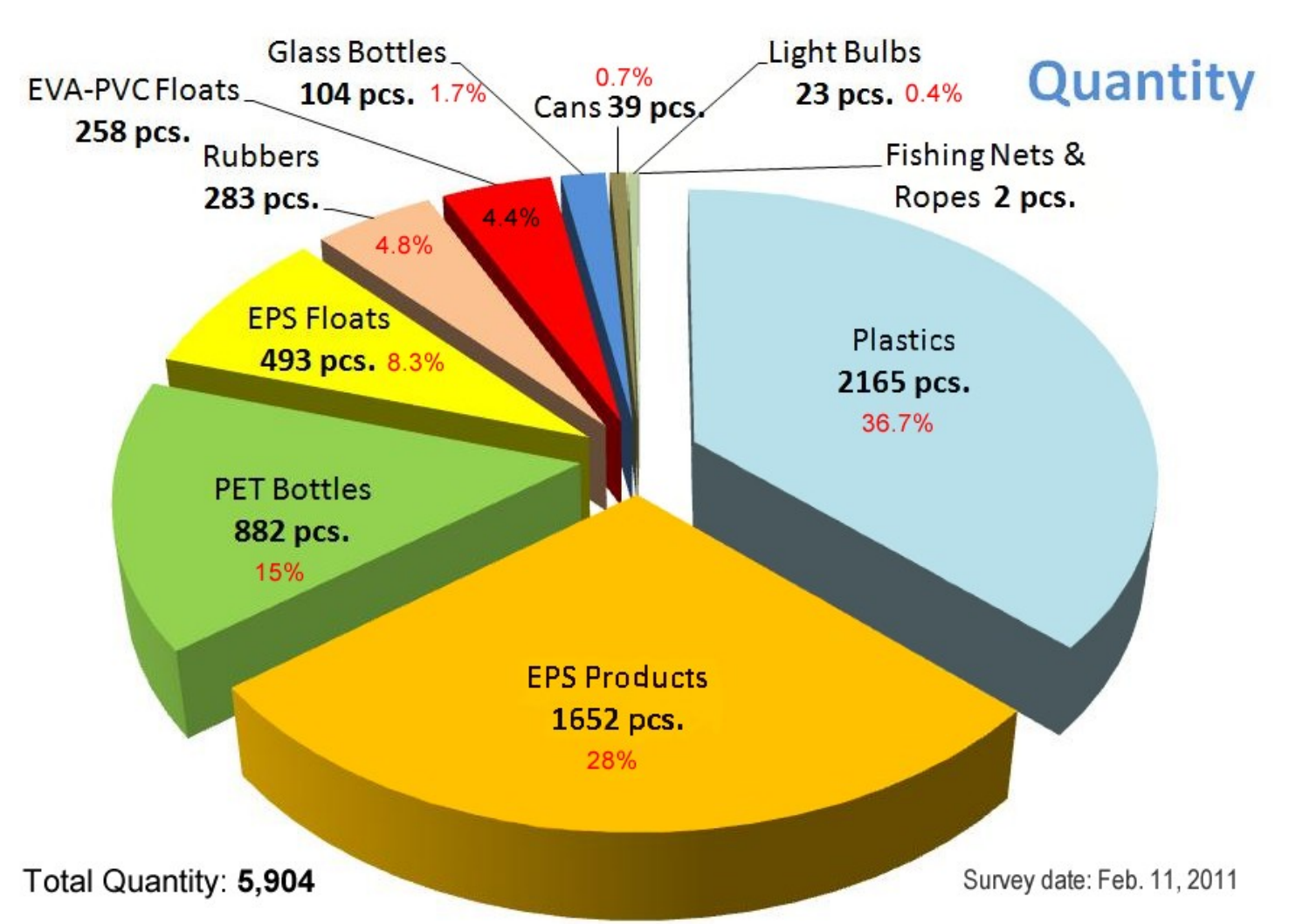
Increasing amounts of marine debris have become a high threat to people and have endangered costal habitats of small islands. Surging marine debris on small beaches of remote islands are already beyond the stage of, "just wait for somebody's help".

"Priority Number One" marine debris research program is a viable beach cleanup application, developed by the Miyakojima Project. This is focused towards small islands to encourage proper marine debris collection by their own hands. This project also covers high efficiency approaches for local disposal and recycling studies for a low-costing and convenient logistic strategy to ship to recycling or disposal facilities on the mainland with minimal financial burdens.

SEE THE REALITY



Miyakojima Project



WHAT WE ARE DOING

1. Initial approach:
We started ecological research at Miyako Island in 2004 to find the ecological impact of tourism related developments and monitor the impact of marine debris to endangered plants that are nearly extinct or are already listed in the Red Data Book.

2. Monitoring and tracking marine debris situations at the beaches of the island:

- 24 small beaches set as extensive monitoring points (roughly 7% of the coastline). The total length of the shoreline in Miyako Island is 130km and 8.8km can be used as intensive monitoring and cleanup sites.
- This is how marine debris may be categorized.
By quantity: By weight: By cubic meter: Country-by-country: By cost:
- Estimations of marine debris arriving each year and its financial impact
43.75 ton x 2 = **87.5 ton**
677.25 cubic meter X 2 = **1354.5 cubic meter**
516,600 pieces X 2 = **1,033,200 pieces**
87,500 kg x \$1.20 per kg = **\$105,000**
87,500 kg ÷ 320kg per day = **274 days**

3. Develop original marine debris research protocol exclusively for small beaches:

Since most beaches at the monitoring sites are small, monitoring size is limited to 100 by 10 meters. Develop distinctive survey protocol and quality assurance methods to collect data because beaches of small islands are topographically challenging to research and clean.

4. Research impacts of marine debris to endangered plants and develop cleanup methods for areas of vegetation:

Research the current situation of the vegetation and plants of the beaches damaged by washed up marine debris. Some of the plants are endangered species listed in the Red Data Book. Particular cleanup methods are needed without further damage to the plants.

5. Data analyzing and summary:

All research data are collected and analyzed by the Priority-Number-One.org, program management center of Miyakojima Project, located at Redmond, WA. Our database places high priority on creating a source of information that can be easily accessed and comprehended by people of the islands throughout the world, so that they can be updated on current situations of marine debris. Using the provided information on our database, people of small islands can localize the data to fit the needs of their islands.



WHAT WE ARE DOING

6. Solution finder:
The project platform of the Miyakojima Project is a tool to find solutions and collect information about safe, scientific, and low costing disposal methods of non-biodegradable marine debris. Collecting the technology for low costing incineration and disposal systems imperative to the financially distressed local government of the islands.

7. Outreach to Younger Generation:

Increasing children's awareness of the need to cleanup marine debris and protect marine species is especially important to small communities. In many cases, family ties are very close on small islands, so children's remarks in family conversations at home concerning this subject can create awareness within the family and also become a new trend for the entire community.

- To advance outreach to children in islands around the world, the Miyakojima Project established www.miyakojima-kids.net to introduce a children's version of "Priority Number One". This provides children with a clear vision that beach cleanup efforts to save their own island also help save marine creatures and the eco-systems thousands of miles away from their homes.



- Promote effective utilization of educational school excursions to Miyako Island. Every high school in Japan has a school trip or study tour during their junior or senior year. Miyakojima Project is preparing all the necessary study programs for high school students throughout Japan to travel to Miyako Island and research the marine debris. This will help them learn the seriousness of marine debris, methods of cleanup and disposal, actual research and collection at beaches, recording and analyzing techniques, and the dissection of local fish to find any micro-debris in the stomach or intestine.



WHY WE ARE HERE

- Find applicable new methods to increase low costing inter-island disposal
- Find new, safe and low costing scientific converting technologies to enable non-biodegradable marine debris to biodegradable.
- Promote simple, low-tech, low costing crusher and press machines for plastic and EPS foamed products to be sent to beach cleanup groups of small islands in the world.
- Meet professionals to learn new methods of marine debris disposal to be used in small islands.



CONCLUSION

As small remote islands already have enough challenges in their daily lifestyles, the "Priority Number One" primarily serves to provide quality resources necessary to aid people of small islands around the world. This platform is to relay information of the substantial amount of new approaches to solving this problem. "Priority Number One" was formed to find solutions that will keep beaches of small islands clean and minimize incidental damages to habitats and marine species. This may be the start of a solution to what is an insurmountable problem for all small islands. The goal of this project is to increase local awareness, strengthen the community's power to protect their environment and eco-system, preserve ocean resources and enable people of small islands to care for their islands by their own hands.



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