



RAFFLES MUSEUM NEWSLETTER

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International Coastal Cleanup Singapore (Mangrove)

The International Coastal Cleanup (ICC) is the largest marine pollution cleanup effort in the world, involving over 1 million volunteers in more than 100 countries. The Raffles Museum led the Mangrove Section of the ICC Singapore in 2001, and we worked the Kranji as well as the Buloh mangroves for the first time in the five-year history of the programme.

From July to September 2001, more than 11 "recce" trips were conducted by museum staff and volunteers to prepare the operational procedure for the exercise,

the communications network (with the help of the Singapore Amateur Radio Transmitting Society), safety plans and routes, guide training, etc. It helped that we had been conducting research and studies in the mangroves there for 10 years or more!

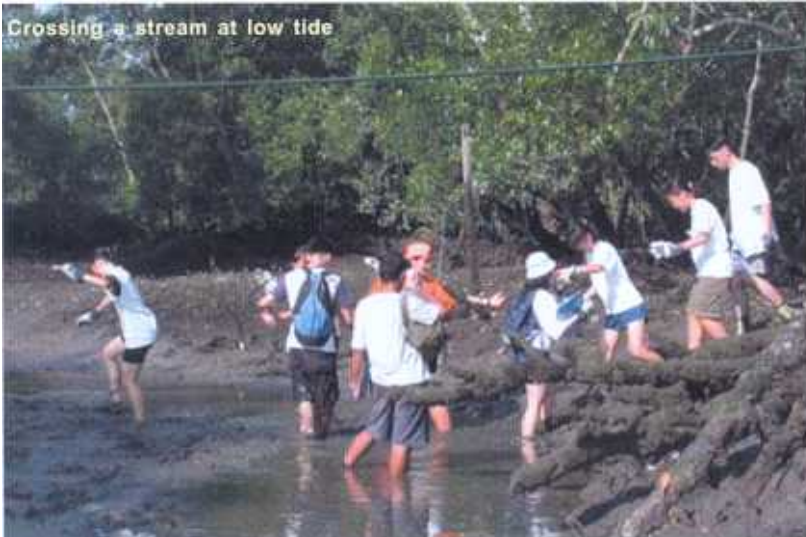
A briefing session in NUS explained to participants the surprising biodiversity of Singapore and the rationale and operational details of the cleanup. Participants were then guided and quizzed at Sungei Buloh Nature Park to introduce to them the depth and beauty of our mangrove ecosystem. The cleanup itself was conducted on 8th September 2001. More than



300 students arrived early that morning, from Catholic High, Commonwealth Secondary School's Girl Guides, St. Andrew's Junior College, Tao Nan Marlin Sea Scouts, Singapore American School, Middle School and SAVE, Temasek Junior College, Victoria Junior College, Woodlands Ring Secondary School and Yusof Ishak Secondary School.



The briefing session for guides before the operations began



Crossing a stream at low tide

The day started with “dry ops” - students battling through some very soft mud to reach their site. For many, it was their first taste of the mangroves so the expedition was accompanied with a lot of screaming! Museum volunteers and student leaders who had attended the relevant “recce” trips helped guide them to their sites.

The groups set to work at their pre-arranged quadrats, collecting trash while data recorders took note of the type and number of debris collected. Strong young students (“loaders”) transferred the filled trash bags to a collection site where bags were weighed before being stacked.

In just 90 minutes, the marine debris collection was halted. There was enough trash there to supply 10 years of cleanups, so we were taking it slow. And as part of the programme to expose the students to new challenges, they discovered how fast the tide rises, for the muddy channel they had crossed earlier had been filled by the rising and orange-capped guides on either side in the water, students



Data recorder and collector clearing rubbish

were treated to the excitement of a river crossing!

At Sungei Buloh Nature Park, they reported to the Data Manager, and then washed, dried, and fed hungrily on pizza sponsored by the Nature Society (Singapore).

Meanwhile, the afternoon high tide operation (“wet ops”) began - Tao Nan Marlin Sea Scouts and volunteer sailors from Raffles Marina transferred the accumulated marine debris to Kranji Reservoir Park. Dry ops guides had rushed back to help out and were wrestling trash bags onto boats and canoes. The bags broke under their load, so the guides struggled to re-bag the trash on the spot as the tide kept rising - exhausting work!

At the unloading point, primary school scouts from Tao Nan scrambled over boats and trans-

ferred the trash to the disposal point near the road. The shore line team would join them later and some of the wheelbarrows even broke down under the load! Three tonnes in all, which ENV’s Western Environment Health District Office and Altvater Jakob Pte. Ltd. coordinated in hauling away at the end of the day.

Once the result had been collated, it was uploaded onto the website at <http://mangrove.nus.edu.sg/iccs> on the very same day! A new record in the 10-year history of the cleanup in Singapore! The preliminary results immediately revealed the sober news that 90% of the 2.7 tonnes of marine debris collected was plastic, which lasts for years in the ocean.

The data report was submitted to the global coordinator at the Centre for Marine Conservation in Washington, United States of America. Analysed data is used to raise legislative issues at the United Nations, and at the national level in various countries to promote public awareness and education programmes.

The ultimate goal of the cleanup is to reduce marine debris and enhance marine conservation by eliminating pollution by people and industries in the first place. That will take a very long time, but with little steps such as these, we will get there!

-N. Sivasothi



River crossing at high tide