

Crusoe project

Teacher Andrew Hughes reports on his Robinson Crusoe-style adventure

Delami Island, a lushly vegetated volcanic outcrop adorned with a sandy coral finger, sits off the south coast of Milne Bay Province, Papua New Guinea. The sole inhabitant, 76-year-old Dagama, passes the days gathering breadfruit, fishing for tuna from his canoe and hunting for leaves of brus, the locally grown tobacco. Students challenged teacher Andrew Hughes to survive on Delami with just a few crucial tools and a set of digital scales to graph the inevitable weight loss. The learning theme was the science of survival and this was explored to the fullest extent via an online forum.



Delami Islander Dagama, left, with Andrew Hughes.

Seeking shelter

With a bush knife and a small axe, the first job was to build a shelter. I found a large shady tree and cleared the vines from the sand underneath. Medium-sized forking branches were pounded into the sand and supported more branches for the roof. Rope lashed the frame together and the emergency space blanket provided a small square of waterproof ceiling. Layered coconut fronds went over the top and I hung a mosquito net to sleep under. Some nights the wind blew through camp and even in the tropics you can get cold. The rain came most nights and I needed to modify the roof to keep from getting wet. It wasn't a great, stylish, robust or even insect-proof shelter, but for survival it was adequate.



Andrew's basic shelter.

Things to explore:

- Design and build a shelter (or a model of one) that would be suitable for Tasmanian weather conditions. What differences would it have to the one built on Delami Island?



Neighbouring islanders arriving to check on the marooned teacher.

Coconut cuisine

Coconut was the easiest food to find. The island has been planted with dozens of palms and many more have washed up on the shore and grow wild. Local landowner families come to harvest the fallen coconuts at certain times of the year to make copra to sell at the market. Sometimes people paddle over from nearby Bona Bona Island to collect coconuts to feed to their pigs. Coconuts are one of the most important foods for villagers in coastal Papua New Guinea. All I had to do was cut the brown husk off the fallen coconut, crack the hard nut and cut out the white meat. I found out early and often that more than one or two coconuts a day caused me an upset stomach and diarrhoea. The students quizzed me about toilet paper and I admitted to having none - a brutal cultural awakening if ever there was one.

Things to explore:

- Find out some of the many ways coconuts are used as food and create a recipe to add coconut to your diet.

Nuts and seeds

Lying on the ground in the bush were two other important foods. The okari and siaia fruits grow on tall trees. Large bats that awake at night with a screech find the fruits on the trees and chew them down to the



Slices of siaia seed ready for roasting.

hard seed coating. They discard these on the ground where they sit until they sprout, rot away or someone like me comes along to gather them for food. The okari nut is very common and I could fill a billy full of them in an hour but the edible seed is small and it was a lot of work for little reward. The siaia seed is much bigger and to get it out of the hard brown casing I needed to use the bush knife. Cut it into strips and roasted in the coals of the fire, they were a reliable addition to the daily coconut.

Things to explore:

- Design an experiment to test what conditions alfalfa seeds need to germinate. Download the student workbook from the Expedition Class website for help.



One of Andrew's best catches.

Finding fish

Seafood was my favourite meal but it wasn't always easy to catch or find. I fished from a rocky reef. After experimenting with different bait, the best results came from using hermit crabs. They could be collected while I was looking for nuts. Some days I didn't catch any fish and other days, like in the photo, I had a good feed of fresh reef fish. On the online forum students told me to be careful which ones I ate because some can be poisonous.

Things to explore:

- Research a dangerous sea creature from anywhere in the world and prepare an alert sheet for where to find them, what the dangers are and how to treat yourself if bitten, stung or poisoned.

Water

Luckily it was the wet season for this part of PNG which meant it rained nearly every day. There was a pool on the other side of the island where fresh water collected and I could catch it from drips off the shelter too. If I had been there at a different time it might not have rained for days or weeks at a time. Students gave me advice on how to collect water from plants by wrapping a plastic bag over a bunch of green leaves. In two days it produced about half a cup of pure water.

Things to explore

- What are other methods of finding or getting water in survival situations?



Andrew making his escape back to civilisation.

Escaping the island

The original plan had been to build a raft to leave Delami Island. After a few weeks I realised it would be difficult to do that because cutting trees down would take a lot of energy that I didn't have, and it would be insensitive to the traditional landowners. The alternative was to swim across the reef to Bona Bona Island about 800m away. Dagama paddled his canoe nearby in case of emergency but I reached the village of Mugula after four weeks on Delami. I had lost 10kg in weight and was desperate for something other than coconut and fish to eat. My first meal with the villagers was wild pig and taro leaf... not exactly what I had in mind, but no complaints.

To follow the expedition reports and read the enlightening forum entries from Tasmanian students go to www.expeditionclass.com and relive the adventure.

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