



Operation Wallacea, Indonesia. August 1999

Report by Lea-Ann Kirkham

From Ujung Pandang, the capital of Sulawesi, we boarded the PELNI ship to Buton Island, a 12-hour nightmare journey in a cockroach-infested cabin! We were met by the Operation Wallacea staff who helped us escape the madness at the harbour in Buton. Indonesians do not wait until all the passengers get off the boat before they start to board the boat. This results in chaos and was my first lesson of the culture: *nothing* is organised in Indonesia.

After settling in to our losemen (bedsits) we sampled the local delights of *chumi-chumi* (spicy squid) and *nasi goreng* (fried rice). I was given my itinerary for the next four weeks...

Week 1: jungle survival training. This involved trekking into the jungle, with hammocks and rations, to find suitable places to camp. We were shown how to identify the edible, poisonous and medicinal plants of the jungle and how to catch wild animals. We also learned how to build a natural shelter and find our way around the jungle if lost. The techniques I learned in this week were invaluable over the following weeks when we had to stay in the jungle for a few days at a time to do the projects.

Weeks 2 and 3: I stayed in the Ranger's house in the small village of La bundo bundo, about three hours north of the harbour. This was where the small mammal project was starting up. Before I arrived there had been problems with the traps that had been bought from the market; they were too small for the animals that we wanted to catch. The whole group of volunteers set about re-designing traps and hand-making them from materials we could buy from the market. After a lot of trial and error, a successful trap was designed and the group set about mass producing the traps for the project. While making the traps in the garden, I was intrigued by the butterflies of various sizes and colours. I then found out that no one had ever studied the butterflies of Buton Island and set myself the challenge of initiating a butterfly project. With three others we decided the first aim, apart from making the nets, was

to decide how best to collect data on the butterflies that we caught. We decided that forming a photographic catalogue of the butterflies we caught would be a good start, helping future volunteers in identifying some butterflies. One problem that we soon discovered was that catching the butterflies was extremely difficult and required a great deal of practice. After two days of modifying our technique and the nets, we were ready to start photographing the insects. Once captured, we held their bodies and took photographs of the top and underside of their wings, placing a ruler in the photograph as a guide of size. Then we set them free; this caused minimal stress to the butterfly. We were soon able to identify the common butterflies and seek those that were more unusual. Although the larger butterflies were the easier to spot and catch, if there are any new species then it is likely to be one of the small butterflies that are almost impossible to catch. Future groups could tackle this problem by modifying the capture and release technique. We tried to get a selection of butterflies from a variety of habitats. Some butterflies were associated with particular flowers and others were only observed near streams. After a week of catching butterflies from around the village, we set off into the forest to explore a different habitat. The butterflies found here were much darker, with yellow, orange, green or brown colouring providing camouflage in the forest. This was a great difference to the butterflies in the Ranger's garden that were elaborately coloured, probably in association with the bright flowers. An ideal thesis/project would be to investigate the association between habitat and wing colour of butterflies on Buton Island.

From the photographs we had taken, a catalogue has been started of all the butterflies caught on the island. A Sulawesi butterfly expert has agreed to help identify the species, it is more than likely that there are species endemic to Buton Island. The aim for next year's volunteers is to have an identification guide set up so that only the more unusual butterflies are studied.

Week 4: I travelled further north to Malegano. Previously this town had been inaccessible because of a fallen bridge but a group of volunteers in June had re-built it, allowing us to cross the river. The north of Buton is home to an endangered species of Megapode called the Maleo (*Macrocephalon maleo*). This is a large emu-like bird that buries its eggs in volcanic sand to incubate them. Eggs can weigh up to 270g and are ~11cm long. The Maleo is endemic to Buton and Sulawesi, and

numbers are dropping rapidly. It has been estimated that the number of breeding hens on Buton has fallen to 25% of that observed forty years ago. This is partially due to predation from monitor lizards but the real threat comes from humans. Butonese children collect the Maleo eggs, a delicacy in Sulawesi, and sell them for 30p each to local markets. If this continues then the Maleo population will soon be extinct.

This summer, Mark Catterral an ornithologist, estimated that there were less than 100 breeding pairs on Buton Island. This was very alarming and required immediate attention. When the children collect the eggs, they scare the birds away from the nesting site, which they instantly abandon. There are few volcanic habitats in the north of the island and by abandoning sites this is reduced even more. The local Ranger informed us of an untouched breeding site he had discovered in the forest, we had to protect the area before the eggs were stolen. Immediately we set up watch sites from which we could observe the birds and any threats made to them. Undergrowth was cleared to allow the sand to reach incubation temperature, thus extending the Maleo's nesting site. While some people were on guard at the breeding grounds, others set about making signs to warn Indonesians to keep out of the area and explain that the Maleo is endangered. We also produced and distributed leaflets to neighbouring villages, explaining why the Maleo was so precious and that the Butonese should be proud of this bird, not making it extinct. The next step was to go into the nearby school, explaining the importance of the bird and how special the eggs were. The groups that were to arrive after us were to keep up the guarding of the sites, working alongside the Indonesians. With the Ranger and his family on our side, a difference can be made as they are highly respected within the village. Mark hopes that in association with the Ranger, the Maleo can be saved and at the moment he is trying to get their nesting sites declared as protected zones.