
Introduction

E. J. H. Corner

Phil. Trans. R. Soc. Lond. B 1969 **255**, 187-188
doi: 10.1098/rstb.1969.0005

Email alerting service

Receive free email alerts when new articles cite this article - sign up in the box at the top right-hand corner of the article or click [here](#)

To subscribe to *Phil. Trans. R. Soc. Lond. B* go to: <http://rstb.royalsocietypublishing.org/subscriptions>

Introduction

BY E. J. H. CORNER, F.R.S.

Botany School, University of Cambridge

We have come to hear on these three days from as many members of the Expedition as we could assemble the results of their work in the Solomon Islands. We have the pleasure, also, in looking forward to contributions from six other scientists who, though not Expedition members, have independently added much to the exploration and study of the Solomons. We hope to enjoy the first occasion for a lengthy biogeographical discussion about the islands. This was the purpose of the Expedition set by its originator, the late Professor Carl Pantin, when he was chairman of the Southern Zone Research Committee. We owe to him and to the generosity of the Royal Society the grand opportunity we have had to visit those beautiful islands, to have explored them according to our predilections, and to be gathered here in such hospitality. Professor Pantin decided that the zoological side should be confined to marine and land invertebrata, being the groups most likely to assist in evaluating the geological connexions of the islands. To increase this aspect, and to test the results, we have the contribution by Professor Cain on the birds and of Dr Torben Wolff on the zoology of Rennell Island, which the Expedition was unable to visit. A geological setting has been prepared by Dr Thompson, which in his absence will be read by Dr Allum, who has himself investigated the occurrence and nature of faulting, particularly on Guadalcanal. Pantin left the botanists to decide for themselves and they have covered most groups of plant life, from the sea, where Dr Womersley and his assistant studied the seaweeds, to the totality of the land-flora excepting the microscopic algae and fungi. But we botanists have also invited Dr Thorne to inform to us on the remarkable differences between New Caledonia and the Solomons, as great as the differences between the British and Japanese floras, yet so much closer together. And we have invited Professor Good to put our findings in the general field of Melanesian and Malaysian plant-geography. Our sixth outside contribution is from Dr Brookfield on the new field of climatology in the Solomons. Regrettably, neither Dr Brookfield nor Dr Thorne is able to be with us.

The work of the Expedition fell into two parts, the marine and the land, and the cleft was accentuated by the need for an Expedition ship to obviate the great uncertainty of local charter. Professor Morton, who lead the Marine Party, and I were fortunate to meet in Honiara, during our preliminary visit in 1964, Captain S. Brown who, with his great experience of Pacific and Solomon waters, put his ship *A.K. Maroro* at the Expedition's service. Our programme, therefore, resolved itself into short surveys of 2 to 4 weeks inland on Guadalcanal, San Cristobal,* Kolombangara, Santa Isabel,* and Malaita, with coastal work on Guadalcanal, Florida, New Georgia and the Russell Islands. We all know that

* As there are commonly used variants of the names of these islands (i.e. San Cristoval and Santa Ysabel), and the contributors to this Discussion in their MSS. have used all the variations, the spellings as used in *The Times Atlas of the World* 1958 have been adopted for this Discussion; i.e. San Cristobal and Santa Isabel. (Ed.)

we studied nowhere thoroughly and that, if we may be lucky enough to return, we would now prefer to study one island in greater detail. The land-party, undoubtedly, missed many pockets of peculiar vegetation which can be discovered in the rugged terrain only by chance.

Almost exactly 401 years ago, Alvaro de Mendana discovered the coral islands Ontong Java and set foot on Santa Isabel and Guadalcanal. Between then and now the only general scientific appraisal of the islands has been that of H. B. Guppy, who visited them in 1882–3 on the survey ship H.M.S. *Lark*. Since Guppy's time there have been several smaller expeditions and since the last war, a great deal of special information has been amassed by the Geological Survey and the Agricultural and Forest Departments of the Solomons. Our Expedition leant heavily on their foundations and borrowed of their personnel. Dr Whitmore, as our chief botanist, had already spent two years on the islands as Forest Botanist. Dr Greenslade brought his knowledge of agriculture and entomology.

Among the problems we shall discuss I wish to mention a few in particular. There will be the over-riding problem of the origin of the sea-mounts which the islands cap, all linked on a 1000-fathom shelf. Then, surely, there will be the arguments for and against long-distance chance dispersal over the seas as a sufficient explanation of the present fauna and flora. There will be the problem of the Malaysian element, and which parts of it are derived from, or have entered into, the Solomon's complex. There will be the particular relations with Fiji, New Hebrides, New Caledonia, the Bismarck Archipelago, New Guinea and Queensland, and we shall realize that we ought to explore the New Hebrides. Then, I will point on the horizon to South America, for I am going to argue that *Heliconia* reached the Solomons from South America. Lastly, there is the obvious fact that, as the islands are very far away, we are led to think of their problems as marginal and irrelevant to the mainspring of life. There are no higher mammals than some bats and marsupials, for the pigs which Mendana noted were surely introduced by the islanders in their chance dispersal overseas, but there are considerable botanical problems peculiar to the Solomons in their unifying flora. It existed surely before the evolution of mammals, and the whole island arc is a challenge to coral-geography, even more than Fiji of which Guppy wrote 'thrown up reef by reef on a submarine basaltic plateau'. I am not sure that the islands, which it was our job to bring into fuller understanding of Melanesia, have not held in their isolation keys to the evolution of flowering forest.

I will conclude this introduction by recording our thanks to the institutions and departments that financed the Expedition: the Royal Society of London, the Royal Society of New Zealand, the Royal Society Leverhulme Scholarship Trust, the Percy Sladen Trust, the Dulverton Trust, the British Museum (Natural History), the Zoological Society of London, the Royal Botanic Gardens at Kew, the Ministry of Overseas Development, the New Zealand University Research Grants Committee, the Dominion Museum of Wellington, and, through the Australian Science and Industry Endowment Fund, the University of Adelaide. The whole expedition of twenty scientific persons cost about £30000 or £1500 each for an average of five months in the field and of this, of course, much was consumed merely on the air-passages to Honiara. I think we did well. Here is the first large debate on the Solomons' natural history.