Archaeological investigations in the Niah Caves, Sarawak

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Preface and Acknowledgements

This book is the companion volume to *Rainforest Foraging and Farming in Island Southeast Asia: the Archaeology of the Niah Caves, Sarawak*. Together, the two books describe the most significant results of the Niah Caves Project, an archaeological investigation of several of the entrances of the Niah cave complex in Sarawak, east Malaysia, that began in 2000 and which, in terms of studies of the finds from both the NCP excavations and those by Tom and Barbara Harrisson in the 1950s and 1960s, has continued ever since. The caves, which honeycomb the Gunung Subis limestone massif close to the northern shoreline of Sarawak, nowadays within the Niah National Park, are the home to huge numbers of swiftlets and bats, the former providing nests that are collected for the lucrative trade in Chinese birds-nest soup, the latter providing guano that is collected under licence by local farmers as fertilizer. The caves have also been the subject of archaeological interest since the mid 19th century, when the naturalist Alfred Russel Wallace visited Sarawak in 1855 to collect biological specimens and reported their likely significance for anthropological research to Charles Darwin and Thomas Huxley. It was the Harrisson excavations, however, that brought the caves to international attention, in particular their discovery in 1958 in the West Mouth of the Great Cave of the so-called 'Deep Skull', the skull of an adult female of modern physical type which they suggested was probably some 40,000 years old on the basis of a radiocarbon date of that age on charcoal that they had collected the previous year from approximately the same depth. The date made the Deep Skull the oldest modern human fossil known at that time anywhere in the world. The Harrisson excavations also indicated that the West Mouth was used for human occupation and burial from the time of the 'Deep Skull' more or less to the present day, and they found further evidence for human settlement and/or burial of different periods of the past in the other entrances of the Great Cave and other caves elsewhere in the Gunung Subis. The Harrisson work gave the caves iconic status in the archaeology of Island Southeast Asia.

For a number of reasons the Harrissons were never able to publish their excavations in final form, and despite the many interim papers they published, some of their discoveries, stratigraphic findings, and interpretations were controversial. One criticism was that, given the fact that caves frequently have complex dipping deposits, the excavation method common at that time, of removing sediment in arbitrary 'spits' or horizontal slices, might have mixed together material of different ages. Was the Deep Skull really as old as Tom Harrisson claimed? In the 1970s the Malaysian archaeologist Zuraina Majid conducted further small-scale excavations in the West Mouth that helped clarify the Niah sequence, but significant uncertainties remained. This was the context for the new project. The main fieldwork took place between 2000 and 2004 and analytical work has continued ever since, focussed both on materials from the new fieldwork and the rich assemblage of archaeological finds – which include animal bones, human bones, shells, stone tools, bone tools, pottery, textiles, beads and resins – from the previous excavations.

Altogether over 70 researchers, mostly archaeologists and geographers, have been involved in the project, a good example of the rich inter-disciplinarity that increasingly has to be involved in the archaeological study of the human past, especially the deep past. The first NCP volume, *Rainforest Foraging and Farming in Island Southeast Asia: the Archaeology of the Niah Caves, Sarawak*, integrated the results of their endeavours into the story of human activity in the caves from about 50,000 years ago to the present, and how that story contributes to our understanding of big questions about the history of the entire region of Southeast Asia, from the mainland to the borders with Australia: when did modern humans arrive? what strategies did such people, long before the invention of farming, develop so that they could survive and prosper in the rainforests of lowland Borneo? and when did farming, especially the rice farming that is so characteristic of the region today, begin, and why did it begin when it did? The purpose of the present volume is to present the detailed information on which the arguments in the first volume are based. The studies incorporate both the new materials we collected in our fieldwork and the materials in the Harrisson Excavation Archive (mostly in Sarawak Museum in Kuching).

Following the two opening chapters setting the scene in terms of the archaeological context as we encountered it in 2000 and the present-day landscape against which our reconstructions of past landscapes

can be compared (Section I Introduction, Chapters 1 and 2), the book is divided into five main sections of associated material: an account of the NCP fieldwork (Section II Field Studies, Chapters 3–6); studies of past climate and vegetation history, and of the present-day cave environment (Section III Environment, Chapters 7–11); approaches to establishing chronologies (Section IV Dating, Chapters 12–15); analyses of artefacts – stone, bone and tusk tools, worked shell, ceramics, textiles, and resins (Section V Material Culture, Chapters 16–22); and analyses of biological materials – human bones, animal and bird bones, plants remains and molluscs (Section VI Bioarchaeology, Chapters 23–28). A final chapter reflects on how the project developed, what it achieved, and the importance of the Niah Caves for world heritage (Section VII Retrospect, Chapter 29). The data presented in these chapters are enormously rich, complex, and drawn from several disciplines, but we hope that the reader will agree with the conclusion offered at the end of this study, that the Niah National Park and the awe-inspiring caves that are its centrepiece have "unique potential to tell the story of the rainforest, and of people's lives in it, from the first human visitors to Island Southeast Asia to the complexities and challenges of managing the world's rainforests in the future".

The chronological framework of the *c*. 50,000-year human and ecological history of the caves set out in the two volumes is from radiocarbon (^{14}C) dating of charcoal and other organic materials, in particular from a programme of AMS (small sample) dating undertaken by the University of Oxford's Radiocarbon Accelerator Unit in support of the Niah Caves Project. For consistency, all dates in the text are cited as conventional uncalibrated radiocarbon dates before the present ('bp') and then as calibrated dates in calendar years ('cal. BP') at a 2σ date range, using the INTCAL09 calibration curve (Reimer *et al*. 2009). The accumulated ^{14}C dates available for the caves, from dates obtained by Tom Harrisson in the 1950s early in the history of the method to the Oxford series, are set out in the Appendix.

The permit for the Niah Caves Project was granted by the State Planning Unit of the Chief Minister's Department of Sarawak, sponsored by Sarawak Museum, and particular thanks are due to Haji Sanib Haji bin Said (Director of Sarawak Museum during the fieldwork and initial laboratory work) and Ipoi Datan (then Curator of Archaeology and Deputy Director, and latterly Director) for their enthusiastic support of the project throughout its development. GB would also like to acknowledge the patience, goodwill and cooperation of the many contributors to this volume, and their forbearance with what has often been a heavy editorial hand in shaping their many contributions into what we hope is a balanced, connected and readable narrative. He would also like to thank his co-editor LF for her Herculean efforts in preparing the illustrative material for the volume, a task that involved lengthy excavation of the archive record and cross-referencing the original section and plan drawings with contributors' texts and illustrations. We would both like to acknowledge the commitment and skill of Ben Plumridge in all aspects of the design and production of the final text.

Full acknowledgements to the many funding agencies that supported the fieldwork and individual researchers are set out in the Acknowledgements prefacing Volume One, and in this volume individual contributors also acknowledge their funding support at the end of their respective chapters, but the principal funding for the NCP fieldwork and ensuing laboratory studies, including the doctoral research of Lindsay Lloyd-Smith on the burials (Chapter 23) and Franca Cole on the pottery (Chapter 20), and the post-doctoral studies by Philip Piper and Ryan Rabett of the vertebrate fauna (Chapter 25) and by Huw Barton of the lithic residues and starches (Chapters 17 and 27) was provided by the UK Arts and Humanities Research Board and its successor the Arts and Humanities Research Council, as was a comparative study of Gua Sireh lithics by Tim Reynolds informing his work on the Niah lithics (Chapter 16). GB would like to express his particular gratitude to the AHRC for its support for the project.

A huge number of people have supported the project and its many contributors since 2000, but we know that none of them will begrudge three in particular being identified for special mention: Tom Harrisson, Barbara Harrisson, and Edmund Kurui. The archaeology of the Niah Caves will forever be linked in popular and scholarly imaginations with the name of Tom Harrisson, but the contribution of Barbara Harrisson (who died peacefully at the age of 93 in December 2015) was at least as important. As GB wrote in Volume One, "the extraordinary contribution of the archaeology of the Niah Caves to human history in Island Southeast Asia is as much her story as Tom's". The NCP field team also owes a particular debt of gratitude to the late Assistant Curator Edmund Kurui, who worked with the field teams each season: he solved every logistical problem minor or major, carried immense loads to and from the caves seemingly without effort, was a constant source of fun, and kept us safe no matter how incompetent we must have seemed. This book is dedicated to his memory with enormous affection and gratitude.

Graeme Barker and Lucy Farr
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