Contents

Volume abstract ........................................................................................................................................... v
Acknowledgments ......................................................................................................................................... vi
Approaching the prehistory of Norfolk Island .............. Atholl Anderson and Peter White 1
Archaeological fieldwork on Norfolk Island ................................................................................................. Atholl Anderson, Ian Smith and Peter White 11
The radiocarbon chronology of the Norfolk Island archaeological sites .................................................. Atholl Anderson, Tom Higham and Rod Wallace 33
Domestic and religious structures in the Emily Bay settlement site, Norfolk Island ......................... Atholl Anderson and Roger Green 43
Stone artefacts from the Emily Bay settlement site, Norfolk Island ......................................................... Marianne Turner, Atholl Anderson and Richard Fullagar 53
Shell and bone artefacts from the Emily Bay settlement site, Norfolk Island .................................. Lyn Schmidt, Atholl Anderson and Richard Fullagar 67
Mammalian and reptilian fauna from Emily and Cemetery Bays, Norfolk Island ..................... Ian Smith, Geoffrey Clark and Peter White 75
Genetic variation in archaeological Rattus exulans remains from the Emily Bay settlement site, Norfolk Island .... Elizabeth Matiso-Smith, K. Ann Horsburgh, Judith H. Robins and Atholl Anderson 81
Avifauna from the Emily Bay settlement site, Norfolk Island: a preliminary account .................. Richard N. Holdaway and Atholl Anderson 85
Fishbone from the Emily Bay settlement site, Norfolk Island ............................................................... Richard Walter and Atholl Anderson 101
Molluscs and echinoderms from the Emily Bay settlement site, Norfolk Island .......................... Colin R. Campbell and Lyn Schmidt 109
Land snails from Norfolk Island sites ...................................................................................................... Diana Neuweger, Peter White and Winston F. Ponder 115
Polynesian plant introductions in the Southwest Pacific: initial pollen evidence from Norfolk Island .............. Mike K. Macphail, Geoffrey S. Hope and Atholl Anderson 123
Prehistoric settlement on Norfolk Island and its Oceanic context .......................................................... Atholl Anderson and Peter White 135
The Prehistoric Archaeology of Norfolk Island, Southwest Pacific

EDITED BY

ATHOLL ANDERSON¹ AND PETER WHITE²

¹ Department of Archaeology & Natural History, Research School of Pacific and Asian Studies, Australian National University, Canberra ACT 0200, Australia
aja@coombs.anu.edu.au

² Archaeology, University of Sydney, Sydney NSW 2006, Australia
Peter.White@antiquity.usyd.edu.au

VOLUME ABSTRACT. This Supplement documents the discovery, excavation and analysis of material of the Polynesian occupation of Norfolk Island about 600 years ago.

The main excavation, in the dunes of Emily Bay, revealed a probable house, with some posts in place, and an adjacent paved area, which we interpret as a possible marae. Some obsidian, mostly sourced to Raoul Island, was associated with the paving. Stone artefacts, including adzes, were made of local basalt. Shell and bone tools were also found. Both stone and shell tools retained residues and usewear. The nature and morphology of the artefacts suggest New Zealand or the Kermadec Islands as the most likely source of the settlement.

Faunal remains included a limited range of mammals and reptiles, along with fish, birds and shellfish. Some specialization in collection is evident in each of the three latter classes of remains. Rattus exulans is the only animal which was clearly introduced, and there is also pollen evidence for plant introductions.

Detailed analysis of the radiocarbon data establishes that the settlement was occupied between early thirteenth and early fifteenth centuries A.D., although the duration of occupation may have been considerably shorter. Reasons for abandonment of the island are discussed; extreme isolation may have been important.