

### ARCHAEOLOGY IN NEW ZEALAND



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## **REVIEWS**

Geoffrey Irwin (ed), 2004. *Kohika: The Archaeology of a Late Maori Lake Village in the Ngati Awa Rohe, Bay of Plenty, New Zealand.* Auckland University Press, Auckland. 266 pp. figs, tables, bib, index. Paper. \$49.99.

Helen Leach, Department of Anthropology, University of Otago

The palisaded village of Kohika has had an eventful past, both in prehistory and during the past 30 years. It was situated in the middle of a volcanically and tectonically active region where rivers regularly flood and even change their courses, fault lines slice the terrain, and volcanoes periodically erupt ash and lapilli. Maori had occupied the Bay of Plenty for several centuries before they built this settlement on a sandy knoll surrounded by Lake Kohika, at the time larger and deeper than it is today. Sometime around the mid-17th century AD they erected a light palisade of kanuka poles around the edge of the island and built houses, pataka (raised storehouses), cooking sheds and storage pits inside the perimeter. They lived at Kohika for several decades, despite experiencing a sharp earthquake that ruptured a house floor and necessitated later repairs. In the end it was a major flood inundating the lower parts of the settlement and smothering it with alluvium that led to the village's abandonment.

Kohika was not totally demolished, however, and much of the wood used in pataka and house construction subsided into the growing peat before fire and fungi could destroy it. The next tragedy to afflict Kohika was agricultural swamp drainage in the 20th century, a practice that has doubtless destroyed many sites before they have even been identified. But at Kohika the palisade posts exposed by the drain digging machine were recognized, and members of the Whakatane and District Historical Society were called in, late in 1974, to salvage the wooden artefacts—what they dug out of the peat turned out to be the earliest known whare whakairo (carved house). In 1974 New Zealand archaeology was not at a stage where such a remarkable discovery could receive the immediate professional intervention it deserved. Even when the University of Auckland became involved in the first systematic excavations at Kohika in May 1975, their conservation strategy amounted to little more than stabilization of the finds. Conservation facilities and expertise had yet to be developed.

If the rediscovery of Kohika was three decades too soon, the delay in the appearance of this monograph has been entirely advantageous. It has allowed

time for advances not only in wet wood conservation and identification but also in palaeoenvironmental reconstruction and lithic sourcing. In the interval Kohika provided material for several research essays and two dissertations (Lawlor 1979, Williams 1980). It was also the subject of Rod Wallace and Geoff Irwin's (1999) important article on the construction of the traditional Maori whare, significant details on which had been lost in the first half of the 20th century. More recently the contents of dog coprolites found in the peat have been the subject of two articles published internationally (Horrocks *et al.* 2003; Horrocks *et al.* 2004).

This long-awaited monograph on Kohika provides an overview and context that could not be adequately covered in the theses and articles. Edited by Geoff Irwin, it is the most attractive archaeological publication yet published by Auckland University Press. The abundant artefact drawings and photographs are of a very high standard and even mid-1970s colour photographs have been acceptably enhanced for a centre section devoted to colour plates. The layout integrates text and illustrations smoothly (except where two or three lines of text have been allowed to sit under a near full-page graphic and take on the character of a caption, e.g., pp 103, 106, 113). Book collectors will not be happy that the edition is solely paperback, and readers will find that the pages are not only self-turning but the book closes shut at every opportunity.

Of the recent batch of archaeological monographs this is one of the easiest to read. Though the number and quality of illustrations play a part, its coherence is mostly attributable to very consistent and firm editing, constraining the 20 contributors to the task at hand: presenting a description of the archaeology of Kohika within its regional context. No space has been allowed for long theoretical or methodological discussions. Readers are invited to pursue these through the references. In places I looked for more comparison of the finds with those from other regions, or even with other waterlogged sites like Mangakaware 1 & 2 (Bellwood 1978), but greater attention to distribution and stylistic analysis would undoubtedly have increased the size and cost of the monograph.

Chapter 1 (by Geoff Irwin, Garry Law, Ian Lawlor and Pouroto Ngaropo) introduces Kohika in its historical and archaeological context, reminding readers of the extraordinary potential of wetland sites to preserve perishable artefacts and structures, as well as of the superior resources and analytical skills needed to process them. Traditional and historical details about the site are scarce—not surprisingly, since it disappeared into the Rangitaiki Swamp for over two centuries after abandonment. With no other swamp pa known in the area its presence would not have been anticipated by archaeologists engaged in site surveys. The large blanks on the map of site distribution in the Rangitaiki Plains (Figure 1.2) suggest that Kohika might not be the only settlement concealed by flood-borne volcanic outwash.

The insecurity of life in this geologically unstable region emerges strongly in chapter 2 (by Geoff Irwin). Though chapter 1 promoted the view that the Bay of Plenty, with its forests, fisheries and fertile land "offered ideal conditions for Maori settlement" (p 4), the mix of subsiding plains, rising hills and ample supply of volcanic tephra in the headwaters meant that Maori were constantly required to adjust to coastal progradation and frequent changes in watercourses and lake levels. Around Kohika the old dunes were prone to wind erosion, while soils of the former floodplains and swamps were poorly drained. As Kevin Jones (1991) wrote earlier, Maori gardeners on these plains concentrated on the river levees. They may also have taken advantage of the lowering of the water table in summer in zones where sand overlay peat. The Kohika mound itself was probably the site of gardens both before and after the village occupation.

Chapter 3 (by Matt McGlone and Kevin Jones) builds on this geomorphological data in its analysis of vegetation change in the coastal Bay of Plenty. A pollen and spore sampling programme at Kohika and two other archaeological complexes is described and interpreted. Independently dated tephra layers in the profiles provide essential anchors to the chronology, for "swamps are particularly prone to contamination by old organic material washed in to the lakes after forest clearing" (p 23). Reworking of old charcoal is suspected in the Tunapahore B core where charcoal dating to the period of the Taupo eruption turns up much higher in the profile. This chapter contributes more solid data to the date of settlement debate. At Kohika the sustained charcoal influx that accompanies human interference in the vegetation succession appears after the deposition of Kaharoa Tephra (independently dated to 665±17 BP). Though charcoal, bracken spores and grass pollen had increased after the earlier Taupo eruption, their relative abundance after the Kaharoa event was much greater and more persistent. Forest did not recover after this date as it did two centuries after the Taupo Tephra. Major human impact in this catchment is therefore placed at about 600 years BP, an important finding which supports the late occupation model (p 42).

Chapter 4 (by Geoff Irwin) focuses on the stratigraphy and structure of the site. It was founded on an old dune associated with the pre-Taupo shoreline. As a village it was enlarged through the build-up of artificially laid house floors and occupation debris that spread out into the growing peat on the lake margin. Four areas were examined, from Area A on the dune top to Area D on the old lakeshore. Area A (of which some 70 m² were excavated) had been subject to significant mixing and later burials, so its features only became clear when exposed in the underlying sterile sand. As well as seven conventional pits, five intriguing bin pits were found, three of which had stake holes around their edges, perhaps to support light roofs (what were they for, readers will ask, have they

been found anywhere else?). Numerous ovens and fire pits completed the array of features that the Maori occupants had clearly thought important to keep above the level of the water table. From Chapter 11 we learn that flakes of obsidian were common in this area, pointing to their use in food preparation, but conditions were too poor for the survival of midden.

Only 20 m² of Area B were excavated, but square B1 revealed several large deep postholes and three standing post butts from a structure capable of carrying heavy loads. No sign of a floor was detected and it was in the wrong position for a fighting stage; thus Irwin proposes that it was the base of a raised storehouse, consistent with the discovery of pataka timbers elsewhere in the site. Beyond the palisade square B3 documented the dramatic flood event that deposited 50 cm of alluvium around the lakeshore, burying woodchips, coils of rata vine, pieces of bracken and gourd shell, midden and rake-out, together with dressed posts and a totara plank stored in the peat to prevent cracking. Square B4 intercepted the palisade line revealing clearly how the flood swept tephra sand between the standing posts into the village.

The higher squares in Area C included more cooking features but were disturbed. The most interesting area archaeologically was Area D of which 120 m² were excavated. Here the sediments were wet enough for good survival of organic artefacts. The excavation revealed three consecutive artificially laid house floors abutting a perimeter fence. The lowest floor had been built up over a layer of cut bracken fern. Prior to the formation of the top floor an earthquake had faulted both of the lower floors at the same point, but the occupants had filled the crack and continued with their lives. I wondered whether liquefaction had occurred in the lower parts of the site during the shake. Beyond the perimeter fence, rubbish had been dumped, and dogs confined.

It is unfortunate that the area from which the carved panels and other high status artefacts were removed by the Historical Society soon after the drain was dug was not stratigraphically excavated. Irwin believes that like Area D it lay on the margins of the dry land, and that the house from which the carved poupou were recovered had been *in situ*. Nearby were workshops with abundant stockpiled obsidian, wood chips from canoe making and numerous wooden tools. Clearly the flood terminated the occupation of the village. Why were so many taonga left behind? The thick alluvium may have concealed some of the smaller items, but not the vertical panels. It is possible that loss of life had occurred, rendering the site tapu.

In chapter 5 Geoff Irwin and Martin Jones show how Bayesian analysis of radiocarbon dates, coupled with careful stratigraphical recording and sequence building can overcome the difficulties of dating late period sites. They conclude that Kohika was home to just one or two generations until about 1700 AD. Who

the occupants were is uncertain, as the Kohika carving styles differ from those associated with local iwi (including Ngati Awa) in historical times. Readers should remember this when drawing conclusions from the monograph's sub-title—Kohika is in the Ngati Awa rohe today, but may not have been inhabited by their ancestors.

In many respects chapters 6–8 are what we have been waiting for with the greatest anticipation: chapter 6 (by Rod Wallace and Geoff Irwin) describes the portable wooden artifacts; chapter 7 (in which these authors are joined by Roger Neich) presents the wonderful carved panels and structural woodwork of the houses and pataka; and chapter 8 (by Sally McAra) discusses the fibrework. The materials from which these items were made are identified, and the tool functions assessed. Though most readers will be comfortable with the use of common names for the source trees, such as totara and rata, the tables should list botanical names as well. Future scholars puzzling over what species we class as totara or rata will ask why pollens and spores are identified to genus and species, but not wood. Even the Appendix inventory omits the taxonomic names. In contrast chapter 12 lists fish and birds under both taxonomic and common names. Why should trees be treated any differently?

The wooden artefacts greatly expand our knowledge of Maori material culture. We learn that bird spears, of which 15 were recovered, were not slender poles, but sections of hardwood carefully split out from tree trunks. Digging sticks, a footrest and a ketu (weeder) blade were found along with a variety of detachable wooden 'spade' blades, not well described in the ethnographic literature. How these were hafted is not explored. We await a comparison of the Kohika 'spades' with those from Mangakaware (Bellwood 1978). The presence of numerous fernroot beaters suggests that the digging tools were not confined to gardening but were necessary for fernroot harvesting. Fragments of troughlike bowls were recovered, including one with a pouring or decanting lip. Canoe paddles were also represented, though the large steering paddle would have been of more use at sea than in a local waterway. Various canoe fittings and bailers were recovered. The presence of heru (ornamental hair combs), all made from the resinous heartwood of rimu, was reminiscent of Kauri Point. However the Kohika combs had not been ritually broken and disposed of. Stylistically they fall at the end of the Kauri Point comb sequence. Rod Wallace successfully undertook some experimental archaeology to determine how the comb teeth were cut, finding that straight-grained wood was a pre-requisite. Other portable artifacts included darts, spinning tops, adze and chisel handles, wedges and pegs. Even a notched ladder, believed to have provided access to a pataka in Area D, was recovered. Overall this is a remarkable assemblage.

Despite the 'informal' conditions under which the Historical Society worked while extracting the carved house, Wallace, Irwin and Neich were able to reconstruct the house from the surviving timbers and to estimate its dimensions. Their chapter describes the individual buildings at Kohika, in contrast to Wallace and Irwin's 1991 article which provided a generic description. It is ironic that for the Kohika houses identified by their artificially laid floors, almost no structural timbers other than post butts were found, whereas those for which rafters, battens, lintels, doorframes and panels survived have no archaeological floor plans. Nevertheless, the authors' overall finding that canoe construction technology was transferred to the building of the Maori house, explaining the concealment of joints and lashings, is a major contribution to knowledge of the prehistoric whare.

In chapter 9 Geoff Irwin describes the artefacts of bone, tooth, pumice and nephrite, many of which were associated with the archaeologically defined house floors in Area D. They included a tooth pendant made from a human incisor, and several fishhooks and a fishhook blank made from human bone. Not surprisingly, the fine human bone pendant made in the form of a tiki (that appears on the front cover) was found in the vicinity of the carved house, along with the pumice kumara god and bowl, and a complete nephrite adze. These are further evidence of the high status of the house's occupants.

Chapters 10 (by Phil Moore) and 11 (by Simon Holdaway) deal with the sources of the obsidian found at Kohika and the technology and distribution of this lithic assemblage. As the most numerous artefact type obsidian flakes were clearly multi-functional tools discarded throughout the site. Proximity to the Mayor Island sources seems to be equated with a reluctance to use cores once flakes struck from them reached a threshold size, defined as about 23 mm in length. Flakes of smaller dimensions were discarded rather than being put to use. Simon Holdaway neatly confirms observations that distance from source is an important determinant of the size of utilized flakes.

Faunal remains are the subject of chapter 12 (by Geoff Irwin, Reg Nichol, Mike Taylor, Trevor Worthy and Ian Smith). Minimum numbers for most taxa are generally low, with only tuatua and pipi shellfish, jack mackerel and kahawai, and dogs occurring in quantity. Given the one or two generations of occupation proposed for the site, even these species represent only a few weeks' consumption. It is possible that the dogs ate most of the food scraps that might otherwise have accumulated as midden. All of their well-preserved coprolites subjected to examination contained fish bones. As a site Kohika's fame rests as much on the survival of these coprolites as on its wooden artefacts (in fact the coprolites provide rather more answers to archaeologists' questions than the carved poupou!). Chapter 13 (by Geoff Irwin, Mark Horrocks, Lynette Williams, H. J.

Hall, Matt McGlone and S. L. Nichol) builds on Lynette Williams' (1980) thesis. The Kohika dogs ate human food refuse and probably human excrement as well, but judging human diet from dog faeces is not straightforward. The identification in dog coprolites of the pollen of puha (probably Sonchus asper, M. McGlone, pers. comm) and raupo, together with starch cells from bracken is claimed to "provide direct evidence that these were used as food by Maori, as described in ethnographic times" (p 217). To be direct evidence of human diet it must first be demonstrated that humans had excreted the pollen or starch cells first. Puha is normally gathered and eaten by people before it flowers and becomes ever more bitter. Since dogs are not attracted to it as a food item it seems rather more likely that they accidentally ingested the pollen because puha grew in abundance where they were tethered. As a weed of both waste ground around settlements, and gardens, puha thrives in disturbed, nitrogen-enriched soils. Accidental ingestion while feeding off the ground is equally likely for the raupo pollen, since the plant grew close by. Bracken frond fragments, found in five coprolites are hardly likely to be recycled human waste, because the Maori did not eat bracken fronds. The starch cells and xylem tracheids from bracken rhizomes are more convincing evidence of human involvement than any of the above, as Maori would not have dug fernroot simply to feed their dogs. Howsoever the plant material entered the dogs' diet, the Kohika dogs seem to have been treated very much as pigs were in tropical Polynesia. The presence of parasite eggs in their coprolites and the spatial concentrations of the coprolites support a view of them as tethered scavengers.

In the final chapter Geoff Irwin completes the vivid picture emerging from the inter-disciplinary analysis of the Kohika material. Though the original excavation took place some thirty years ago thorough records made at the time now allow the convincing integration of stratigraphic archaeology and geomorphology. Furthermore, three decades of laboratory analysis have done justice to the rare organic items. The palaeoenvironmental studies have provided a natural context for site interpretation, and the faunal and lithic identifications have suggested some of the wider sources of food and raw materials brought to the site. The contributors, especially Irwin and Wallace, deserve our congratulations. The Kohika volume is a worthy addition to the literature of internationally significant wetland sites.

Above all, Kohika stands as a reminder of all the late Maori villages that once existed in the safety of wetlands, only to be drained, dried out and destroyed before they could be studied. This fine monograph provides an absorbing description of what might so easily have been lost from just one such site.

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Simon Best

This is a large and beautifully produced hardback monograph, with a stunning cover, produced to commemorate the first half century of Oceanic archaeology, kicked off in 1952 by Edward Gifford and Richard Shutler's excavation at Site 13 in New Caledonia.

Those who believe that the Lapita part of Pacific archaeology has been overdone, and fear that the monograph might be riddled with "There I was on the back beach knee-deep in dentate stamped pottery" need not worry: the fare on offer covers many aspects of Pacific archaeology (with the exception of the historic period), and some of the articles don't even mention Lapita.

The volume leads off with an introduction to the New Caledonia conference, in which Christophe Sand describes Pacific archaeologists as "that strange community" (le legion Étranger perhaps), which is followed with reminiscences of working with Gifford, and then falls into three main parts consisting of 31 contributions: Old Oceania (3), the Austronesian Spread (24), and The Pacific and Archaeology (4).

Old Oceania sets the backdrop for the arrival or emergence of Lapita, with discussions on the Pleistocene of Australia, New Guinea and Island Melanesia, including a description of the recent discoveries of pre-Austronesian rock art in Eastern Borneo.

The next section is in five parts: From East to West, The Lapita Sphere, Cultural Chronologies, Evolutions and Transformations, and Traditional Polynesian dynamics. In the first Oppenheimer adjusts the "fast train" timetable of expansion in a comprehensive article, and Anderson makes the case for more weight to be given to the demographic side of colonisation.

The second part is the Lapita core of the monograph, with eight contributions. Among these is an article by Jim Specht on the Watom stratigraphy, the archaeological control of which has been given a bad press by some (including this reviewer), apparently without due cause (although the dated Lapita cigarette butt is not covered). Scarlett Chiu takes a look at the meaning of Lapita pottery in New Caledonia, finding the answers in exchange networks. New material from Fiji and Vanuatu is presented by Aubrey Park, Patrick Nunn *et al.* and Stuart Bedford, the latter suggesting that "the haze" over Vanuatu Lapita is about to clear (likely, as in most Pacific archaeology, to reveal a dense fogbank).

Cultural Chronologies proves that there really was life after Lapita, in Island Melanesia (Matthew Spriggs), New Ireland (Stephanie Garling), Fiji (Dave Burley and Jeffrey Clark) and Palau (Sarah Phear *et al.*). Spriggs also tackles the Lapita/post Lapita boundary.

In the Evolutions and Transformations section Dave Burley has produced a real stinker, involving a new interpretation of the Sigatoka Dunes prehistory. The early part of the Fiji ceramic sequence is mangled beyond recognition, partly because Burley does not understand it and partly because he is trying to shoehorn it into the Ceramic Phases of Green, which worked well enough 30 years ago but have been worse than useless for the last 20 or so. The Birks' are probably spinning in their graves at hearing their report had left a "considerable degree of misunderstanding in its wake." The misunderstanding is all Burley's.

Traditional Polynesian Dynamics looks at the date of first settlement in the Phoenix and Line Islands (Eric Pearthree and Anne Di Piazza), the roles of history and archaeology in Uvea (Hapakuke Leleivai), new data from the first field season in the Gambier Islands (Atholl Anderson *et al.*), and a rare example of research at the household level on Mo'orea (Jennifer Kahn).

The last section is perhaps the most interesting and challenging. Tarisi Sorovi-Vunidilo charts the minefield that lies between researcher and local community, and flags the necessary steps to be taken if you wish to get through relatively unharmed and without causing offence.

The contribution by the museum archaeologist Nigel Prickett deserves special mention. This is a hard-hitting look (although apparently the draft was even stronger) at some of the quirks and anomalies in New Zealand archaeology (most of which are probably similar world-wide): the lunatic fringe (outside the universities as well), the slightly incestuous grants system, and archaeologists' "vexed association with radiocarbon dating" are just some of the topics. Strangely enough, the point comes through that despite the bumbling incompetence that so often marks archaeological efforts, we have a history of being more right on some substantive issues than colleagues from real sciences: the ones that get Nobel prizes. Prickett ends with a plea for more historic archaeology, in the belief that this might start to breath life into our stories of the prehistoric past.

Every monograph should have a happy ending, and the contribution from Colleen Urlich provides this, or at least a warm fuzzy one. A direct connection between Lapita potters and Maori clay working is seen, even with similarities in some of the motifs. The rare examples of small pieces of hard clay (sun dried or fired) found in prehistoric Maori sites, some with simple decoration, are given as the proof (the author has omitted the clay nose flute from Oruarangi). This is archaeology from the heart more than the head, and is presumably similar to that which inspired a lecturer at Auckland University to tell his class that Lapita pottery had been found at Wairau Bar.

At the same time, and bearing in mind Prickett's plea, there is more passion in this short article than in the rest of the monograph, and in the arid setting of most archaeological writing this cannot be a bad thing.

The only omission noticed was a missed reference in the last contribution, and two of the three copies (which included the one for review) that I saw had a leaf of pages missing—whether the latter reflects the print run in general or is an example of a French colony dumping its reject goods on a British one is unclear. Whatever, the monograph marks an important milestone in Pacific archaeology, and is well worth acquiring.

# D.C. Stapp and M. S. Burney, 2002. *Tribal Cultural Resource Management: The Full Circle to Stewardship*. AltaMira Press, Walnut Creek CA. 246 pp, figs., tables, bib. Paper. \$USD24.95.

Harry Allen, Anthropology Department, University of Auckland

The subtitle of this book, *The Full Circle of Stewardship*, refers to the process whereby anthropologists and archaeologists who, having become interested in an American Indian past, now work with tribes to achieve common conservation goals. The book shares a common purpose with *Aborigines and Archaeologists Working Together* edited by Davidson *et al.* (1995). Its subject is tribal resource management, defined as the situation where tribes formally manage the cultural resources that are important to them. It is resource management under American Indian control, conducted by both Indians and archaeologists under contract. The authors, Stapp and Burney, place their emphasis on the protection and conservation of the cultural value of archaeological sites. They note that this differs from conventional archaeological resource management where protecting the research value of cultural resources is usually the main point.

This book is addressed to archaeologists, planners and resource managers. Its main themes are that CRM is: firstly, more about people than places and artefacts; secondly, that it is about using management processes to sustain the cultural meaning of places for the people who value them; thirdly, it is only indirectly about conducting archaeological research; and finally, the authors stress that cooperating with the people who care about cultural resources ensures that a diversity of opinion and approaches can be applied.

The introductory sections (Chapters 2, 3 & 4) provide a useful history of American archaeology and the development of CRM. The most interesting sections concern the rising political consciousness of Indian peoples in North America and the impact that this had on the discipline of archaeology. Significant advances were made with the passing of the National Environmental Policy Act (NEPA) in 1969, and the National Historic Preservation Act (NHPA) in 1966, which created the Tribal Historic Preservation Office Programme. The Native American Graves and Repatriation Act (NAGPRA) of 1990 represented a further breakthrough, though this later Act is only briefly discussed. These Acts required Federal authorities to consult and involve Indian Authorities when projects impacted on cultural resources and they created formal avenues through the bureaucracy and the courts to achieve this.

The comparative section lists 33 Indian groups in the US which have set up Tribal Historic Preservation Offices. Amongst the most useful mechanisms

for heritage protection the authors include the National Register of Historic Places because it draws attention to the fact that salvage excavation was not the only way in which historic places could be 'protected'. The parallels with the New Zealand situation are close. The experiences described in this book are ones which could be drawn upon by the New Zealand Historic Places Trust, Maori Heritage Units and archaeological contractors working with Maori.

The major and most interesting part of this book is the case study based on the author's joint experiences (Indian manager and an archaeologist contracted by the tribe). These managers were responsible to the tribe for cultural resource management in central and southwestern Washington State, northwestern Oregon and western Montana, where the lands of the Confederated tribes of the Umatilla Indian Reservation, and lands ceded by these tribes, are located. One of the first steps was to achieve recognition by being accepted by State and Federal authorities as the cultural spokespeople for the area.

Quite a bit of the information is in the style of a 'how to' handbook. This point is returned to in Chapter 9 where the various steps required to set up an agenda of stewardship are listed. For any tribal authority trying to set up a heritage unit these are very useful sections. They cover planning, assessment of resources and the requirements of long-term monitoring. The practical examples of consultation are telling. Also important is the frustration experienced by requests to rank different parts of the territory into those that are more or less important than another. Again, the dilemma over the sharing of cultural information is discussed. The solution offered is to suggest that managers work with small bits of information until trust and mutual respect is established. Then, if further information is needed to safeguard the future of a place it is likely to be provided. The proviso is that this information should not be made available to strangers. The authors note that preserving a cultural landscape involves more than simply protecting specific places within it. Places are interconnected and their preservation should also include the oral history attached to places.

One of the most telling sentences in this book are in the Introduction, written by Jeff Van Pelt, a member of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the manager of the Tribe's Cultural Resources Protection programme. Asked how he does his job in the midst of tribal politics, Van Pelt answers that he has strict rules to follow, laid down in a written policy and procedure manual. Unless this is done, then the danger is that policy and rules might change as individuals responsible for particular tribal functions change.

The final section of the book discusses the future of tribal cultural resource management. Goals for the future include increasing public awareness through an education programme and fostering a closer relationship between American

Indians, archaeologists, anthropologists and others. Archaeologists and Maori Heritage managers should look up the Umatilla website at http://www.umatilla.nsn.us for further information about the confederation and its policies.

In 2000 the Ministry of the Environment in New Zealand produced a guide Te Raranga a Mahi: Developing Environmental Management Plans for Whanau, Hapu and Iwi. This guide offers a step-by-step approach to formulate an Iwi Management Plan. The process begins with a scoping exercise, and proceeds to setting up a steering committee, to community consultation, draft plans, making resource inventories, putting goals and outcomes into place, finding funding and, finally, to networking for information. Although wāhi tapu and wāhi taonga are mentioned in the text, it is obvious that the writers were not very interested in cultural resources management as these are not directly discussed. This is a pity as there is a considerable need for generic-level advice to Maori organisations that wish to set up resource management units. While a number of Maori cultural resources plans exist these often are very generalised and have varying formats. Persons intending to set up, or assisting the setting up of, tribal cultural resource management organisations in New Zealand could benefit by reading this book. It is also relevant to archaeologists in New Zealand who often work with Maori organisations, but have vet to document their experiences in a form that is available to a wider audience.

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Dimitri Anson, Otago Museum

This volume presents a review and synthesis of the archaeology of Walpole, a bleak, raised coral island located about 150 kilometres east of the Isle of Pines in New Caledonia. E. Lacroix, G. Gambioch, P. Genthon and F. Valentin have made contributions.

Introductory sections describe the discovery of the island and later the mining of guano by Europeans. The island's geology, flora and fauna are also

With only a small proportion of the material from Walpole coming from an archaeologically controlled context Sand presents the reader with a two-stage chronological network based in part on typological comparisons with related New Caledonian materials. The latest phase, dating from the second millennium AD, is represented primarily by surface finds. These consist on the one hand of Kanak Cultural Complex material, and on the other of imported lithics of Polynesian type. Sand associates the former with short-term visits of people from the mainland, the Loyalty Islands or the Isle of Pines in search of resources or as a point of transit. The lithics of Polynesian type he attributes to peoples foreign to the New Caledonian archipelago, given that two of the basalt adzes have Fijian affinities, as does a lower human jaw, and some of the tombs that were covered with gravel and slabs fashioned from coral. Sand associates these with the Polynesian expansion to the west known to have occurred at Tikopia (Kirch and Yen 1982) and Ouvea at about this time.

The earliest layers indicate that Walpole Island was first visited ca 800–500 BC, soon after the settlement of the New Caledonian Archipelago. Succeeding layers, also dating to the first millennium BC, are indicative of successive relatively long-term occupations that Sand believes are associated with clamshell adzes, shell pendants and bird bone tools of a type unique to Walpole. He posits that these must have been produced at a time of relative isolation when only local resources were available.

To place the archaeology of Walpole Island into a theoretical context this work undertakes a review of some of the models used to explain the abandonment of what have been called "mystery islands" (Bellwood 1978, Weisler 1996, Di Piazza and Pearthree 2001). Sand maintains that Walpole Island is "mysterious" only in so far as site disturbance makes it difficult to accurately define its past. What we do know of its chequered history reveals, however, that different models are applicable at different times.

The book is well illustrated with photographs and maps of the island depicting site location and the stratigraphy of the sites that were excavated. It

includes numerous illustrations and descriptive tables of the artefacts and other finds that were analysed. Tables of the carbon dates present the new chronology. In sum this book is now the basic primer to the archaeology of Walpole Island.

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Val Attenbrow and Richard Fullagar (eds) 2004. A Pacific Odyssey: Archaeology and Anthropology in the Western Pacific. Papers in Honour of Jim Specht. Records of the Australian Museum, Supplement 29. vi + 186 pp. \$AUD60.

J. Peter White. Archaeology Department, University of Sydney

Jim Specht is one of the small group of English-trained archaeologists—among them Jones, Higham, Schrire, McBryde—whose arrival in Australia and New Zealand in the 1960's did much to vivify the second wave of Pacific research. This volume, arising from a one-day conference on his retirement from the Australian Museum in 2000, is an acknowledgment of his contribution—mostly to science. But, in an initial 8 page tribute, four colleagues detail Specht's major contributions to the development both of cultural organizations in several nations and of policies of repatriation and their implementation. Only two of the 17 papers relate directly to this, but they are in some ways the most significant in the book.

Bolton, writing about the return of a textile to Vanuatu, and Bonshek on the non-return of Firth's Tikopia collection to the Solomon Islands, both stress how much these activities depended on social and cultural relationships. In a post-colonial world, museums and the personalities within them are a critical part of such relationships and Jim's role has been major. The only other paper specifically related to museums is Knowles and Gosden on colonial collectors in southwest New Britain, one of Specht's major research areas. This is a detailed account of how the purpose of collecting has changed over a century, but turns out to be a chronicle rather than an exploratory or explanatory history.

The final paper to touch Jim's non-archaeological interests is Anita Smith's discussion of how Pacific field monuments—fortifications, mounds and terraces, what Brookfield called 'landesque capital'—might be considered for World Heritage status. The approach relies strongly on her interpretation of high-level continuity and considerable continuing interaction in Eastern Melanesian—Polynesian prehistory (cf. Smith 2002), but, as she says, requires better chronology and a Pacific-wide approach to such sites before it can take off.

The more strictly archaeological papers cover a wide geographical and temporal range within the western Pacific. Many are valuable reports, though because of publication delays some need to be supplemented by later research outputs. These include Denham (cf. 2003), Sand (cf. 2002), Spriggs (cf. 2003), Summerhayes (cf. 2003a, 2003b) and Torrence (cf. Araho *et al.* 2002, Rath and Torrence 2003). However, some of the papers here contain more detailed data than is often presentable in journals. Detailed review of each paper is impossible, so here I focus on some of the range. Note that the volume is completely available on line, so you can view the remainder easily (www.amonline.net.au/pdf/publications/[1396-1414]\_complete.pdf —each chapter has a separate number, from 1396–1414)

Athens and Ward analyse a 27 m pollen core from Guam, with 10 radiocarbon dates and 45 pollen and charcoal samples, arguing that charcoal particles, which first appear at cal 4300 BP (about half-way up the core), indicate first human settlement. They note that other disturbance indicators first appear only at cal 3900 BP and suggest that the earliest archaeological data, now dated at several sites to ca cal 3500 BP, is actually too young (see also Athens and Ward 2001). Rainbird's swift overview (2004) would not agree, but Athens and Ward's well-presented data are important and require explanation rather than dismissal. Also important is their discussion of the later environmental transformation of Guam and the native presence of coconut and betelnut.

Denham's assessment of Phase I at Kuk produces considerable data hitherto unpublished by Golson or Hughes. He uses this to argue that "the claims for Phase I representing wetland agricultural activities at 9000BP are not justifiable" (p 54) but, looking more widely at contemporary geomorphological and palaeoecological changes at Kuk Swamp, agrees they "mark the widespread clearance and utilization of the dryland landscape for productive purposes" (p

56). Denham's more recent evaluations are less critical of some of the interpretations than is this one.

Several papers deal with the archaeology of island Papua New Guinea. Pavlides carefully analyses the Pleistocene artefacts from interior New Britain and demonstrates that the raw material was garnered from local sinkholes and used in exploiting this high-rainfall tropical forest area. Since neither the stone artefacts from Misisil nor the various New Ireland shelter sites are yet published in any detail, this and Torrence *et al.* (2004) are the only comprehensive accounts of early island stone technology.

In a classically understated but still elegant paper Swadling suggests not only that mortars and pestles date to >3500 years old, but that the distribution in New Britain accords with areas where traditionally (pre 1870) taro was cultivated. She believes this pattern recurs throughout Papua New Guinea. Swadling's diligent pursuit of these artefacts and the pattern she is uncovering is a dramatic demonstration of the value of collections. [Note: the captions to Figs 1 and 2 have been reversed.]

Lentfer and Green's paper demonstrates how the role of plant foods in prehistory can be shown in the absence of hard seeds or skins. Working, appropriately enough, on sediment samples from Watom, they identified *Emusa* phytoliths, notably in layer C1 of the SAC locality. These, along with a variety of re-growth species such as gingers, suggest a regime of shifting cultivation within the Lapita period. Combined with other evidence there can be little doubt that these people were gardeners and husbandpeople. Potential major starch components of the diet, taro and yams, do not produce phytoliths; their identification, if indeed they were grown, must await starch analysis.

The final paper of the volume's alphabetically listed authors is Wilson's analysis of western Pacific ("Melanesia") rock art motifs. This is designed to expand and supplement Jim Specht's 1979 overview which has been the basic resource since its appearance. Using several multivariate techniques she shows that painted and engraved assemblages do differ across the region, but regionality within the area is hard to see. Thus Specht's original 'painting in the west/engraving in the east' division can no longer be substantiated. But she notes that inter-regional groupings can be seen, though these do not display geographical contiguity. She does not discuss what these patterns might relate to or, indeed, how this patterning might be further investigated.

There has been a small spate of volumes honouring retirements in the last few years. This one stands out in a couple of ways. First, the institution to which he has been devoted has honoured him, not just as a scientist but as a real contributor to its current strengths. It continues to do so—it is Jim whose filmed interview about repatriation is an important part of the current exhibition

*Unearthed.* Second, as far as I can see, there isn't a paper here which is not a current part of the lively, if small, field of western Pacific research: not one is a 'dust it off' resurrection. The contributors have succeeded in honouring the man both for what he has done and for the directions he has opened up. And rightly so.

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