NEW ZEALAND
ARCHAEOLOGICAL
ASSOCIATION

ARCHAEOLOGY IN NEW ZEALAND

NOTES AND NEWS

New members

Edward Ashby, Laurence Boyd, Envirotech Maintenance Ltd, Rhiannon McGhee, Linda Styles, Douglas Styles, Jonathan van den Elzen.

Donations (received with thanks)

Brian Allingham, Cathy Barr, Kelvin Day, Deane Endowment Trust, R. H. Griffin, Mark McGhie, Dan and Alison Witter.

President's report

After nine years of work updating 47,000 records in the Site Recording Scheme, the Upgrade Project, in its current form, has been wound down. It will now be completed as a regional project where we still have commitments. This has been a major accomplishment for NZAA, raising our profile nationally with landowners, iwi, TLAs and central government. Thanks are due to the Steering Group, Project Manager, Information Manager and staff who have represented us so ably over the last nine years.

NZAA's experience managing a central government-funded project was taken into account by the Department of Internal Affairs (DIA) Community Partnership Fund, and we received funding to undertake the digitisation of the site recording scheme (DSRS) over the next three years. This is an exciting project and we hope to be able to launch it at next year's conference.

Whilst we received confirmation of this in July 2007, the contract was not signed until late January 2008. This impacted on NZAA's finances during that time and cash flow became a serious issue in December and January. We had costs associated with the DSRS application and the hosting of the Information Management System which NZAA had to cover whilst we were waiting for the DSRS funding. A very stressful time for all and I wish to thank those who assisted us, in particular NZHPT, for their support.

We do now have a contract with DIA for the DSRS project, and we are finally moving forward. I would like to take the opportunity to thank Garry Law, who has resigned as Convenor. Garry has seen the Upgrade Project through its many years and has been a clear and committed supporter of the DSRS project. His vision and hard work will be reflected in the final product.

We continue to apply for funding from a range of sources for the completion of the Upgrade Project and were successful in receiving a Lotteries Board Grant in December.

I would like to take the opportunity to congratulate Harry Allen who was made an Officer of New Zealand Order of Merit. It is wonderful to see Harry honoured for his commitment to archaeology and his award raises the profile of archaeology nationally.

During the year we received some advice from auditors and lawyers about how we have been running our business. As a result of that there have been some changes to how the accounts are managed. We also revamped the Consultants list and tied it more closely to the membership secretary role. Thanks are due to Ian Barber for his work over the years administering this list. And finally we need to ratify our constitution at this AGM so that it can be lodged with the Registrar for Incorporated Societies. Apparently the constitution they have dates back to the 1970s.

NZAA Council continues to make submissions on statutory planning issues that impact on archaeology but it is increasingly difficult to respond to these. Thanks to all of you who have lodged submissions on our behalf.

We have recently been asked to comment on a Draft Conservation Plan for the Kaingaroa Rock Art. The state of this significant site and its management regime was raised as a matter of concern at a recent NZAA AGM. Council approached the Minister of Conservation a number of times and finally DOC has commissioned a conservation plan. How this plan is implemented is something Council will need to keep an eye on.

Finally I would like to thank the outgoing Council members: Karen Greig, who during her seven years as Treasurer managed the finances through a period of change from a small voluntary organisation into an organisation with a considerable turnover, Rachel Darmody (our funding application guru, and temporary treasurer), Lynda Walter (Immediate Past President) and Elizabeth Pishief (submissions coordinator), Thanks also to Council who have worked hard for the benefit of the organisation during a difficult period.

Pam Bain

Treasurer's report

The following comments should be read in conjunction with the 2007 annual accounts, which have been sent to members. The accounts are in the process of being audited to maintain our audit record, as audited accounts are required by the Department of Internal Affairs for the Digital Site Recording Scheme Project. The accounts sent out to members represent the financial

position of the Association as at December 2007 – changes, if any, will be audit adjustments only.

Operating costs and income for the Association remained at a similar level to previous years. As is usual, the general account continues to be run on the proverbial smell of an oily rag. The two largest costs (excluding conference) were the contribution to produce AINZ for 2006 and the audit required for the application to DIA. The 2006 contribution for AINZ was transferred to Publications at the start of 2007, due to cash flow issues at the end of 2006. The audit fee is recoverable from the DIA grant, as this was included in the application.

In 2007 all of the subscription income and the small profit from conference went toward either the running costs of the Association or to finance the Upgrade Project. No contribution was able to be made to Publications for producing AINZ in 2007.

Funding from the Ministry for Culture and Heritage (MCH) for the Upgrade Project finished in June 2007. After strong indications that further funding was likely, this proved not to be the case. The MCH funding covered the costs of the national project management, information services and iwi participation. As at June, money was still being received from local councils for fieldwork, which is ongoing in several regions. The Upgrade Project Steering Group decided to keep the Project operating on a national basis for the remainder of the year, and to continue to seek additional funding.

From July to December 2007, the majority of the national project costs for the Upgrade Project were met by the General account. This contribution honours the assurances made by NZAA to central and local government and funding agencies that the NZAA has also made a financial commitment to the Project.

Following a plea for help, NZAA also gratefully received funds from a number of organisations (the Historic Places Trust, DOC, Environment Waikato, Whakatane Historical Society and a private philanthropic trust). Eagle Technology provided hosting and support for the Upgrade Project Information Management System in the later part of the year at no cost, until the Digital Site Recording Scheme project commenced February. In December, some work was also carried out on a voluntary basis by NZAA Council members.

The total cost of the Upgrade Project from 1999 to 2007 was $1.7 million. The majority of the money for the project came from local and central government sources. NZAA contributed $57,000, the bulk of this money being spent during July to December 2007. It was decided to wind up the national project after December 2007, and the remaining work will be managed on a regional basis.

This is my last Treasurer's report, having stepped down at the end of the NZAA financial year (31 December 2007). I took on the job seven years ago, not because I had a burning interest in accountancy, but because I was asked and it seemed like the right thing to do at the time. Seven years and two children later my priorities have changed, but I believe I am stepping down having resolved some of the financial and compliance issues facing the Association and with the books in good shape, despite the challenges of the last year. I would like to sincerely thank those of you who have supported me in the Treasurer's role and ask that you extend the same support to Emma.

Karen Greig

Site Recording Scheme File Coordinator's report

There have been a small number of changes with the regional filekeepers over the past year. Emma Brooks resigned as the Wellington filekeeper and NZHPT Regional Archaeologist Simon Duff took over the role. The file continues to be housed in the Trust office in Wellington. Deborah Foster resigned and Reg Nicol is now the filekeeper for the Marlborough district. I would like to thank Emma and Deborah for their contribution to NZAA as filekeepers.

The Southland file has moved from the Southland Museum and Art Gallery to the Department of Conservation, with Karl Gillies continuing as filekeeper.

Acting Central Filekeeper, Nicola Molloy, has advised that on 31 March 2008 the Central File held a total of 60,488 records. This is an increase of 899 on last year's figure of 59,589. This represents an increase of about 1.5%. The largest percentage increases were in Southland, Auckland, Wellington and Otago. The three largest files hold 29,708 (49.1%) of the records. Pa sites (excluding gunfighter pa) comprise 11.6% of all recorded sites (n = 6996). Historic archaeological sites make up 16.9% of all recorded sites.

Table 1:Total sites recorded for each region, showing the change from 2007-2008.

Region	2007	2008	Increase	% Change
Northland	11240	11343	103	0.92
Auckland	9569	9871	302	3.16
Hauraki-Coromandel	4524	4563	39	0.86
Waikato	3853	3887	34	0.88
Bay of Plenty	8472	8494	22	0.26
Taupo	457	457		
East Coast	2944	2955	11	0.37
Taranaki	1675	1676	1	0.06
Inland Patea	308	311	3	0.97
Hawkes Bay	2063	2066	3	0.15
Wanganui	939	942	3	0.32
Wellington	1187	1226	39	3.29
Subtotal	47231	47791	560	1.19
Nelson	1660	1672	12	0.72
Marlborough	822	822		
Canterbury	1315	1322	7	0.53
West Coast	938	951	13	1.39
Otago	2774	2839	65	2.34
Central Otago	2294	2330	36	1.57
Southland	1668	1874	206	12.35
Subtotal	11471	11810	339	2.96
Outlying Islands	887	887		
TOTAL	59589	60488	899	1.51

Rachel Darmody

New Zealand Journal of Archaeology Editor's report

The journal continues to attract just enough acceptable papers to be published once a year. My hope of catching up and getting back on schedule is always frustrated by the low volume of submissions (and sometimes also

by the length of time it takes for some papers to come back in final form after refereeing).

This is not a criticism of the refereeing process. I think most of our authors appreciate the feedback they get from referees and the papers are better as a result.

Volume 28 was published in the middle of last year with 141 pages. Despite having only four papers, it attracted some favourable comments. This may have been because of an unusually good mix of topics – something for everybody. It is very encouraging (and most unusual) for the editor to receive positive feedback.

Volume 29 should have been out early in the year, but has been held up by slow return of papers from some authors and pressure of other work on the editor and typesetters. It should appear shortly.

Volume 30 does not look likely to assist in the catch up, with one paper back currently with the author for revision and one out to referees. I can only repeat, as I do every year, that if the Journal is to continue to survive and maintain its quality it needs a better submission rate.

Subscription rates including libraries, are holding up reasonably well, but we will always need new individual subscribers from among the growing pool of younger archaeologists to counter our losses as our loyal foundation members grow old.

Once again, I thank the referees, the typesetters, the business managers, and those who continue to support the Journal by contributing papers.

Janet Davidson

Webmaster's report

The visitor totals for the year and past years are shown below. We do not have complete records for 2006 due to a change of ISP.

	2007	2006	2005	2004	2003	2002
Hits	1,012,299	-	1,085,022	720,020	504,609	250,440
Pages	210,580	-	221,341	135,436	107,170	74,030
Visits	105,510	-	129,298	88,996	62,264	43,394

There are 415 subscribers to the email newsletter which appears about twice monthly. Subscriptions to this are increasing.

The jobs/digs wanted guestbooks are attracting posts. Jobs/digs offered are much more scarce. The homepage is the most common entry page followed by the email listing page, then pages rich in information. The Kevin Jones

electronic publications on aerial photography gets a lot of hits probably from search engine links on place names in the items.

Entry Pages (Dec 07):

Entry Page	No.
/rss.xml (news syndication page)	1729
home page	1555
/join.html	268
/nzaa archaeologists email/Archlist.htm	257
/netsubnews.htm (news blog)	236
/world archaeology 2002.kmz (Google earth file)	137
/cultural_tourist.htm	116
/northauckcoro.htm	116
/aerial/opacs.html	115
/employment.htm	75
/elecpublications/SiteSurveyReportsJan2007.xls	68
/waikbopgisb.htm	66
/teacher_resources.htm	65
/nzja.html	62
/conferences.htm	52
/elecpublications/aerial photo index.htm	47
/nzaa consultants/Contract.htm	47
/alternative.htm	44

Overall Page Popularity (Dec 07):

Pages	Viewed
/rss.xml (news syndication page)	4438
/ (home page)	2433
/netsubnews.htm (news page)	456
/join.html	328
/nzaa archaeologists email/Archlist.htm	320
/employment.htm	278
/cultural_tourist.htm	198

/northauckcoro.htm	188
/world archaeolog.kmz (Google earth file)	171
/nzaa consultants/Contract.htm	166
/aerial/opacs.html	151
/conferences.htm	138
/nzja.html	133
/recording.htm	118
/waikbopgisb.htm	115
/teacher_resources.htm	113
/newstop.htm	104
/elecpublications/SiteSurveyReportsJan2007.xls	98

Our most frequent referrer is the Google search engine with an 84% share. The top keywords in searches which get referred to us are:

20.14%	new
19.47%	zealand
9.75%	archaeology
5.29%	archaeological
4.17%	association
3.03%	maori
2.34%	nzaa
1.43%	sites
1.33%	settlers
1.21%	history
1.16%	first
1.11%	jobs
0.94%	archaeology
0.84%	society
0.76%	email
0.69%	historical
0.63%	early
0.62%	culture
0.57%	cultural
0.56%	settlement
0.42%	directory
0.35%	journal
0.32%	structure

0.31%	social
0.31%	gold

The guide to sites to visit for cultural tourists is popular as far as it has gone. So far it remains comprehensive only for Northland, Auckland and the Bay of Plenty. It is a lot of work to extend it so it will continue to be a slow project.

Garry Law

Skinner Fund Representative's report

In 1966, in honour of Henry Devenish Skinner, the New Zealand Archaeological Association jointly with the Royal Society of New Zealand and the Polynesian Society established the Skinner Fund from public subscription. Following the death of Dr Skinner in 1978, donations from the Friends of the Otago Museum and the Otago Museum Trust Board substantially increased the fund as a token to his memory. The Royal Society of New Zealand administers the fund.

The purpose of the fund is to promote the study of the history, art, culture, physical and social anthropology of the Maori and other Polynesian peoples, particularly through the recording, survey, excavation and scientific study of prehistoric and historic sites in New Zealand and the islands of the South-west Pacific. This includes the detailed analysis of all cultural, artistic, or physical remains recovered as the result of such investigations. To this end, the Skinner Fund committee deems research projects that have survey, recording, and excavation as their goal, to have equal weight with those which propose to treat analytically and comparatively materials already so recovered. The committee gives preference to well-documented research plans that specify methodology and anticipated outcomes of the proposed research.

The amount available for distribution from the fund is not large, and grant allocations are up to about $1000.

In 2007 Skinner Fund grants were made to:

- Rachel Fuller, University of Otago—to assist with funding to travel to Auckland to study the human skeletal collection excavated from Tonga.
- Mara Mulrooney, University of Auckland—to assist with funding for dating supplies for obsidian hydration dating.
- Kasey Robb, University of Otago—to assist with funding to travel to Auckland and sample Tongan material excavated by Janet Davidson in 1964.
- Catherine Smith, University of Otago—to assist with funding to trial analytical methods to enable the identification of materials of construction of the Puketoi Station artefacts.

In 2008 Skinner Fund grants were made to:

• Mara Mulrooney, University of Auckland—to assist with funding for additional dating supplies for obsidian hydration dating of samples to be collected during the next field season.

• James Robinson, University of Otago—to assist with funding for a field investigation to obtain sediment cores from within the complex garden systems located at the northern end of Tawhiti Rahi Island.

• Erin Williams and Chris Jennings, University of Otago—to assist with funding to investigate technological adaptation and regional variation in Southland through the examination of the 1D adze.

Bruce McFadgen

Abstracts from the NZAA conference, 2008

"Doing much for themselves": the historical archaeology of 19th century settler farmsteads in Taranaki

Janice Adamson, University of Auckland

A key strength of historical archaeology lies in the potential to cast light upon aspects of life often previously unrecorded by documents. My PhD research focuses on the archaeology of three ephemeral farmstead sites whose occupants were part of the bulk of emigrants from Britain to the planned settlement of New Plymouth in the 1840s - the "labouring classes". Many of this group of first emigrants could not leave written records, and archaeology now provides what is probably the only tangible evidence of their everyday lives.

While the land wars in Taranaki caused anguish on both sides, these same wars left behind a valuable archaeological resource in the form of the remains of the farmsteads of these early European settlers, as nearly 200 buildings were destroyed across the district. The short term occupation of these sites provides a rare and unique opportunity for a closely contextualised and fine-grained analysis of the material remains associated with particular families. This paper will outline the objectives of my ongoing doctoral research, and take you through my journey of discovering, and eventually uncovering, two farmstead sites, in Omata, Taranaki.

A descriptive analysis of the fibre artefacts from Kohika

Amber Aranui, University of Auckland

Kohika was a late Maori lake village occupied during the latter part of the 17th century and is unusually well preserved because of its wetland location. This paper summarizes an MA thesis research project on the fibre work excavated in 2005-2006.

Results from the application of analytical technologies both old and new at the Teouma Lapita cemetery, Efate, Vanuatu

Stuart Bedford and Matthew Spriggs, The Australian National University

A range of analytical techniques have been used in the investigation of the Teouma cemetery site, on Efate Island, Vanuatu. The cemetery, which is remarkably well preserved, dates from around 3000 BP and represents a primary colonising population in Vanuatu. So far 60 skeletons have been recovered from the site. A wide range of burial positions have been recorded and lengthy and detailed treatment of the remains has been identified. Analytical techniques which have been critical for the interpretation of the site include: radiocarbon dating of human bone, isotopic and forensic analysis of bone, ICPMS analysis of obsidians, pottery petrographics, reconstruction and conservation. Some of these techniques have been around for some time and have been greatly refined while others are relatively recent, but it is the first time that all can be applied to such an early Lapita cemetery.

How old is that house? A scientific approach to dating colonial-era (kauri) buildings

Gretel Boswijk and Martin Jones, University of Auckland and New Zealand Historic Places Trust

Dating the construction of colonial era buildings usually relies on a combination of architectural style, stylistic features and documentary sources. In this paper, we discuss the potential of a scientific dating method – dendrochronology – to assist in dating the construction and alteration of kauri (Agathis australis) buildings.

Dendrochronology is an independent dating technique that can provide accurate and precise calendar dates for timber samples. Under certain conditions it is possible to determine the exact year a tree was felled prior to its conversion into a building timber and use in a structure. The method is widely used in the Northern Hemisphere to date standing buildings, including colonial period structures from North America, but has only recently been tried in a New Zealand context.

Using three case studies from Auckland we show how tree-ring analysis of kauri building timbers can be applied in conjunction with other methods to provide further understanding about the construction history of 19th and early 20th century buildings.

Canterbury Museum Archaeology Upgrade Project

Srey Bowron-Muth, Canterbury Museum

The Canterbury Museum is currently undertaking a 12 month project to upgrade their Archaeological Field Collections. This project was set up to address the issue of limited information and availability of the archaeological field collections currently held in the Museum's Basement. This collection comprises several different excavations that have been deposited at the Museum since the 1940s. Many of these assemblages have not been inventoried, accessioned, catalogued into the museum's database system, or reported on.

There are approximately 275 archaeological sites represented in the Canterbury Museum's Archaeology Upgrade Project. Some of these assemblages have associated documentation (field books, maps, NZHPT reports, site record forms), but many do not. The project's methodology involves sorting, bagging, boxing, labelling, cataloguing, cross-referencing, documenting, and making a site-by-site assessment of whether to retain or dispose of the material based on the scientific values of each assemblage. A report of assemblages to be retained and disposed of will be forwarded to interested parties towards the end of the project.

The Canterbury Museum's Archaeology Upgrade Project is of direct benefit to the wider New Zealand archaeology community. Some of the sites have significant scientific relevance to the NZ archaeological knowledge. Once the items are processed and catalogued onto the museum's database, they will be more easily assessable to researchers and archaeologists. The information collaborated from this project can further be used for purposes such as upgrading NZAA site record forms, NZHPT authorities, and future potential research projects.

Eating fish and shellfish in 19th century New Zealand: Archaeological and historical evidence

Maria Butcher, University of Otago

It is often assumed that the diet of 19th century New Zealanders consisted of mutton, beef, pork, and little else. Faunal assemblages from historic sites are certainly dominated by the remains of large mammals; based upon archaeological evidence alone, fish and shellfish do not appear to have been important components of the 19th century diet. However, the historical evidence suggests otherwise.

This paper investigates fish and shellfish supply, distribution, and consumption in 19th century New Zealand, with particular emphasis upon the Otago region. Official records, business directories, and contemporary newspaper and journal articles are useful sources of information pertaining to

the catching, distributing, and selling of fish and shellfish. Recipes – extracted from newspaper columns and recipe books – provide very detailed information about the preparation of fish and shellfish dishes.

Fish and shellfish were readily available in Otago in the late 19th century; the fishing industry was expanding, and supply networks were established, by sea and rail. The recipes reveal that fresh fish were obtained whole, and that the fish were most often cooked whole. The historical data has implications for the interpretation of the archaeological evidence, and affords us a better understanding of when, where, how and what people were eating.

Characterisation of New Zealand nephrite jade (pounamu) using strontium isotopes

Hamish Campbell[1], Christopher Adams[1] and Russell Beck[2], [1]Institute of Geological and Nuclear Sciences Limited, [2]Southland Museum and Art

Nephrite jade is notoriously difficult to characterise or 'fingerprint' on the basis of mineralogy or chemistry. Here we describe a method involving strontium isotopes that has been successfully applied on New Zealand nephrite or pounamu, enabling discrimination of major nephrite sources within New Zealand, and the potential for discriminating NZ nephrites from overseas nephrites.

Excavation at the Westney Farmstead, Mangere

Matthew Campbell, CFG Heritage

Recent excavations at the Westney Farmstead, Mangere, in preparation for the second Auckland airport runway, have combined the archaeology of the standing farmhouse, built in 1856, and inground archaeology. Excavations of rural settler settings are rare in New Zealand and we were unsure what to expect. We were disappointed to find no wells, privies or rubbish pits relating to the Westney family occupation (1854–1936), but we did find some very interesting patterns respecting the house construction as well as deposition of an extensive underfloor deposit. We were able to relate these to cycles of growth and contraction in the Westney household.

A view from the blue: the maritime cultural landscape

Matt Carter, University of Otago

Throughout New Zealand's history the sea has played a key role in the lives of its various inhabitants. The archaeological study of the relationship between humans and the sea is known as maritime archaeology and involves the investigation of the material manifestations of maritime culture. One area of maritime archaeology that has proven to be of particular value is the investiga-

tion of maritime cultural landscapes, a framework that has been used widely overseas. As an island nation the potential and applicability of a maritime cultural landscape approach in New Zealand is enormous, offering us new sources of evidence with which to interpret and reconstruct our past.

This presentation will outline my ongoing investigation of the maritime cultural landscape of the Otago Harbour. This study concentrates not only on the location of maritime archaeological sites within the harbour but also on the environmental variables that influenced these sites and the ways in which people perceived their harbour through such aspects as place names, oral traditions and myths. This study will be the first of its kind undertaken in New Zealand and will ultimately provide us with insights into the lives of various groups who have made the harbour their home throughout prehistory and into the present.

Archaeologists and the Protected Objects Act

Liz Cotton, Ministry for Culture and Heritage

The intention of the Protected Objects Act 1975 (POA) is to provide better protection for New Zealand's cultural heritage, particularly with regard to the finding of taonga tūturu and the export of items of cultural heritage value (protected New Zealand objects).

Ministry for Culture and Heritage staff administer the POA and in doing so rely on the input of archaeologists working in the field – to ensure that finds are notified appropriately, to gain an understanding of the nature and importance of finds, and for advice on the ongoing care of taonga tūturu.

This session is designed as an overview of the intention and administration of the POA and an opportunity to identify where archaeologists and the Ministry can work together to protect New Zealand's cultural heritage through the legislation.

Within the lines: simulating settlement in marginal Polynesia

Ben Davis, University of Auckland

This paper explores the compound relationships between island environments and their human inhabitants utilising agent-based simulation, a tool becoming increasingly important for modelling complexity in archaeology. Utilising preliminary results of an agent-based simulation, different settlement scenarios will be examined for Nihoa: a "mystery island" in the Northwest Hawaiian chain which represents the ecological margin of Polynesian settlement. These hypotheses are analysed for their robustness against variability, and their relative probability within the boundaries of ecological contingency. This kind of analysis aims to shed light on the nature of occupation in marginal

environments, providing a base from which to build further knowledge about the processes involved in island settlement at large.

Underwater and nautical archaeology in Hamilton, New Zealand
Andy Dodd, Department of Conservation

This paper looks at some recent archaeological and conservation work in Hamilton. Three sites within a kilometre-long stretch of the Waikato River have been investigated over the last few years including a dugout canoe, an 1860s paddle steamer and supply vessel, and the footings of the first bridge linking the townships of Hamilton East and West in 1879. The paper raises issues in artefact conservation and site management in a riverine environment.

Preparing for the worst: insurance in a land of plenty
Louise Furey, CFG Heritage

Elsdon Best and others described Maori harvesting of birds and fish when plentiful in summer and preserving them for use later in the year. The archaeological literature from a number of sites suggests food is also being preserved in the early period of settlement. The diverse evidence is presented, and Polynesian ethnography is also looked at for parallels.

Two tetere (flax trumpets) in Canterbury Museum
Roger Fyfe, Canterbury Museum

Musical instruments are rarely recovered from archaeological sites in New Zealand. Instruments in wood and other perishable materials are obviously further under-represented. The identification of one partial and one complete tetere in archaeological textile material recovered from Moa bone Point Cave near Christchurch is therefore significant and appears to be unique in the archaeological record.

The design, dimensions and method of manufacture compares favourably with ethno-historical accounts. Radiocarbon dating will also assist with confirmation of antiquity. This research will assist with future identification of tetere amongst both wet and dry archaeological textile remains and may even "tease-out" a few more specimens from archaeological textiles in museums.

Damaged but still valuable: the salvage excavation of a suburban moa hunting site
Jenny Glover, University of Otago

This paper presents the interim results from the salvage excavation of a moa-hunter site at 24 The Esplanade, Dunedin. During the construction of a boutique hotel a layer of cultural material was found running along the face

of the low dune rising northeast from Beach Street, on the inland side of the Esplanade. This layer contained charcoal stained lenses and fire features, including several large ovens. A team from the University of Otago were contracted to undertake an investigation under Section 15 of the HPA. Upon excavation two sparse midden deposits were located, and a number of oven and pit features. Several artefacts were also recovered. The presence of large moa species indicates that this is an early site, probably occupied in the 13th–14th centuries. Although the site has been nearly destroyed by more than a century of development, I will show in this paper that sufficient material was recovered to make a useful contribution to understanding early occupation and economic adaptation in the Dunedin region.

An analysis of the technology and spatial distribution of obsidian artefacts from Kohika

Paul Haysom, University of Auckland

The excavated assemblage of obsidian from Kohika now exceeds 5000 items. This paper describes a current MA thesis study of the distribution of obsidian items in the site.

Fine-tuning culture change models in New Zealand archaeology

Chris Jacomb, Southern Pacific Archaeological Research, University of Otago

To overcome the simplistic nature of two-phase models of New Zealand prehistory, more gradualist and sophisticated multi-stage models were proposed in the 1970s and 80s. The earlier models can, to some extent at least, be described as identifying phases and emphasise difference, while the later are more concerned with explaining the process of change and emphasise continuity. As the sophistication of the models increased they became correspondingly more difficult to characterise in terms of archaeological data. There are problems with traditional archaeological ordering methods that use stratigraphy or material culture to document change, and fluctuations in the radiocarbon calibration curve mean that carbon dating cannot provide more than a very coarse-grained chronology. A quarter of a century has passed since the last model was offered, by Janet Davidson. There has been change in New Zealand archaeology during this time. The length of New Zealand's prehistory has decreased from 1000 to 500 years. We now have a clear picture of this, such as when pa first appeared and an improved idea of when the moa became extinct, but are we any closer to understanding the timing and nature of culture change than we were in 1958? This paper reviews some of the barriers to progress on this problem and makes some suggestions on how they might be overcome.

Dynamic land tenure: an overview of historic land 'ownership' in Te Tau Ihu o te Waka a Maui (northern South Island)–1860

Moira Jackson and Ian Smith, University of Otago

This paper will look at the change from dynamic tribally-based land tenure (in the historic period) to the British cadastre system of land ownership with individual title as introduced post 1840. Drawing on data from historical maps and other sources and utilising GIS a temporal stratigraphy of tribal land use, use rights and land 'ownership' in the northern South Island in the period 1820-1860 is examined. During this period five iwi from the North Island migrated into the region and as a result the previously resident population was ousted from some of their places of settlement though some continued to maintain residence throughout the research period, albeit at a lesser scale, contrary to some early historical accounts.

Stone exploitation in the Bluff Harbour Area

Chris Jennings and Erin Williams, University of Otago

There are several areas in Southland that exhibit a fine-grained metasediment commonly referred to by archaeologists as argillite. Southland argillite is a rock source which has not been fully investigated in any great detail in the past, and over the last year we have visited and sampled argillite from all of the known argillite sources in Southland. Outcrops throughout the region are of differing quality, but many are associated with archaeological sites where there is evidence for the manufacture of prehistoric Maori stone tools.

Bluff Harbour and its surrounds are of particular interest to us, as the outcrops in the area demonstrate huge variability in colour and grain size. We argue that as a result of this variation, some outcrops were more intensively exploited than others. This talk will discuss the preliminary results of our fieldwork.

The Criffel Goldfield and aerial photography

Kevin L. Jones, Department of Conservation

The Criffel goldfield flourished c. 1885. Many account it to have been a duffer. The crest of the Criffel Range lies at about 1300 m asl (contemporary tourism brochures describe it as 'the highest goldfield in New Zealand'). There are many goldfields which have been planed right down to bedrock or papa. It is difficult to work out anything about technique other than the supply races, dams and the last phases of tail race construction. The Criffel, however, being a bit of a duffer and short of water as well, reveals much about the proving of fields. Some small valleys are riddled with proving shafts, designed to test the abundance of gold beneath the overburden. Water was obtained in a highly

competitive fashion. This sub-alpine region is also completely free of trees and a good subject for aerial photography. Some duffers think that goldfields are only significant if a large amount of gold came from them.

"Bend over sir, this won't hurt much": the archaeology of Wellington Hospital

Mary O'Keeffe, Heritage Solutions Ltd

Capital and Coast District Health Board are currently constructing a new regional hospital on their site in New Town, Wellington, to replace the previous outdated labyrinth.

The first hospital was built on this site in 1881. Thus the development work for the new regional hospital was the subject of an HPT authority, and was monitored by an archaeologist

Artefacts were uncovered in a deep service trench. The assemblage is a small but fascinating collection of medical and domestic items and utensils, demonstrating medical technology from the turn of the 20th century.

Analysis of the Little Papanui bone point assemblage in the Otago Museum

Sheryl McPherson, University of Otago

There is little known about awls and other bone points recovered from prehistoric New Zealand sites. This paper presents the analysis of bone awls and other bone points from Little Papanui. The data from this site illustrates the issues that are faced when studying a difficult and poorly understood artefact class The definition of an awl as opposed to other bone points, is demonstrated using the Little Papanui material, in addition to the variation and similarity observed in analysing a bone point assemblage. This research is part of a larger Masters project that focuses on the form and variation of awls from prehistoric New Zealand sites.

Kokowai Research Project: progress, growth, and future

Yann-Pierre Montelle, University of Canterbury and Ngai Tahu Maori Rock Art Trust

The year 2008 marks the beginning of a new phase for Project Kokowai with the establishment of a joint research project between Victoria University and the New Zealand Historic Places Trust (Kokowai Research Project). This presentation is our annual update on current work which is focused in two areas; analysis methodology development using SEM, XRD, and spectrometry techniques; and research into documentary and matauranga Maori knowledge resources. The next phase of the project is focused on developing non-invasive

technology for the sourcing and characterising of samples in situ and in the labs. New portable PIXE, RTF, and Raman spectrometry technology are showing promise as it becomes more readily available for researchers to perform analysis without disturbing cultural material under investigation. To conclude, a request will be made again for New Zealand archaeologists and curators to provide information about kokowai, and consider submitting suitable samples from site excavations and museum collections.

The Tarawera Mine and Smelter, Preservation Inlet

Peter Petchey, Southern Archaeology

The Tarawera Mine and smelter site is located in Preservation Inlet, Fiordland National Park. The Tarawera Mine was first worked in 1896, but in 1899 seawater flooded the shaft and the mine closed. It was reopened in 1908, and a smelter was built on the site in order to process the ore, which assays had shown contained gold, silver, copper, lead, iron and zinc. A trial firing of 35 tons of ore was made in June 1911, but this produced no returns, and the mine and smelter were shut down. The project had cost over £8,000.

In 2007 and 2008 survey work was undertaken for the Department of Conservation on the Tarawera site to record the archaeological remains of the mine and smelter, and work is currently underway on analysing ore and slag samples in order to understand the smelting process that was used there, and possibly identify reasons why the smelter failed. This paper presents some results from the archaeological survey, discusses the smelting process and the evidence left on site, and outlines the research being undertaken on this material.

Stressors in prehistoric populations

Kasey Robb and Hallie Buckley, University of Otago

The study of human remains from archaeological sites allows a direct investigation of stressors affecting prehistoric populations. These stressors include growth disruption, malnutrition and infection. The use of multiple indicators of stress are important in reconstructing patterns of adaptation by examining population specific patterns. The process of adaptation is a key theoretical concept in anthropology and the diachronic investigation of stress is crucial to forming a biocultural interpretation of prehistoric peoples.

The history of 'bioarchaeology' has progressed since its initial obsession with metric analyses and recent trends attempt to measure the effects of social, political and economic transformations on health and illness. These methods of investigation are benefited by modern technology and an understanding of the biological basis for many of the stressors investigated in prehistoric human remains. A summary of the developing use of stress indicators in New Zealand

and Pacific Island research is presented and illustrated by case studies from Palliser Bay and the Pacific that involve the effects of adaptation to an island environment.

The creation of an island fortress: a case study of the Poor Knights, offshore islands of temperate New Zealand

James Robinson, University of Otago

When we look at cultural evolution in Polynesia, the islands of New Zealand are unusual, in that human settlement is very short – possibly only 700 years long, and the cultural evolution of an indigenous Maori society occurred in isolation from other Pacific societies.

Despite this short timeframe New Zealand archaeological research has shown that Maori society has experienced similar complex 'scenarios incorporating social and cultural processes of adaptations, transformations and intensifications' (Sand and Lilley 2008) as has been documented elsewhere in Polynesia. Here the first humans to settle New Zealand created a strongly Polynesian influenced culture commonly referred to as "archaic Maori". Over time this changed to become the distinctive "classic" Maori culture documented by numerous European visitors such as Captain Cook. Because this change in culture happened in isolation from the rest of Polynesia there is as much cultural continuity as cultural dis-continuity going on and so archaeologists working here have had difficulty isolating exactly what cultural or environmental factors instigated this change.

In an attempt to resolve this issue I have been carrying out archaeological, traditional historical, and environmental research on the Poor Knights Islands, located off the temperate east coast of northern New Zealand. These islands have, due to a fortuitous set of circumstances, retained a contiguous, complex and pristine archaeological landscape that was constructed by Maori in the later 'Classic' prehistoric period (post 1500 AD). This settlement ended abruptly in December 1823 as a result of inter-tribal fighting, and the resulting traditional 'tapu' and subsequent government reserve status has protected this archaeological landscape from any further human modification.

Using a holistic approach this paper will show how the traditional history of the Ngatiwai tribe, the environmental data of vegetation change, and the results of archaeological survey and excavations, have come together to show how initial intermittent seasonal use of island resources changed rapidly post 1500AD. It is argued here that all these data sources suggest that this late phase settlement by 'classic' Maori is a cultural response to escalating tribal conflict driven by increasing population and changes in resource availability.

On the mainland this conflict led directly to the construction of hundreds of defended villages known as pa to protect the resident populations; however, on these islands something different occurred. The encircling barrier cliffs and tightly constrained access points which had been a deterrent to settlement in the past, now became an asset which local Maori used to create a 'natural fortress' within which a functional horticultural community was established.

No more paper – data capture in the digital age

Vanessa Tanner, Auckland Regional Council

Auckland Regional Council (ARC) heritage staff are trialling an innovative method for capturing archaeological site monitoring and management data using a handheld device called a Personal Data Assistant (PDA). The PDA stores various spatial and descriptive components including the NZAA Site File and Auckland Regional Parkland asset information. This information can be automatically pre-populated into monitoring forms saving time and avoiding duplication. In conjunction with a Bluetooth GPS (Global Positioning System) accurate spatial definition of sites can be recorded. An advantage of this application is the automatic uploading and synchronisation of the captured PDA data into the ARC computer network which enables instant analysis, reporting and visibility to all staff via ArcIMS (the ARC intranet mapping system). This paper provides background on the development of the monitoring method and identifies types and format of data captured using PDAs.

Adzes and other artefacts from Tubuai, Austral Islands, French Polynesia

Marianne Turner, University of Auckland

The Polynesian Adze Project has now moved into Central East Polynesia with the recent analysis of 2330 adzes and preforms from the Miller collection from the island of Tubuai. The collection provides an intriguing contrast to those previously investigated (New Zealand and Pitcairn Island).

Early setters at Tairawhiti: recent archaeology at Cooks Cove, Tolaga Bay

Richard Walter, Southern Pacific Archaeological Research, University of Otago

This paper looks at recent excavations at an early occupation site at Cooks Cove, Tolaga Bay. The site is unusual in New Zealand archaeology in that it contains a record of at least four stratigraphically discrete cultural events spanning the "Archaic" to early historic period. This paper discusses the results of recent excavations in the context of the larger research of which

it is a part. The 'First Hundred Years' project is a new Marsden Funded project focusing on the first century of New Zealand colonisation that is being run from the Anthropology Department at the University of Otago.

Burning the southern landscape

Erin Williams, University of Otago

Palaeovegetation and fossil fauna analyses have confirmed the view that prior to human arrival, New Zealand was covered with a mosaic of vegetation, established by a long relationship between vegetation, climate, and infrequent natural fires. Around the time of Maori arrival in southern New Zealand there was an unprecedented increase in fire, which has been attributed to Maori activities. This firing had a devastating impact on much of the original vegetation, with naturally dry areas such as central and coastal Otago and South Canterbury most affected by vegetation changes at this time. I argue that several factors are involved in this vegetation transformation, including El Niño Southern Oscillation, the state of moa populations, pre-human vegetation, Maori use of the southern landscape, moisture balance, and ignition frequency.

'Pop' culture: perspectives on the archaeology and technology of aerated water patents

Hamish Williams, University of Otago

The consumption of aerated water (soft drinks) grew in popularity throughout the 19th century, with the local production of fizzy drinks being well established across New Zealand by the 1860s. The technological challenges posed by these potentially volatile carbonated products saw the ongoing development and refinement of bottle and closure designs specifically for containing aerated waters. This paper is a review of recent research into these often morphologically curious bottles, and the progressive adoption of new patent types by local manufacturers to determine their potential usefulness in dating archaeological contexts. Recent earthworks in downtown Dunedin associated with the major Chinese Gardens development uncovered several late 19th century rubbish pits, with a number containing significant concentrations of patent aerated water bottles. From this assemblage narratives of bottle use, reuse, and discard, intellectual property and patent records, and bottle collectors and diggers are discussed.

A resurgence in amateur archaeology: activities in Tongariro Natural History Society (TNHS), 2006-2008

David Wilton, Massey University

Various histories of the NZAA (e.g. Furey and Holdaway [eds], Change through Time: 50 Years of New Zealand Archaeology) record that in the early days of the Association, (1950s and 1960s) a large portion of the effort was provided by amateurs. This state of affairs has steadily eroded due to the impacts of legislation such as the RMA, which requires archaeological work to be performed by professionals with appropriate qualifications. However, over the past three years (and continuing) TNHS amateurs have been involved in projects such as the NZAA SRS upgrade, as part of which over 100 sites in the central North Island were reviewed and updated; and with the location, survey and recording of numerous other sites. Sites of interest which have been recorded or updated include the Te Maro o Kaiora kainga sites near Te Porere redoubt, Boyd airstrip in the Kaimanawa Ranges, a long-misplaced steam log hauler near Ketetahi (Tongariro National Park) and Te Kooti's gunfighter pa at Te Pononga, near Tokaanu.

The paper will describe these activities, and discuss some issues arising, such as the potential to train other interested amateurs in site location and recording, and the limitations of interpretation that can be provided within the organization

Flaking greenstone at Pegasus

Dan Witter, Witter Archaeology

In the late 1960s and early 1970s Canterbury Museum undertook excavations at the Hohoupounamu site 20 km north of Christchurch. This produced a wide variety of artefacts, a line of palisade posts, and over 2,000 pieces of greenstone, most of them flakes. The site was about a kilometre south of Kaiapoi Pa, famous in oral history as the great centre of greenstone manufacture and exchange in the South Island. It is because of the fabled greenstone treasure that it was sacked by Te Rauparaha in 1832.

In 2005 Pegasus Town Ltd began a development project within a 3 x 4 km area, which with the exception of the Hohoupounamu site in a conservation zone, would require the entire area to be stripped of soil. This would expose all of the sites surrounding the Hohoupounamu site, and much of the dry land adjacent to Kaiapoi Pa. The original research design for the HPT authority proposed that the abundant middens known to be in the Pegasus Town dunes were to feed the greenstone workers. The shellfish would provide the protein to go with the bracken starch on the dunes.

Now, 2½ years into the project, and with about 80% of the land stripped, the situation is more complex, although the original proposition is still relevant. Over 320 middens have been recorded on the Pegasus landscape and there are an additional 150 ovens not associated with midden. A few sites contain what seems to be the last of the moa in Canterbury, but in which the "Moa Hunter Culture" is well over. There is a new pa with palisades cutting off a point of land (but with no ditch and bank), and is probably in the order of 500 years old (Taerutu Gully pa). Associated with this pa is a bog deposit in a channel that has produced an assemblage of about 300 significant wet wood artefacts along with another 500 by-products.

A large quantity of greenstone has been recovered. The greatest amount has been from the Taerutu Gully pa "entrance area". There are an estimated 5,000 pieces with another 5,000 or more to be recovered from wet-sluicing stockpiled deposits. Over 90% are flakes, a few of which show grinding. There are also examples of tools and ornaments which are finished, in progress, or just blanks. This assemblage will be a focus of analysis.

A new model for Pegasus suggests that the technology for flaking greenstone was essential to enable a central place strategy where it could out-compete other settlements in Canterbury and the West Coast. This was because of tectonic events about 500 years ago and the cycle of landscape evolution which resulted in a radical increase in estuarine productivity. This was followed by the Ngai Tahu occupation and a new scale of socio-political integration which increased the capacity for greenstone manufacture and exchange.

The specialised greenstone flaking technology was crucial for an otherwise extremely labour-intensive process to allow the mass production of preforms. The technology is more like splitting slate than the conchoidal fracturing of a homogenous material. A suitable term for this technology might be "foliate flaking", and it is perhaps unique in the world. Through analysis and replication (based partly on the unusual wear facets of hammerstones) it is expected that this technology, which was discontinued after metal tools became available, will be re-discovered.

Atholl Anderson

Atholl Anderson's archaeological career has spanned some forty years, starting in Tasman Bay in 1966 with fieldwork for his MA in Geography from the University of Canterbury and ending this year at the Australian National University (ANU) in Canberra. In between, there have been many and varied research projects and interests throughout the Pacific (and also in Sweden, where Atholl undertook the fieldwork for his PhD) as well as numerous publications. It is possible to touch on only a few of those here.

One of Atholl's more significant research projects for New Zealand archaeology was his Southern Hunters Project. This project saw Atholl undertake excavations at twenty archaeological sites, including Shag Mouth, Purakanui and Lee Island. The results of these various excavations led to a new and more detailed understanding of the prehistoric economics of southern New Zealand, and a number of publications, including the Shag Mouth volume, and a pioneering analysis of the fibre artefacts from Lee Island. The Lee Islands publication was Atholl's first involvement in producing a multi-authored publication that was the result of collaborative research. Collaborative research is something that has characterised much of Atholl's subsequent work.

While at Otago, Atholl produced the now classic Prodigious Birds: Moas and moa-hunting in New Zealand. This volume provided a synthesis of the data pertaining to moa in New Zealand, and saw Atholl develop an on-going interest in Pacific megafauna and the complexities of radiocarbon dating. This latter interest saw Atholl become heavily involved in the debate about when Rattus exulans arrived in New Zealand. His approach to this debate typified his approach to research in general, by focusing on the quality of evidence and interpretation.

While at ANU, where he held the Establishment Chair of Prehistory at the Research School of Pacific and Asian Studies, Atholl's fieldwork interests took him to Niue, Fiji, Norfolk, Lord Howe, Tuvalu, Maupiti, Kiritimati Island (Kiribati), Palau, Taiwan, Philippines, Juan Fernandez, Mangareva, Rapa, Christmas Island (Indian Ocean), New Caledonia, Yaeyama Islands (Japan), Galapagos Islands, Mocha Island (Chile), and Huahine. This work was, in the main, driven by two projects, the Indo-Pacific Colonisation Project and the Asian Fore-Arc Project. These projects were concerned with the chronology and sustainability of island settlement.

Atholl's interests in megafauna continued, and while excavating in the Volivoli caves (inland from Sigatoka) in 1998, he found the remains of a previously unknown extinct crocodile. This has subsequently been named after him – Volia athollandersoni – and its image can be found on the Fijian 50c stamp.

New Zealand archaeology remained one of Atholl's interests during his time at ANU, in particular with the Southern Margins Project. This project sought to determine the extent and nature of southern exploration by Polynesians, and saw fieldwork undertaken in Stewart Island, Codfish Island and the Auckland Islands.

Not only has Atholl undertaken a prodigious quantity of archaeological research throughout the Pacific, he was also heavily involved in the Ngai Tahu claim. Through his mother, Atholl is descended from a branch of Ngai Tahu Maori from Stewart Island (Rakiura). The research Atholl undertook as part

of this claim has seen him become an authority on the ethnohistory of southern Maori, and resulted in two publications: Traditional Lifeways of the Southern Maori and The Welcome of Strangers.

Throughout his academic career, Atholl has been generous with his time, to the students he has supervised, his colleagues, to those whose papers he has reviewed, and by serving on various university committees and editorial boards. In spite of these time commitments, and the time commitments of his academic career, Atholl has managed to dedicate a significant amount of time of his family, and his outdoor pursuits, including mountaineering, fishing and sailing.

Atholl has retired to the Wairau Valley in Marlborough, close to the vineyards that produce his favourite wine and a creek renowned for its brown trout. Retirement, then, should allow him more time for those pursuits.

Leach, B.F. 2008. Atholl John Anderson: No ordinary archaeologist. In: Clark, G. Leach,B.F. and O'Conner, S. (eds) 2008. *Islands of Inquiry: Colonisation, seafaring and the archaeology of maritime landscapes. Papers in honour of Atholl Anderson*, 1-29. Terra Australis 29. Australian National University Press.

Geoff Irwin

Professor Geoffrey Irwin retired as Professor of Archaeology in the Department of Anthropology in February this year. Readers of Archaeology in New Zealand will be well aware of Geoff's contribution to New Zealand and Pacific archaeology. However, his retirement provides the opportunity to provide a public appreciation of his teaching, research and theoretical contributions.

As an Aucklander, Geoff Irwin brings his love of islands, sailing and archaeology together in a unique manner. These interests date back to his MA thesis on the pottery of the Shortland Islands (Solomon Islands) and his subsequent research documenting pottery manufacture and trading cycles at Mailu and the Massim (Trobriand Islands) in Papua New Guinea.

In terms of his Pacific research, his book Prehistoric exploration and colonisation of the Pacific (CUP 1992) was a timely complement to the data coming from experimental voyaging. Based on computer simulations, his sailing knowledge and the archaeology of the island Pacific, Geoff Irwin put forward a mechanism by which Polynesians were able to safely explore and settle the small and distant islands of eastern Polynesia. It is a thesis that put paid to ideas that the Pacific was colonised by accidental, one-way voyaging. Pacific archaeologists are still working their way through the implications of these research findings, where the older models of cultural development in

isolation are giving way to interaction spheres and the possibility of multiple contacts across time and ocean.

As far as New Zealand archaeology is concerned, Geoff Irwin's contribution is at two levels. The first is at his site-specific research at Kohika, a Māori lake village in the Bay of Plenty, where an extraordinary range of architectural and artefact remains are preserved. The detailed excavation of Kohika has allowed the reconstruction of Māori village life during the 16th century AD. It has revealed the presence of a carved whare nui and the layout of the village in terms of multiple house floors and an open area suggestive of a marae. This project, in partnership with Ngati Awa Iwi of the Bay of Plenty, is a continuing one with further excavation and publication planned.

Geoff Irwin has also conducted research at the landscape level, attempting to deal with the scale and the complexity of Māori occupation of the North Island of New Zealand. One part of this study has been published as Land, Pā and Polity (1985), which concentrates on the Māori fortifications of the Pouto Peninsula, demonstrating the importance of historical and contingent factors in the formation of the more recent periods of the New Zealand archaeological record. This long-term research continues on the islands of the Hauraki Gulf (Motutapu, Waiheke and Ponui), with publication as a further retirement project.

As Professor of Archaeology in the Department of Anthropology at Auckland University between 1993 and 2008, and now Emeritus Professor, Geoff Irwin has played an important role in the promotion of the discipline and in the establishment of the careers of many New Zealand archaeologists. His colleagues and many graduate students wish him well

Harry Allen

A tribute to Tony Walton

At the NZAA AGM in Masterton in June, Tony Walton was presented with an award for outstanding service to NZAA. The following is the speech Mary O'Keeffe gave to outline Tony's archaeological career.

Most people will know and associate Tony with the Central File, but he is very much more than that.

Like so many of us Tony came to archaeology via a first study choice. He was completing a BA in geography at Auckland university, when anthropology papers taught by Richard Cassells and Roger Green caught his attention.

He then completed an MA in archaeology at Auckland. Colleagues in his graduate class included such luminaries as Ian Lawlor, Wendy Harsant, Reg Nichol, Peter Piece, Mat Newman, Joanna Boileau – names that will resonate with many people in this room.

During his masters Tony dug at Hamlin's Hill with Peter Pierce, back in the days when people excavated for fun on their weekends.

Tony's masters thesis was on Maori soils, and he notes with some glee that even though he commenced after Reg Nichol he still managed to finish before him.

Tony graduated MA in 1978, and moved to Wellington to join the Historic Places Trust. HPT were looking for a fieldwork assistant, and Tony took up this position on contract.

Back in these days John Daniels was the Trust director, Jim McKinlay was the senior archaeologist, a keen young chap called Bruce McFadgen was completing his PhD and Mary Newman was the advisory officer. When we were discussing Tony's professional career Tony's comment was that the government no longer has advisory officers presumably because they do not want any advice.

Back in the late 70s the Trust was based in premises in Pipitea St in Wellington, and the archaeologists were down the road on Thorndon Quay. Tony's comment here was "oh what fun we had". I asked him "was that comment dripping in cynicism", to which he grinned and said "…possibly".

Early on in his time at the Trust Tony took over the management of the archaeological central file, under the leadership of Aidan Challis, who was then senior archaeologist, and CINZAS as we know it today was established.

In those pre-PC days Tony would take boxes of punch cards up to Victoria University to input the data, and he spoke lovingly of WFL – word flow language. Clearly Microsoft was still some way down the track.

In 1984 the Trust moved to Antrim House on Boulcott St.

In fact much of Tony's career seem to have been punctuated by location moves – to Antrim in 1984, to Tory St in 1987 when the archaeologists were relocated to DOC, then to Victoria St with DOC and finally to their current locale in Manners St. Unfortunately each move was marked by a loss of labs and space for archaeology.

At the same time people came and went. Aidan replaced Jim as senior archaeologist and in turn the position was taken by Brian Sheppard. Mary Newman's' role was taken by Anne Geelen, and a bright young chap named Kevin Jones arrived to focus on forestry issues.

Raewyn Sheppard was the archaeology assistant for some time, and in the late 80s I took the role for a couple of years, and was in turn replaced by Anne Williams. For about six months Tony would get confused between Ann and I, so hit on the thoroughly expedient solution of calling both of us MaryAnn, knowing that someone would answer.

I also remember one of the map cabinets overbalancing one day and just about falling on Ann. Tony ran out to her screams and righted the cabinet and calmed Ann down. A few moments later his head poked out of his inner office with the deadpan comment "of course I was only worried about the maps".

Aidan told me his main memories of working with Tony in their HPT days were when they were sent on archaeological field work together - an investigation near Ahipara in 1978, a survey at Pouerua in 1992, and an investigation at Castle Hill in 1993. Aidan remarks of Tony "He is always a really effective practical and sensible person to work with and has great reserves of patience and endurance".

As well as managing CINZAS Tony undertook research and field-based archaeology. While Bruce was undertaking his large project in the Bay of Plenty, Tony assisted in setting the project up, and developing the fieldwork project. I was lucky enough to be involved in that, in fact it is how I got my start in archaeology, and Tony notes that while we were traipsing round the mainland dealing with stroppy farmers he and Bruce were having a fabulous time surveying the BOP harbour islands – Rangiawea, Matakana, and Motiti.

Tony has undertaken research into the archaeology of the Wanganui region, and he is the author of a concise but soon to be classic monograph on the archaeology of Taranaki/Wanganui. It summed up decades of interest in that region including continuing on Tony's thesis topic of soils and gardening, the New Zealand Wars and archive-based work on Maori demography in the 1840s-1860s.

Another research thread is military fortifications in New Zealand.

In addition Tony has written on criteria for assessing archaeological significance, and also finalized Mary Newman's Tongariro work and prepared it for publication.

However it is probably for CINZAS that Tony is best known. I think we have just grown used to CINZAS and its functioning, and regard it with some complacence. Perhaps we need reminding that it is a complex database of about 59,497 records, and with data comprised of paper records, plans, maps and photos. But how often do we hear of problems with CINZAS? How often do we hear of mistakes because of duplicate records or lost records or whatever? We do not because Tony manages it to the highest possible standard.

Most of you will be aware that I have babysat the database over the past few years when Tony was away on leave. When I first started I would send out data to colleagues with cheery gossipy e-mails until Tony did a remote log-on to check the status and I received a terse message: "Less chat. More work".

Tony's diligence with CINZAS has given us an utterly remarkable data set of profound rigour and robustness.

Along with this Tony has developed an encyclopaedic knowledge of NZ archaeology. At Tory St I would get used to yelling out "Tone, who dug… or what date is.." and the reply would come back. It would only then dawn on me that he hadn't had time to get up and look the data up.

Tony has also been active in the Wellington Archaeological Society for decades, and his name is on many of the key site record forms for the Wellington region.

I asked Kevin for thoughts on Tony, and he notes Tony has remarkable powers of concentration, reading and analysing issues. He can always be relied on for a dryly witty and well-expressed contrary view. On Kevin Jones, for example, Tony says: "On the rare occasions when he is right, he is very right".

His recent work on a national study of pa produced, with Nicola Molloy, statistically sound results on pa, for example their size: average area 0.4 ha, perimeter 1438 m. With Kevin he also wrote a paper on the defences of Otatara.

Kevin says that Tony is always a great help in interpreting aerial photographs, able to lend fresh insight to their analysis. He is difficult to get excited, being always very careful and professional, anything but long-winded. There was one occasion, though, when Vanessa Tanner brought him a vertical photo of a rectangular ditch and bank she had just noted, a possible redoubt, at Porangahau. Tony leaned over the pocket stereoscope, and produced the words slowly: "That.... is..... truly.... re..... mark.... able....".

A little-known fact about Tony is that he has a deep sense of social justice, being active in causes as diverse as Amnesty International and PSA work in DOC.

He has also developed a deep knowledge and enjoyment of early-music performance up till about the era of Bach.

Since his illness and his return to New Zealand, his colleagues have noted a change in his personality. He is very stoic in accepting his condition and responds well to black humour; he takes an even greater amusement than ever in the silliness of human behaviours, especially that of managers as a class; and he is better than ever at sardonic witticisms.

Tony, you are a good friend, a mentor, a critic, a scholar, a philosopher, devil's advocate, a superlative archaeologist, and NZAA taonga.

Mary O'Keeffe

Site Record Forms

A couple of issues have arisen recently when site record forms have not been returned to filekeepers. There have been instances where archaeologists

sub-contracting to another archaeologist have been issued site numbers, completed site record forms and then given the forms to the principal contractor who has, through some oversight, failed to send them in to the filekeeper.

There have also been instances where site record forms have not been sent directly to filekeepers but have instead been appended to final reports supplied to the NZHPT. While a number of filekeepers are also NZHPT archaeologists, it is a separate role and it is not appropriate to expect filekeepers to copy site record forms out of another document for inclusion in the Site Recording Scheme. NZAA stresses that these have been isolated occurrences with everybody normally doing a great job of site recording. However, it seems timely to remind all archaeologists and other site recorders that it is the responsibility of the original recipient of the site number (who has their name logged against it) to ensure that site record forms are completed and sent to the filekeeper concerned in a timely manner – preferably as soon as possible, so they can be entered into the Site Recording Scheme. This ensures that information in the Site Recording Scheme is as up to date as possible. Happy recording.

DOC Training - Archaeology in the Coastal Marine Area

The Department of Conservation and Australian Institute for Maritime Archaeology are sponsoring three four-day training courses on archaeology in the coastal marine area. The courses follow the AIMA/NAS (and DOC Hands-on) format of practical sessions and class based seminars, and are internationally recognised (for details see the AIMA website http://www.aima.iinet.net.au/frames/aimavtframe.html and click on the courses tab). Two visiting Australian state tutors will be running the training, and there will also be local content.

The training is open both to divers, who can opt for an underwater practical, and non-divers who can opt for the land-based or intertidal practical. Divers must be minimum of rescue diver certified and have a current medical, and numbers may be limited by supervisory ratios. Each course can cater for 8-16 participants. To register contact salderson@doc.govt.nz (DOC employees register themselves via the intranet).

Details of programme (to date) as follows:

Dunedin

Date: 17-20 November

Venue: Otago University

Dry site: Deborah Bay hulks and spar torpedo boat station

Wet site: Aramoana mole

Practical: Port Molyneaux shipwrecks site recording, underwater photogrammetry (Albert Chong)

Local content: Otago Harbour maritime landscape (Matt Carter), Otago maritime history (Bruce Collins), archaeology of the New Zealand coastal marine area (Andy Dodd)

Wellington
Date: 23-26 November
Venue: Matiu/Somes Island
Dry site: Lighthouse, coastal defences, historic wharf superstructure
Wet site: WWII barge, historic wharf underwater component
Fall back: patent slip/Owhiro Bay wrecks
Practical: MAANZ metals conservation lab (Jack Fry)
Local content: Lake Waikaremoana sunken armed constabulary boats (May O'Keeffe), Waikato River underwater cultural heritage (Andy Dodd)

Auckland
Date: 29 November-2 December
Venue: North Head Barracks
Dry site: Motukorea/Browns Island hulks, Hauraki Gulf
Wet site: Whangaparoa Army Bay or Okoromai bay wrecks
Practical: Auckland University wet wood conservation lab (Dilys Johns), side scan sonar demonstration (Dan Breen)
Local content: Auckland Regional Council Cultural Heritage Inventory and protection in coastal marine area (Robert Brassey), Great Barrier Island coastal survey 2006 (Andy Dodd)