



NEW ZEALAND
ARCHAEOLOGICAL
ASSOCIATION

ARCHAEOLOGY IN NEW ZEALAND



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NOTES AND NEWS

New Members

Carl Partridge, Tim Thomas, Kathryn Miller, Amy Howard, Amanda Symon, Christine Prior, Reg Nicol, V.S. Cullen, Dave Gardner, Lisa Matisoo-Smith.

Donations

D.M.E. Allen, R.H. Griffin, R. Clough and S. Macready, N. and K. Prickett, I. J. Morrison, J. Tollemache, C. Merrony and D. Gray.

Replacement for the Institute of New Zealand Archaeologists

NZAA has agreed to take over certain functions of the now disbanded Institute of New Zealand Archaeologists. These functions relate in part to standards, best practice guidelines, and ethics, all of which are areas in which NZAA already has a keen interest. ICOMOS (NZ), NZHPT, and DOC also have an interest in these areas and all three organisations have already indicated a willingness to work with NZAA to develop guidelines acceptable to all parties. NZAA proposes initially to set up a 'network' of members, and others, preferably linked by email, with an interest in these, and other, professional matters. If there is sufficient interest it may be appropriate to set up more formal structures at some later time. I will initially act as co-ordinator for this network. Please indicate your interest in this by sending me an email or dropping me a line.

NZAA has a 'Best Practice' sub-committee currently consisting of Rick McGovern-Wilson, Chris Jacomb, and Lynda Bowers. A process for examining and endorsing documents has been agreed on by NZAA Council. Kevin Jones's 'forestry and archaeological site protection guidelines' is the first document which will be considered for adoption by NZAA. The process involves consultation with members over content and feedback on this

particular document, which is also being discussed by the NZ Forest Owners Association. Feedback is now sought. For email or paper copy contact me at twalton@doc.govt.nz. or at Department of Conservation, P.O. Box 10420, Wellington. Following revision, the sub-committee will make a recommendation to Council as to whether or not NZAA should officially adopt and publish the guidelines. It is stressed that these guidelines are hortatory and non-enforceable but experience suggests that even so will not be without effect.

Tony Walton

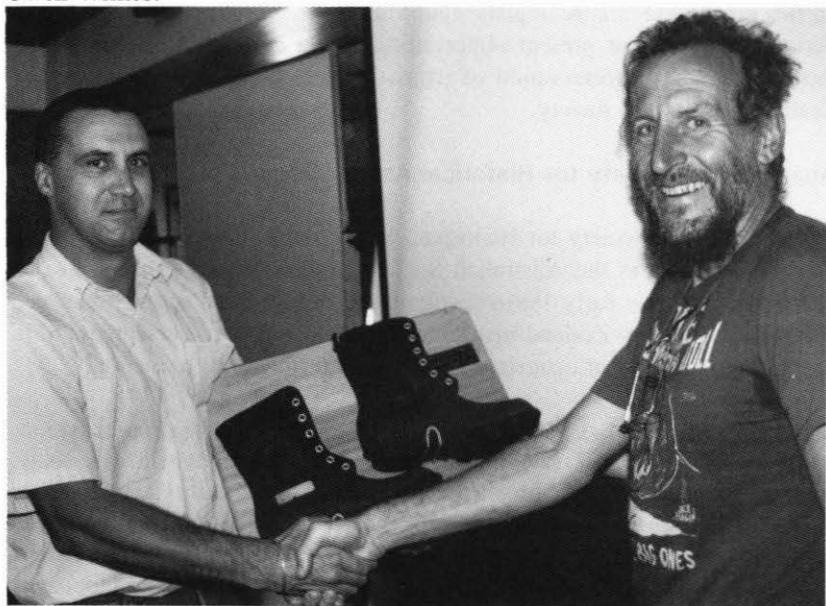
Awards for service to archaeology

These awards were decided at the 1998 NZAA Conference. Our warm congratulations to this year's recipients.

Public Archaeology Award to the Auckland Regional Council Cultural Heritage Unit for contributions to archaeological site protection.

Certificate of Merit to Keith Holswich for contributions to archaeological site protection.

The Groube Gumboot Award for practical contributions in the field to Owen Wilkes.



Rick McGovern-Wilson presents the Groube Gumboot Award to Owen Wilkes.

Protecting Historic Places in New Zealand by Harry Allen

The Department of Anthropology, The University of Auckland, announces that a new publication, RESEARCH IN ANTHROPOLOGY AND LINGUISTICS is about to be launched. The first volume will be available in May 1998. It is entitled *Protecting Historic Places in New Zealand*, by Dr Harry Allen.

Like its predecessor, *Working Papers in Anthropology, Archaeology, Linguistics and Maori Studies* (discontinued in 1990), this series will publish work in all fields of anthropology and will have a New Zealand and Pacific focus, reflecting the interests of Department members. Approximately four of these occasional publications will appear each year. Among the next topics are Rangitoto's interwar communities, the Raurimu historic settlement, the Sigatoka excavations, an important South Island stone tool collection, and tourism and identity in New Zealand. The cost per volume will vary depending on production costs but will be around NZ\$20.00 - 25.00.

Protecting Historic Places in New Zealand provides a critique of heritage management in New Zealand in terms of legislation, institutions and involved parties, including archaeologists and Maori. The requirements of Maori heritage management present opportunities for a conservation regime that moves beyond the preservation of icons to foster diverse readings of New Zealand history and society.

Australasian Society for Historical Archaeology

The Australasian Society for Historical Archaeology, founded in 1970, was originally known as the Australian Society for Historical Archaeology. Its name change in the early 1990s recognises the close ties that exist between Australian and New Zealand historical archaeologists and the shared aim in promoting the study of historical archaeology throughout the region.

The main aim of ASHA is to promote the ongoing exchange of information, research and reference material between Australasia and overseas, while continuing to actively support the conservation of sites and relics which are part of our heritage and which reflect all aspects of life dating from European contact to the present day (including historic sites and buildings, industrial archaeology and engineering heritage, pioneer technology, rural development, etc.)

ASHA encourages the ongoing research of historic sites, buildings, artefacts and relics through historical research, survey, recording, excavation and analysis and the encouragement to publish results of such research. The Society's own publications include a Newsletter, Journal, Occasional Papers and various major publications.

Members receive the quarterly *Newsletter* and the annual journal *Australasian Historical Archaeology*. Activities include bimonthly lectures (in Sydney and Melbourne), and an annual conference which provides a forum for speakers throughout Australia, New Zealand and overseas.

Membership is open to all interested in historical archaeology, at both amateur and professional levels.

Applications of membership should be sent to:
The Secretary
Australasian Society for Historical Archaeology
Box 220, Holme Building
University of Sydney, NSW 2006
Australia

Student membership \$A25.00; Individual membership \$A40.00

ASHA's New Zealand contact is:
Neville Ritchie
Conservancy Archaeologist
Dept of Conservation
Private Bag 3072
Hamilton
email: nritchie@doc.govt.nz

World Archaeological Congress 4, Capetown, South Africa 10-14 January 1999

Announcement and call for papers

For information please contact the WAC4 Congress Secretariat

Fax: 27 (21) 762-8606
Email: wac4@globalconf.co.za
Tel: 27 (21) 762-8600
Address: PO Box 44503, Claremont, 7735, South Africa
Website: <http://www.uct.ac.za/depts/age/wac>

National Archaeology Student's Conference
1-3 October 1998, Australian National University
Call for papers

The Graduate program in Archaeology and Palaeoanthropology would like to invite all students of archaeology to attend and participate in the *Inaugural National Archaeology Student's Conference*. The aim of the conference is to provide a biennial forum for archaeology students to present papers or posters, meet, exchange ideas, find out about fieldwork and employment opportunities and to become **enthused** and **excited** about archaeological research.

All students (undergraduate, Honours, MA and PhD) are invited to present a **paper** or **poster** on any archaeological topic. You can be a current student or someone who has graduated in the last 2 years. We want to hear from students with - work in progress, research proposals, new methods, computerapplications, amazing and revolutionary ideas, wild and woolly theories, fantastic finds: **Students** who work in Australia, New Zealand, the Pacific, Papua New Guinea, The Near East, Europe, South America, Asia: **Students** who work on biological anthropology, genetics, art and material culture, theory, stone artefacts, environmental archaeology, pottery, glass, ethnoarchaeology, settlements, heritage, language, cemeteries, paleopathology, community archaeology **ANYTHING!**

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Size of Central File as of 31 March 1998

This year is the 40th anniversary of the founding of the New Zealand Archaeological Association Site Recording Scheme. In May 1958 the establishment of the Site Recording Scheme was approved in principle at the Wanganui Conference and soon after Jack Golson and Roger Green's *Handbook To Field Recording In New Zealand* was published. The original group of filekeepers appointed were Winifred Mumford (Central Filekeeper).

Peter Gathercole, Tony Fomison, Jim Eyles, Max Smart, Alan Pullar, Don Stafford, and Laurie Birks. Stan Bartlett, Tony Batley, and Ian Keyes are the longest serving of the current filekeepers: they were appointed to the North Auckland (later Northland), Inland Patea, and Wellington files respectively in the mid-1960s.

On 31 March 1998 the Central File held a total of 51,607 records. This is an increase of 1350 on last year's figure of 50,257. This represents an increase of about 2.8%.

Regional totals are as follows:

Region	1997	1998 Change
Northland	9139	9377+ 238
Auckland	7962	8150+ 188
Coromandel	4608	3929- 679*
Waikato	3186	3232+ 46
Bay of Plenty	6603	7770+1167*
Taupo	411	411
East Coast	2657	2698+ 41
Taranaki	1506	1533+ 27
Inland Patea	292	294+ 2
Hawkes Bay	1616	1709+ 93
Wanganui	638	801+ 163
Wellington	973	990+ 17
Nelson	1483	1485+ 2
Marlborough	472	472
Canterbury	1166	1166
West Coast	853	853
Otago	2445	2451+ 6
Central Otago	2000	2022+ 22
Southland	1425	1442+ 17
Outlying Islands	<u>822</u>	<u>822</u>
	<u>50257</u>	<u>51607+1350</u>
Summary:		
North Island files	39591	40894+1303
South Island files	9844	9891+ 47
Outlying Islands	<u>822</u>	<u>822</u>
	<u>50257</u>	<u>51607+1350</u>

* U13, with 871 records, has been moved from the Coromandel to the Bay of Plenty file. -

A. Walton
31 March 1998

Summary of the Annual General Meeting of the New Zealand Archaeological Association, Friday 17 April, 1998, The Ancient Mariner Motor Inn, Picton.

Council were elected as follows:

President	Rick McGovern-Wilson
Vice-President	Kath Prickett
Treasurer	Lynda Bowers
Secretary	Moira White

Council members:

Tony Walton
Sue Bulmer
Owen Wilkes
Ken Phillips

General Business

1. Heritage Review

Moved (McG-Wilson/N. Prickett) that this meeting endorse the views proposed at the meeting held prior to the AGM and the Chris Jacomb be given a mandate to put these forward as an official submission from the New Zealand Archaeological Association. Agreed.

2 Awards

Three awards were made to mark work by those within and outside the Association:

- Public Archaeology Award to the Auckland Regional Council Cultural Heritage Unit for contributions to archaeological site protection.
- Certificate of Merit to Keith Holswich for contributions to archaeological site protection.
- The Groube Gumboot Award for practical contributions in the field to Owen Wilkes.

3. Points of information:

A list of addresses has been added to and can be accessed through the N.Z.A.A web page. Gary Law is currently administering this.

The 1999 Conference will be held in Auckland.

The meeting finished at 4.07 pm.

President's Report

The most important and difficult work of the past year has been to do with the ministerial review of historic heritage legislation. The promised involvement of the Association in the review process has not happened, and it is now up to the membership and council to do all in their powers to see that we don't lose what we currently have. For the past 23 years, the statutory protection of archaeological sites has been supported by successive governments, and through two revisions of the Act. We are now facing the very serious possibility of losing that protection. The closing date for submissions on the review discussion paper is only a week away and it is essential that every member of the Association writes a submission. Our bottom line principles as set out in the March issue of *Archaeology in New Zealand* are available to guide members in the preparation of their submissions. Now that the bottom line principles have been discussed at conference, we can use the newly developed telephone tree to get that message out to the membership.

The *Handbook* revision suffered a temporary setback when the principal contractor left New Zealand for a job in Australia. The contract has been terminated and the project will now be overseen by Tony Walton. The new *Handbook* will be purely a guide to the Site Recording Scheme, and we intend to publish a series of 2-6 page *Guidelines* for best practice on topics such as GPS, photography, and what to do when you encounter human remains on a site, and so on, after the *Handbook* project has been completed.

The Institute of New Zealand Archaeologists wound up shortly after our last AGM and gave their accumulated funds to the Association with the proviso that they be used for the purpose of promoting standards in professional archaeology. I would like to record our grateful acceptance of these funds and to assure the past membership of INZA that we have already begun several initiatives, including the above-mentioned *Guidelines*, in this direction. The most significant of these is a Code of Best Practice in

Archaeology, which will be aimed at all archaeologists in New Zealand and will be designed to set standards and general guidelines for the best archaeological practice. These are necessary if we are to be able to monitor archaeological standards in a meaningful way.

The second initiative is a set of guidelines for the uptake of best practice by users of archaeology such as local authorities, developers, forestry companies and so on. These are essential if the users are to know when to use archaeological expertise and what to expect of their consultants. The intention is that this will be a jointly sponsored NZAA project, with the Department of Conservation, the Historic Places Trust and ICOMOS, and the in-principle support of these agencies has already been obtained. The combined effect of these initiatives should be very influential towards improving the cause of archaeological site protection, whatever the outcome of the review.

A 'Standards subcommittee' of Council has been formed with the responsibility of drafting up these two documents, in consultation with relevant groups, agencies and individuals.

Council intends also to develop a charter of archaeological heritage management in New Zealand along the lines of the ICOMOS international charter for archaeological heritage management.

Last of the list of initiatives being undertaken by your council is an ambitious project designed to upgrade the records of the Site Recording Scheme to the point where they can be used effectively in the land management and planning process. Rick McGovern-Wilson deserves all credit for this project, which involves considerable financial input by regional and local authorities, and, we hope from Lotteries.

The draft Memorandum of Understanding between the Association and Ngai Tahu is moving ahead after being temporarily stalled. I am working closely with the tribe's natural resources manager on this and we hope to see a successful end to the negotiations soon. This should prove to be a very useful model in developing future memoranda with other iwi.

As promised last year, Council has instituted a raft of awards for service to archaeology and the aims of the Association. These were published in the December issue of *Archaeology in New Zealand* and nominations called for. I am pleased to report that there were nominations in each of the three

categories available this year and the winning nominees will be announced later in the meeting.

The next year will be another busy one, with continued lobbying of government, participation in the work towards a new system for heritage protection, completion of the revised and updated Handbook, work on mechanisms for the promotion of professional standards, further negotiation with Ngai Tahu regarding the Memorandum of Understanding and other ongoing work on items described in this report.

I would like to thank the secretary, treasurer and vice president and council members for their hard work during the year.

Chris Jacomb

Treasurer's Report, 1997 Financial Year

The 1997 financial year was a good one for the Association with an overall increase in accumulated funds of \$3,014. The comments which follow should be read in conjunction with the annual accounts which have been posted to members.

The General Account realised a net surplus of \$1,449.95. The 1997 Conference was subsidised in an amount of \$303, which was an improvement on the 1996 year and reflects the fact that a significant number of members of the public attended the 1997 Conference, particularly District and Regional Council staff.

Newsletter expenses increased by \$1,035. This was due primarily to the initial cost of changing the cover printing. Overall printing and mailing charges have not altered significantly during 1997. Travel expenses associated with the three Council meetings held during the year decreased by \$995 compared with 1996.

The majority of the revenue in advance relating to the updating of the Handbook, received from the Lotteries Board, is still invested and the return is represented by the interest figure in the General Account income. A total of \$3,000 was spent on the Handbook contract during 1997.

The Publication Account realised an increase in its net surplus. There was generally little activity in this account during 1997, with the majority of

income derived from donations totalling \$2,000. The Journal Account realised a minor deficit of \$774. However this is offset by the significant net surplus during 1996.

The overall financial position of the Association has remained sound during 1997. The charging and recovery of NZAA file search fees, however, remains an area of concern. A potential loss of income to the Association results from inconsistent charging between file districts or failure to send copies of invoices to the Treasurer. I repeat my plea of last year's report. It is imperative that all filekeepers obtain full name and address details from people requesting file searches. In addition, the filekeepers need to regularly send copies of invoices they have issued to the Treasurer so that unpaid search fees can be followed promptly.

I look forward to continuing in the role of Treasurer for the Association and offer my apologies for my absence from the AGM and Conference. I hope it was a successful and enjoyable event for you all.

Lynda Bowers
Treasurer

Editor's Report

Archaeology in New Zealand is in good heart and the new and up-dated format of Volume 40 has been well received. Formatted disks in the new *AINZ* style may be obtained from the editor. This makes the editor's job easier especially if there are complicated tables.

Because this publication is not refereed it is often a difficult task for the editor to decide on her own whether an article is of sufficient merit to be published. A suggestion by Owen Wilkes is that articles based on New Zealand fieldwork should only be accepted for publication if NZAA site record numbers are cited. This would give the editor some assurance that the sites have been investigated thoroughly and would also benefit the reader by providing precise identification of sites. I wholeheartedly agree with this suggestion and intend to implement it in the future.

I wish to thank all those members who have contributed papers and book reviews over the past year and especially to the regular contributors to the Notes and News and Fieldwork sections - Joan Maingay, Kath Prickett, Owen Wilkes, Pam Bain, Tony Walton, Ian Barber, Ian Smith and Karl

Gillies who supply relevant material throughout the year to keep NZAA members informed about archaeological activities in New Zealand.

I look forward to your continued support and a constant supply of interesting papers and other contributions in the coming year.

Joan Lawrence
Editor, *Archaeology in New Zealand*

REPORT ON PAPERS PRESENTED

Wednesday 15 April - morning

Peter Sheppard: "Recent Research on New Georgia, Solomon Islands"

Peter discussed the relationships between head-hunting, land tenure, exchange shell values and ancestor shrines, using both archaeological and ethno-historic information. The case study is of Nusa Roviana, an island in the Roviana lagoon, New Georgia, where there is a large fortification site between three areas of habitation. The fortifications were a place where the ancestral shrines of several groups were brought together to form the basis of a single polity in the nineteenth century.

Kevin Jones: "Recent aerial photography: Nelson Mineral Belt, Waihou River (Thames)"

Kevin showed slides of aerial photos of the Nelson Mineral Belt - including the argillite quarries, particularly on D'Urville Island. He argued that aerial photos are good for monitoring purposes, e.g. he identified forestry planting on wahi tapu areas. Aerial photos also give a more holistic view of the landscape.

He also showed aerial views of the Waihou River and associated pa. Parch marks, the result of a very dry summer, were used to identify other sites, especially middens. Some areas with parch marks were not recorded archaeological sites, and these need further investigation.

Garry Law: "Picturing the Past - an Exploration of Art and Analogy"

Garry discussed the changing trends in illustrations of the past (including paintings, drawings, dioramas and 3 D models). He commented on the growing use of archaeological information in such depictions, especially those accompanying archaeological texts (reconstructive illustrations), but stated that often little justification was given for the choices made in the

illustrations, such as the depiction of nuclear families or gender divisions of labour. He took specific examples from Goldie, Duff, school textbooks, the Palliser Bay monograph and others. The way people were shown in the pictures was an important aspect of the overall changes noted. Garry called for more debate on this subject.

Claire Reeler: "A Study of the Internal Structure of Pa Sites"

Claire discussed her new methodology for studying data from excavation reports of pa, with particular reference to internal structure. The method used cluster analysis, fuzzy logic and artificial neural networks to extract patterns from the data. Five clusters were defined as the most useful interpretation of the patterning. After further analysis with artificial neural networks and extraction of the rules, these were identified as 4 primary groupings of sites, including 1 subgrouping viz. Swamp pa, large sites with multiple defences (with the subgroup volcanic cones), small sites with simple defences. This is not a classification system for all pa, but a recognition of the strongest patterns in this particular data set.

Helen Leach: "Quitting the Intensification Habit"

Helen said that most research into past agricultural practices is drawn from Boserup's intensification model, based on population growth in a given area. This model identified stages that were said to be linked to linear historical developments. The model was adapted by archaeologists to define ways of identifying the stages based on artefacts and other archaeological material. Helen critiqued several of the Pacific studies of agricultural intensification (e.g. Barrau, Yen, Kirch), especially the criteria used to identify it. She stated that because intensification is based on changes in a given area of land, a simpler system has to be shown to have been present in the same area first, to prove later intensification of agricultural practices. There has to be clear distinction between expansion and contraction and intensification and disintensification and that often intensification criteria could be expansion criteria instead. She queried all the archaeological evidence used to demonstrate intensification over time and argued that Pacific horticulture was very intensive in nature, often without a prior non-intensive stage.

Owen Wilkes: "Tactical Response to Topographic Opportunity: Maori Fortifications in the King Country"

Owen mapped 97 pa in the King Country over a 90 km stretch. From these he developed a classification system: O-ring pa, hill pa, edge pa, corner edge pa, spur pa, ridge pa, pa with only natural defences, pa with only artificial

defences. He divided these sites into small, medium and large pa and linked the different sizes to differences in function. He linked the pa type to the natural topography because of constraints on construction in different situations. In particular the use of spoil from ditches for banks was linked to the topography of the site. He compared his sample with Taranaki pa and showed changes in the different areas. He stated that his system does not work well outside of the King Country.

Tony Walton: “Assessing the Archaeological Values of Historic Places”

Tony described a DoC project to codify existing practices in the assessment of historic places. This was of particular relevance to the application for consent procedures. The aims were 1) to provide an explicit statement of application procedures and methods consistent with current legislation; 2) to obtain greater clarity of roles and responsibilities of archaeologists; 3) to provide consistency of assessment procedures; 4) to provide a framework for guidelines and codes of ‘best practice’. DoC looked at practices in Canada, the USA, Britain and Australia, as well as ICOMOS and chose a system based on the British model with 3 stages viz. appraisal, evaluation and detailed evaluation. This is a discussion document available on e-mail.

Caroline Phillips: “Development - extent and methods: some thoughts from an archaeologist”

Caroline used the example of a development at Athenree to demonstrate that building a house totally modifies and destroys the whole land block, as well as the house site, because of landscaping practices. Therefore those responsible for the protection of archaeological sites should take this into account when giving consents. Using an example from Ellerslie, Auckland, she concluded that detailed testing of a site using test pits and trenches is better than monitoring work in progress in most cases. It usually works out cheaper and allows the archaeologist more control. In the Ellerslie case a lack of communication between developers and archaeologists and the use of many excavators in different areas at once meant that close monitoring was extremely difficult.

Mary O’Keefe: “NZ Shipwrecks and other Maritime Sites”

Mary subtitled this paper “New Zealand’s Forgotten Heritage”. Only 6 shipwrecks were found on consulting the national NZAA database, whereas Ingram lists 1100 shipwrecks between 1835 and 1900 in New Zealand waters. Underwater archaeology has particular problems. Archaeologically trained divers are needed. Marine organisms obscure much of the sites.

Visibility is a particular problem, especially with silt, and cold water and the associated equipment necessary limits people's dexterity and the amount of time spent underwater. A detailed strategy is necessary because of communication problems underwater, poor visibility and limited dive times. It is also important to realise that one does not need a complete, detailed map of all sites, as with land sites, a simple description can suffice in some circumstances. However, Site Record Forms should be filled out, giving the location.

Wednesday 15 April - afternoon

Discussion of Historic Heritage Management Review

Chris Jacomb presented the NZAA Inc. draft submission to the Review comprising 9 principles. This submission was to be finalised at the AGM. It was given as a handout to the conference.

Aidan Challis presented the circumstances leading up to the review and summarised the Historic Heritage Review Archaeological Provisions. A handout addressing the various options for the archaeological provisions was distributed.

Richard Cox (member of the Committee for the Review) gave an outsider's overview of Maori perspectives as presented at various Heritage Review hui.

Kevin Jones gave the ICOMOS NZ submission.

Alexie Simmons examined heritage management legislation in the USA and noted that there were many legal statutes relating to archaeological heritage management in the States compared to New Zealand.

Ian Barber (NZHPT) summarised the HP Act and noted that the NZHPT was not perceived as doing job in terms of preservation.

A general discussion of the issues followed.

Wednesday 15 April - evening

Public Lecture: Trevor Worthy: "The Fossil Avifauna from Marfells Beach, Marlborough"

Trevor compared a natural sample of bird bones with an archaeological sample to look for evidence of preferential hunting of specific fauna. He concluded that there was some evidence for hunting of certain species in preference to others (especially certain types of shag). He noted that pukekos seemed to have a short history in NZ (about 500 years), but that swans were present over a long sequence.

Thursday 16 April - morning

Ian Smith: "The Endeavour Settlement, 1795-97, Dusky Sound"

Ian discussed evidence for the European settlements in Dusky Sound, following the wreck of the Endeavour. From Oct 1795 - 1796 there were 244 people living in the Sound after the wreck. After construction of a schooner which took the majority back to New South Wales, there were 90 people from Jan 1796 - March 1796. The last 35 people remained until May 1797. A pile of ballast stones mark the place where the Endeavour was left. Using a metal detector Ian Smith and his team found most evidence for settlement around a small stream and gravel beach to the north. Excavations revealed evidence of a stone chimney and cobblestone floor from a structure, a wooden structure closer to the stream that was probably the storehouse mentioned in a journal and a small jetty on the northern side of the stream. Artefacts found were consistent with an 18th century European settlement.

Karl Gillies: "Canoe Prow Updates: Further Discoveries from Mason Bay Region, Stewart Island"

Karl reported the discovery of burials and artefacts near the site where the recent canoe prow was found on Stewart Island. Near to the burials some moa eggshell was found. A wooden bow piece off a canoe (possibly from the same canoe) was discovered close to where the canoe prow had been found. He went on to describe an unusual wooden comb from Monkey Island, off Riverton. These discoveries will be presented in a paper co-authored with Michael Skerrit in the NZJA.

Chris Love: "Archaeological Site Surveying in Kura te au"

Chris described a joint project between Te Ati Awa, the Marlborough District Council and DoC to identify and manage wahi tapu in Totaranui (Queen Charlotte Sound) including Kura te au (Tory Channel). Steve Bagley provided initial archaeological assistance and Reg Nichol is now working as consultant archaeologist on the project. Most of the coastal areas of Kura te au have been surveyed to date, 15 previously recorded sites have been relocated and 60 new sites have been identified. The coastal and intertidal zones have been the focus because of issues arising from the inter-island ferry wash and resource consents for marine farms. The ridges remain largely unsurveyed at this stage.

Richard Meylan and John Martin "Relationships with the Royal Society"

Richard Meylan is the Public Awareness officer of the Royal Society, with

a particular interest in the Social Sciences. John Martin is the new Social Science Representative at the Royal Society (his e-mail address is john.martin@dia.govt.nz). There is a new Royal Society Act 1997 which has changed the focus of the organisation slightly. They want to develop communication between different groups within the Royal Society, draw up a list of skilled people available for consultation and are also interested in fostering links with international organisations. They publish a weekly update of science in NZ on the Royal Society Web pages (see specifically "Social Sciences Alert").

Brenda Sewell: "The Industrial History of Great Barrier Island"

Brenda restricted her paper to the period between 1840 and 1868. In the 1840s copper mining began on Great Barrier Island. By 1843 there were extensive mines at Miners Head. In March of that year 100 tons of copper ore was exported to England. Ship-building was a complementary industry. The second wave of copper mining was from 1851 - 1853. It was mechanised and 12 tons of ore were extracted per week. By 1859 there was logging on the island and a sawmill had been built to provide lumber for the associated copper mining settlement. In the 1860s the copper mine became even more mechanised but was unproductive and mining stopped in 1868. Miners took up land in lieu of wages. Some of the house sites from the first settlement have been located in the long kikuyu that now covers the area. The sawmill also closed in 1868, although logging resumed in the early 20th century.

Robert Brassey: "Tiritiri Matangi Wharf Excavation"

The cyclones of the summer of 1996/97 exposed several coastal archaeological sites. A deeply stratified site at the base of and adjacent to the main wharf on the SW side of the island was excavated because the wharf was due to be relocated over it. The salvage excavation (with consent and iwi approval) began on the area due to be affected by the new wharf in May 1997. Three phases were identified. The lowest level contained an occupation layer on top of a gravel beach. This included flakes and midden. One moa bone was found in the midden. This has been dated to 1380 - 1420 AD (about the time of the Rangitoto eruption). Above this was a yellow clay fill with a stone wall, possibly a retaining fill. Above the fill was evidence of structures and later ovens, showing a change in use of the site from dwellings to cooking. Above this was a gravel layer, which was not a beach deposit. Covering this was a thick fill layer with a cooking area with ovens on top of it. Evidence from the site suggested localised sea level change between occupation layers and the presence of kiore on the island in the 16th century.

Peter Petchey: "The Dunedin Gasworks. The preservation of IA (Industrial Archaeology) in Dunedin"

Peter showed several slides of the new museum under construction. In 1987 the Dunedin Gasworks (based on coal gas) closed after being in operation for 124 years. The museum will be officially opened in September 1998. The original engine room, chimney and boiler house form the museum, most of the other buildings have been demolished. There is structural evidence of change over time. Displays will include domestic gas appliances and some social history content as well as steam engines.

Cathy Barr: "Pine Harvesting from Pa Sites in Whangamata and Whangarei"

Cathy works for Carter Holt Harvey as an archaeologist, and has been involved in harvesting operations for the last three years. She discussed 2 examples of pa sites in pine forests where logging was managed so as to minimise damage to the sites. One pa was in Whangamata and one was in Whangarei. The Whangamata site had been identified in 1978 and then marked off in 1982 and had pines growing up to the edge of the site. The Whangarei site had not been previously recorded and was covered in trees. In both cases trees were felled so as to fall off the site where possible and were lifted off rather than dragged. Existing tracks were used to provide access. Neither site will be replanted. As some forests are on Crown land, with forestry companies having cutting rights only, the issue of who manages the excluded archaeological areas needs to be addressed.

Dilys Johns: "Wet organic archaeological materials conservation in Aotearoa"

Dilys showed slides of a variety of artefacts conserved in the Conservation Laboratory at the University of Auckland (eg the canoe prow mentioned above by Karl Gillies). The Conservation Laboratory is a national resource that can be used by museums, iwi and other groups. The use of Poly Ethylene Glycol (PEG) is still the main method of impregnation for wood and fibre. It is best to treat the objects while they are still wet, when the water can be replaced by PEG. Totally dry objects can only be coated in resin. Fibre objects (eg hinaki) can be reshaped during the conservation process. A directory of NZ Conservators is available, listing different specialists for different materials (eg wet organic artefacts, books, buildings, paintings etc). Dilys also showed maps of all the wetland areas in NZ and suggested that a national policy was needed to protect them.

Thursday 16 April - afternoon**Fieldtrip - Tuamarina, Rarangi - Port Underwood loop.**

This was a bus trip led by John Davies, a geography teacher from Blenheim. The focus of the trip was nineteenth century historic sites and regional history. We visited Tuamarina, site of the 19th century Wairau "Incident" between NZ Company militia and Te Ati Awa. There was a brief stop at the Marshlands flax mill which closed down after drainage of the surrounding area stopped the growing of flax. Whites Bay is the first bay from the south going towards Port Underwood. It was inhabited by whalers but was never a whaling station. It is the place where cables were first laid between the South and North Islands. The next bay was Robin Hood Bay. This bay has excellent examples of stone alignments, stone mounds and pits. These were clearly visible because of parch marks from the recent drought. There was also an historic cob cottage of mud and stud construction. We then entered Port Underwood where there is much evidence of whaling activities (eg try pots) in many bays. At Kakapo Bay the Guard family has been resident since the 1830s, first as whalers and traders. The last stop was Karaka Point pa overlooking Queen Charlotte Sound. This pa has extremely well preserved pits with very large, rounded raised rims and a modified ditch and bank. We returned to Picton via Waikawa.

Friday 17 April**Marshall Weisler: "Some thoughts on prehistoric fishing on the southern South Island"**

Marshall Weisler summarised the fish remains from two field seasons at the coastal Archaic site of Kakanui, located north of Dunedin. Contrary to other southern South Island assemblages, the Kakanui site contains about 80% Red Cod (by MNI and NISP). Additionally, 14 fish species, new records for New Zealand, were identified by otoliths. Results suggest fine sieving using 3mm mesh contributes substantially to our understanding of prehistoric fishing strategies.

Richard Walter: "Recent Research on Niue Island, West Polynesia"

Richard Walter gave a talk on the preliminary results of the Niue Archaeology Project. This is a joint research project directed by Walter (Otago University) and Atholl Anderson (ANU) which aimed first at determining the place of Niue within the settlement history of Polynesia and second at investigating adaptive strategies on a large, isolated raised reef

island. In summarising the results of three field seasons' work Walter argued that Niue was not settled during Lapita times but received first colonists about 2300 BP from West Polynesia. Niue remained isolated for much of its prehistory and the particulars of Niuean culture history were largely conditioned by a combination of isolation and extremely limited natural resources. A volume covering the Niuean work is currently in preparation.

Sue Bulmer: "Archaeology in New Guinea: recent research and controversies"

New Guinea is an environmentally complex country with a very long human history, and much archaeology has been carried out since 1959. Research has concentrated on the Highlands close to pottery sites, including Lapita and the Sepik/Ramu basin. Many New Zealand archaeologists have been active in New Guinea, but much remains to be done.

Perhaps the liveliest debate concerns the origins of agriculture in the Highlands. Work by Jack Golson and colleagues from ANU revealed that agriculture began at least as early as 9000 BP, making use of mainly native plants including bananas, sugar cane and taro. Recently some have challenged this, arguing that agriculture developed gradually and that 'real' agriculture did not begin until after the arrival of the Lapita pottery people. A recent model by Peter Bellwood based on the three earliest centres of Eurasian agriculture (the others being central China and SW Asia) fits the New Guinea Highlands much better than Bellwood thought. Agriculture had its origins in the massive environmental change at the end of the pleistocene causing rapid increase in plant and animal resources as well as human population.

Janet Davidson: "Aspects of Maori and Moriori Fishing"

The fishbone data base at the Archaeozoology Laboratory of the Museum of New Zealand (Te Papa) now has identifications of more than 143,000 fish bones, representing a Minimum Number of 44,553 fish from 126 New Zealand archaeological sites. Methods have been developed for reliable size reconstruction of the commonest species in sites from archaeological bones. We are thus able to observe not only variations in relative abundance of fish species regionally and through time but also changes in mean size of popular species. Widespread changes in relative abundance of fish such as snapper, labrids (spotties and wrasses), blue cod and greenbone (butterfish) were probably due to natural changes relating to factors such as surface sea water temperatures, whereas increases in the average size of blue cod and labrids are more likely to be due to cultural factors. Any impacts of Maori fishing

on the inshore environment are subtle and difficult to identify and stand in marked contrast to the huge effect on snapper size, for example, resulting from modern fishing methods.

Bruce McFadgen and Steve Bagley: "Recent Investigations at Lake Grassmere"

The proposed Transrail terminal at Clifford Bay will impinge on land managed by DOC which contains the Marfells Beach archaeological site. Bruce McFadgen and Steve Bagley described an investigation of the land to determine the nature and extent of remaining archaeological deposits and natural deposits of bird bones. The investigation was carried out by DOC and Bioresearches Ltd. and was funded by Transrail. Deposits were associated with a buried soil which still contained shell middens and undisturbed ovens containing moa bone. Sand below the buried soil was shelly and preserved bones of many birds. It was concluded that the site still has the potential to provide valuable information relating to the adaptation of early Polynesians to the New Zealand environment, and to the impact which they had on that environment.

Ian Barber and Tina Delany: "Archaeological landscapes and cultural heritage management in eastern Golden Bay"

This paper reviewed the work of monitoring and archaeological investigation associated with the construction of a sewerage scheme in eastern Golden Bay. From the archaeological work associated with the scheme and subsequent works, complex and extensive archaeological landscapes have been identified in the region. These include deeply stratified soil sections incorporating evidence of early, and on occasion, intensive Maori settlement, through to European contact. Midden, oven, posthole and pit sites as well as extensive modified soil horizons are identified frequently. A number of midden sites have been investigated in detail. Results of the work of midden analysis to date were discussed.

The iwi management perspective on this work was contributed by Tina Delaney for the Manawhenua ki Mohua. Iwi had consented to this work on the understanding that the scheme would protect archaeological sites from the polluting effects of domestic sewerage discharges. The archaeological effects of the work were monitored by the iwi, who participated in archaeological recording and investigation. The consequent benefits of archaeological training and knowledge are seen to support the kaitiaki role of iwi. Manawhenua ki Mohua now consistently require and manage detailed

archaeological assessments of Golden Bay sites affected by development proposals.

Richard Holdaway: "Reliable bone gelatin dates from natural sites"

Richard Holdaway discussed the relationship of bone gelatin dates to known chronostratigraphic markers including two major volcanic tephtras.

Lisa Matisoo-Smith: "Update of Kiore DNA Research"

Generally species identification of rodent remains in archaeological sites in the Pacific is made based on overall size and robusticity of those bones most commonly recovered - mandibles and femurs. Molecular identification of Pacific rat remains suggest that the current method of morphological identification may not be appropriate for species identification. It appears that there is a high degree of size variation on *Rattus exulans* throughout the Pacific and a significant overlap in size between *R. exulans* and other rat species present in the region.

Bruce McFadgen read Atholl Anderson's paper: "A production trend in AMS ages on *Rattus exulans* bone"

Atholl Anderson drew attention to a trend in the radiocarbon ages of rat bones from archaeological sites. The dates from three sites were obtained from two laboratories, Oxford University Research Laboratories and the Rafter Radiocarbon Laboratory at Gracefield. All dates were from archaeological sites and should have produced dates of less than 800 years. In fact rat bone dates measured in 1995 were substantially older than 800 years, rat bones measured in 1996 were old but not as old as those measured in 1995 and rat bones measured in 1997 were within the expected age range. Atholl conclude that there appears to be a 'production' trend in the dates which if confirmed would cast doubt on the validity of early dates (c.1000-2000 B.P.) obtained on the predator accumulated rat bones in 1995.

Final Discussion of Historic Heritage Review Submission.

Report compiled by Moira Jackson and Clare Reeler