



NEW ZEALAND  
ARCHAEOLOGICAL  
ASSOCIATION

## ARCHAEOLOGY IN NEW ZEALAND



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## LETTERS TO THE EDITOR

Dear Editor,

I refer to your issue of June last year (Volume 39, Number 2), where I was surprised to see the tendentious piece by the Australian historian, Austin Gough, on the politics of archaeology in Australia, which I had not heard about before ('The New Official Religion and the Retreat of Western Science').

Gough's account highlights instances where relationships between Aborigines and archaeologists have come into severe and public conflict, but fails to refer to any of the many documented cases where Aboriginal and archaeological interests have been successfully negotiated. I refer your readers to a recent publication, *Archaeologists and Aborigines Working Together*, edited by Iain Davidson, Christine Lovell-Jones and Robyne Bancroft (University of New England Press, Armidale, 1995), where examples of such cases are described.

The archaeologists concerned have not had to sacrifice the standards of archaeological practice and scholarship. What they have been required to do is recognise the legitimacy of the concerns of people who have historical links with the land and its past inhabitants and consult with them.

Jack Golson  
Research School of Pacific and Asian Studies  
Australian National University

Dear Editor,

Recently an Auckland Museum file marked "ARCHAEOLOGY MISC. 1951-" was passed to me as part of an approval process for its destruction.

Much of it was letters to school children advising on a career in archaeology, but there were also items which may be interest to members of this Association.

Correspondence on a national site recording scheme begins with a remarkable proposal by the Historical Section of the Hawkes Bay Branch of the Royal Society of New Zealand. Committee convenor was J.D.H. Buchanan, a schoolteacher at Hereworth School, Havelock North, - a man who later in his career tried to teach me maths.

A letter dated 27 August 1951, presumably addressed to museum director Gilbert Archey, asks for comments on an enclosed recording scheme proposal. 'Buck' writes: "Is such a scheme desirable and practicable on a national basis?", and finishes by stating that it was hoped to have the scheme in operation in Hawkes Bay by the end of the year.

The three page "Suggested scheme for the recording of archaeological sites" begins by outlining concerns regarding site destruction and loss of information that sound very familiar, and puts forward a site recording scheme practically identical to the one we now have. Buchanan acknowledges a suggestion by Mr H.W. Wellman that the scheme be based on one already in use for recording fossil localities.

It is proposed that the Polynesian Society set up a committee to develop a national scheme; a definition of 'site' is put forward; as is the system of site numbers based on inch-to-the-mile map sheets which was eventually adopted; local and central files are proposed. There is also a draft "Archaeological record form" and two pages of instructions for filling it out.

When there was no reply Buchanan wrote again to Archey asking for comments, which the latter duly provided, expressing concern about the availability of information to those "...who would not hesitate to "rat" the deposits." Museum ethnologist Vic Fisher wrote in early 1952 expressing enthusiasm but repeating Archey's concern.

The last letter on file is again from Buchanan, dated 12 March 1952. He thanks Archey and Fisher for their comments and writes of a proposal for a "Board for Archaeological and Historical Sites" being in the hands of the Museums Association. He will also raise the issue at the annual meeting of the Royal Society in May.

"The H.B. Council [of the Royal Society] however thinks that the matter of the setting up of a Board, on the lines suggested by Prof Keesing, with power to make regulations for the control of archaeological investigation, should be gone ahead with as soon as possible."

On behalf of the Hawkes Bay branch Buchanan was also to propose a branch structure at the annual meeting of the Polynesian Society, to encourage and co-ordinate local research, and to have branch representation on the council bring new life to that "moribund society". A few years later the New Zealand Archaeological Association was set up, though without the branch structure that the Hawkes Bay group envisaged. It was 25 years before legislation was passed to regulate archaeological excavations.

In the file there is also a mixed bag of letters, meeting programmes, notices on proposed excavations and study groups, etc., relating to the University of Auckland Archaeological Society. In the 1959 programme: "Our chairman, Mr Hamilton Parker, will speak on LIBYA: Some Problems Raised by a War-Time Interest". There is a notice regarding the 1960-61 summer dig at Kauri Point (railcar times from and to Auckland; weekly camp costs at 3 pounds 10 shillings per person); and one for Mr Golson's farewell party at "approx. 8.30 pm", 22 April 1961, at his flat at 12 Grafton Road.

This material has not, of course, been thrown out, but has gone back to the museum archives to assist future historians in telling the story of New Zealand archaeology.

Nigel Prickett  
Auckland Institute and Museum

Dear Editor,

#### A Perspective on Obsidian Hydration Dating

We would like to thank our friends in the  $^{14}\text{C}$  community for their comments on the obsidian hydration dating program being run by the Centre for Archaeological Research (Higham 1996, Sparks 1996), particularly Roger Sparks with whom we agree in entirety. It is clear however, that we need to put the Obsidian Hydration Dating program into some perspective. We have no doubt that  $^{14}\text{C}$  has made a valuable contribution to archaeological research

in New Zealand and that it will continue to do so. Our intention in developing Obsidian Hydration Dating in New Zealand is to broaden the avenues of research available to archaeologists. Obsidian Hydration Dating is a complementary technique to  $^{14}\text{C}$ , and clearly there will be situations in which  $^{14}\text{C}$  is the preferred technique. Likewise there will be those in which it will be Obsidian Hydration Dating. The two articles published in *AINZ* and critiqued by Sparks (1996) & Higham (1996) (Sutton and Sheppard 1994, Sheppard et al. 1996) are intended to inform the archaeological public about the current status and availability of Obsidian Hydration Dating, rather than launch an attack on any other technique or facility.

Having said this there are some issues raised by Tom Higham (1996) that we feel should be addressed. In terms of the cost of Obsidian Hydration Dating, the current price of \$50 reflects a full costing of the dating process, and this is unquestionably cheaper than  $^{14}\text{C}$ . This is what we see as one of the primary attractions of Obsidian Hydration. We would like to do it cheaper but this price allows for full cost recovery.

Another issue Higham (1996) raises is that the High Precision  $^{14}\text{C}$  facility at Waikato has not been mentioned, stating that this facility can produce a S.E. of  $\pm 25$  years at 0-1000 years B.P. This statement is worth looking at as we find it worrying. The problem with this statement is that what we are talking about here is  $^{14}\text{C}$  years, and what the stated precision means is that at an approximately 68% C.I. the residual  $^{14}\text{C}$  component of the sample lies within a 50 year spread of  $^{14}\text{C}$  years. In order to talk about high precision let's multiply the S.E. by three to get a 99% C.I. This means that the H.P. facility can measure the residual  $^{14}\text{C}$  content of a sample to  $\pm 75$  radiocarbon years or a range of 150 radiocarbon years. As Higham (1996) points out this range will spread out further in the conversion of  $^{14}\text{C}$  years to calendar years. This is not to mention problems that may arise from multiple calibration intercepts, reservoir effects, inbuilt age etc. Thus at best the H.P. date is actually a confidence interval of approximately 200 calendar years, and at some crucial points in New Zealand's prehistory the range will be considerably greater. The point here is that for archaeological utility we must talk in terms of chronological precision as opposed to some value several steps removed. This critique is not intended to run down or devalue  $^{14}\text{C}$  as a technique nor the facilities that perform the measurements, rather the suggestion is that the archaeological community must stop talking in chronometric slights of hand, and start referring to the chronological reality

that the chronometry presents. If this is not lead by the chronometric labs in New Zealand where will it come from?

Another issue raised by Higham (1996) is the fact that Obsidian Hydration Dating requires  $^{14}\text{C}$  for independent evaluation of the dating performance, and that further this is in some way a slightly less than kosher process, especially given what he perceives as our attack on  $^{14}\text{C}$ . First things first, we do not have to use  $^{14}\text{C}$  to evaluate Obsidian Hydration dating. As Obsidian Hydration dating works well in the historic period we can make use of material that comes from sites of known ages. We agree with Higham that the exclusive use of  $^{14}\text{C}$  would be cheeky as this would give us a large target to hit, though we do not agree that chronology based on  $^{14}\text{C}$  measurements is insufficiently accurate that some comparison between the two techniques is unfounded.

In conclusion we see Obsidian Hydration Dating as a complimentary technique to  $^{14}\text{C}$ . We have confidence in the  $^{14}\text{C}$  laboratories in New Zealand, and would not (and do not) hesitate to purchase  $^{14}\text{C}$  dates when necessary and suitable. Even so we feel that it is useful to publish the current status of Obsidian Hydration Dating research and outline the positive aspects of the technique so that it is possible for archaeologists to choose the dating system that is most suitable for their problem.

We believe that people will continue to date carbon with  $^{14}\text{C}$  and obsidian with OHD.

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