ARCHAEOLOGY IN NEW ZEALAND

IMPLEMENTING THE DRAFT INTERNATIONAL CORE DATA STANDARDS FOR ARCHAEOLOGICAL SITES AND MONUMENTS IN NEW ZEALAND

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In the light of the current review of the Historic Heritage Management, launched by the Minister of Conservation, the current practice of site recording in New Zealand is an issue which is not as widely discussed as seems to be necessary. All future heritage management systems or procedures rely on a functional national site recording scheme. The principles formulated by the NZAA (Jacomb 1998) mention the wider archaeological landscape of which each site is part of and archaeological standards which need to be monitored.

Both issues are of outmost importance to the quality of the field information, which is the main basis for archaeological site management. Poor field recording will only allow poor management, however efficient (or non efficient) are the site management procedures. This is a simple truth, often overlooked.

I hope to provoke discussion of the way we record archaeological remains currently, with the following thoughts.

Archaeological survey and recording methods are in a time of change. New, highly accurate and fast digital recording methods challenge the old familiar field methods. Developments of PC power, undreamt of some years ago, provide opportunities to record huge amounts of data in a very detailed way on a restricted budget. Not only systematic and textual information but pictures and drawings can be made part of a database (Andresen 1996). Data exchange and data retrieval through the Internet are recent issues, which could provide archaeology with a strong internal network, integrating government departments, research and contracting archaeology in New Zealand. An informal heritage discussion group via e-mail, thanks to Susan

Forbes, is a glimpse of the possibilities, already available today and developing quickly.

Currently archaeological remains are recorded as sites with one location record accurate to 100 x 100 metres. There are severe restrictions in the use of this basic information.

A. The site concept:

An archaeological site is the interpretation of visible archaeological remains in their relationship to each other and their context in the landscape by a trained archaeologist. This interpretation is open to change over the decades of archaeological research and is therefore not absolute and not fixed. Different archaeologists prefer different interpretations based on their training and experiences, as we all know from the ongoing discussions between 'site splitters' and 'site lumpers'.

The law quite clearly states the protection of all archaeological remains. Standard non-intrusive survey methods can recognize on the surface visible, human-made changes to the landscape. By documenting these site elements in an accurate plan, interpretation and documentation are separated to allow a future re-interpretation of the site without re-surveying it. The accuracy of documenting the site elements has to be around 1-2 metres in the NZ Map Grid, as the accuracy has to match the accuracy of the legal boundaries to be of any help for the bodies concerned with site management and protection. Laser theodolite and differential GPS with a Laser Range Finder are instruments to achieve this accuracy rapidly. Tape, compass and clinometer will achieve the same results, if either a pair of survey control points or geo-corrected blow-ups of aerial photographs are used to construct the survey base line. As the high accuracy, detailed surveying has not been applied very often in the past, we can expect some changes and enhancements to the methods if more archaeologists use them.

Recording the elements of site first, before interpreting the extent of the site, has several advantages. An archaeological landscape can be reconstructed for the purpose of protection on the basis what is really still visible on the ground. Site elements can be interpreted in terms of larger archaeological landscapes and even the management of large sites is far more flexible, balancing the needs of different user groups. The archaeological interpretation of a site, when challenged in a Court or planning tribunal, has to resort to the

visible elements of the site to clarify the interpretation. A detailed and accurate element recording is much better prepared for any legal purposes than a cursory site location survey. If we as archaeologists do not provide the information which can stand up in our legal system, any site protection management is prone to be a failure, however efficient the procedures may be.

B. A national database

The recording of the whole data set as part of the Site Record Scheme in a national database will allow the whole range of heritage agencies and other stake holders to archaeological sites, such as iwi, to access rapidly all the available information, rather than a small subset of the information available as at present through CINZAS. Current restriction of public access to some data is necessary and should be reflected in any future system. The current digital database, CINZAS, run by the Department of Conservation, was designed back in 1978. The ways to handle digital data and the computer power to do more complicated procedures has improved enormously since then. The introduction of a relational database, DBase, to the PC in 1982 marked a significant increase in the use of databases in archaeology (Scollar 1997). The evolution of methods and experiences gained on the way are reflected by national archaeological database applications e.g. in England (RCHME 1993) Denmark or the Netherlands (for an overview: Larsen 1992).

The important step is to provide detailed spatial data as part of the database, which can be integrated into GIS systems displaying legal boundaries and archaeological remains together, and the possibility of an automated ownership update of the land parcel with archaelogical remains. These are the two main components of successful heritage management: spatial extent of the archaeological remains and current ownership of the land in question. Instead of accumulating Site Record Forms for each archaeological event in succesive surveys, a modern database could provide for documenting each event plus updating changed information, thus keeping the Site Record on the latest information level. Re-surveying to establish accurate and precise information of sites will be more common in the future.

C. The archaeological landscape

The interpretation of sites as part of a protected archaeological landscape relies heavily on individual elements, as usually the elements provide the

basis for the archaeological landscape. Re-interpretation of all the elements of several sites into a consistent archaeological landscape is necessary for a public presentation of the archaeological record. The presentation of archaeological remains to a wider public, for example as part of heritage tourism, is still in its infancy in New Zealand. The outlook towards the archaeological landscape rather than the archaeological site is often closer to the interpretation of archaeological remains through mana whenua. Harmonising archaeological interpretation and traditional interpretation of archaeological remains can be a very fruitful process, though there still remain two different points of view towards the same subject. Often patience and listening are qualities required by an archaeologist to achieve this goal.

The Draft International Core Data Standards for Archaeological Sites and Monuments (CIDOC 1995), which was adopted in 1997 by the Council of Europe as the European core data standard (Gillian Quine, RCHME, pers. comm.) provides a relational database model, which can applied to the Site Record Form without too many changes. It was designed especially to provide data exchange and remote data discovery on different platforms through different agencies. Some modifications are necessary to reflect the special circumstances in New Zealand. But a data model based on the international standards could provide data exchange between the involved agencies like HPT, DoC and NZAA, as well as providing iwi with the possibility to set up their own, non-public databases, which can produce a 'consultation flag' for specific areas on Regional Authority GIS systems.
The International Core Data Standards could provide a starting point for an extended national Archaeological Record Base, without having to develop a data model from scratch and thus cutting time and costs to a minimum.

The Draft Set of Principles document of the NZAA (Jacomb 1998) provides a philosophical statement to a re-organised heritage management in New Zealand. But it has to be backed up by accurate and detailed survey information managed in an information system which can provide local authorities, planners and the public with this level of information, in order to be truly successful. If this does not happen any changes to the current heritage management will be a mere cosmetic retouch. Information is power and provides the system with the teeth it lacks currently.

The old saying for information systems (computerised or not) still holds true: Quality in, quality out.

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