wetlands formed by the Alligator Rivers floodplains. The project aims at developing a picture of the prehistoric cultural ecology of the Kakadu wetlands. This is to be achieved through broad reconstructions of the subsistence-settlement patterns which were in place during prehistoric times. To date much effort has been spent evaluating and testing models posed by earlier researchers (e.g. Guse 1992; Hiscock 1990; Hiscock 1993b; Hiscock and Kershaw 1992; Hiscock and Mowat in press; Hiscock, et al. 1992). In addition, original data is increasingly being used to derive inferences about prehistoric human ecology (see Bowen and Mowat above).

Conclusion

This paper provides readers with an update on the archaeological activities at the NTU. In a short period, the size and scope of archaeological teaching and research has expanded significantly. Field research has concentrated on the Alligator Rivers region, but includes areas across the entire top end of Australia. Research interests extend geographically beyond the tropical north to the arid inland of Australia and to island southeast asia, and incorporate many themes, concentrating on issues of site formation and physical/cultural evolution in the Australasian region. As Australian archaeology grows in the 1990s, the NTU is well positioned to contribute to that growth.

References

- Guse, D. 1992 Predictive models of prehistoric settlement and subsistence patterns for the South Alligator and Mary River Wetlands, Northern Territory. B.A.(Hons) thesis, Northern Territory University.
- Hiscock, P. 1990 How old are the artefacts from Malakanunja II? Archaeology in Oceania 25:122-4.
- Hiscock, P. 1993a Bondaian technology in the Hunter Valley, New South Wales. Archaeology in Oceania 28:65-76.
- Hiscock, P. 1993b The distribution of points within Nauwalabila 1. The Beagle 10:173-8.
- Hiscock, P. and P. Kershaw 1992 Palaeoenvironments and prehistory of Australia's tropical Top End. In J. Dodson (ed.) *The Naive Lands*, pp.43-75. Longman Cheshire.
- Hiscock, P. and F. Mowat 1993 Midden variability in the coastal portion of the Kakadu region. *Australian Archaeology* 37:18-24.
- Hiscock, P. and I. Walters 1991 Archaeology at the Northern Territory University: An introduction. *Australian Archaeology* 32:52-5.
- Hiscock, P., F. Mowat and D. Guse 1992 Settlement patterns in the Kakadu Wetlands: Initial data on site size and shape. Australian Aboriginal Studies 2:69-74.
- Sullivan, M. and D. Carment 1992 Cultural heritage conservation in the Northern Territory. North Australian Research Unit Discussion Paper 10.
- Sullivan, M. and P. Hiscock 1992 A suggested cultural resource GIS for the Northern Territory. In C.C. Devonport, S.J. Riley and S.M. Ringrose (eds) *Proceedings of the GIS and Environmental Rehabilitation Workshop*, pp.78-90. Australian Government Publishing Service.

COMING TO TERMS WITH THE NORTHERN TERRITORY HERITAGE CONSERVATION ACT 1991

Peter Hiscock

On 26 September 1991 the Legislative Assembly of the Northern Territory enacted the Heritage Conservation Act. This peculiar piece of legislation is designed to protect natural and cultural heritage, including archaeological materials, but its ambiguity and severe problems in its implementation belie this objective. Archaeologists working in the Northern Territory (NT) are in the process of coming to terms with this Act, and are finding it flawed. The purpose of this paper is to describe some of the immediate difficulties associated with this legislation.

Aspects of the historical background to this legislative change have been documented by Carment (1984, 1991). Since I intend to concentrate on the implications of this Act for current archaeological

activities, I will not repeat its developmental history. What is important to note is that the passage of this legislation represents a shift from a previous Act that was entirely concerned with protection of archaeological materials to one that protects many other phenomena in addition to archaeological materials. The Heritage Conservation Act 1991, section 3, states that:

The principal object of this Act is to provide a system for the identification, assessment, recording, conservation and protection of places and objects of prehistoric, protohistoric, historic, social, aesthetic or scientific value, including geological structures, fossils, archaeological sites, ruins, buildings, gardens, landscapes, coastlines and plant and

Department of Anthropology, Northern Territory University, PO Box 40146, Casuarina, NT 0811, Australia.

animal communities or ecosystems of the Territory.

While this holistic concept of heritage conservation may be advantageous in some ways, in practice it has the potential to create a number of serious obstacles for the management of archaeological resources in the NT.

Areas of concern

The draft of this Act was widely reviewed, and the Conservation Commission of the Northern Territory (CCNT) received almost 50 submissions, including several submissions from individual archaeologists as well as one from the Australian Archaeological Association. Many of these submissions were critical of the underlying concepts and mechanisms proposed in the draft. The National Trust, for example, argued that the draft Act was confused and ineffective, failed to provide assessment methods, and failed to provide resources for the identification and management of heritage places and objects (Carment 1991:75). Despite such critical comments from the professional community, and prolonged criticism from the opposition benches during parliamentary debate, no changes in the direction and nature of the Act were made. Consequently the legislation remains the flawed work that troubled the National Trust. Two issues can be used to illustrate the problematic nature of the Act: the ambiguity of its definitions, and the inadequate protection it offers to archaeological material.

Ambiguity

An underlying problem with the Act is the ambiguity of definitions of archaeological material. A number of definitions are presented in section 4 of the Act, and there the term 'archaeology' is specifically used to refer to a particular time period and/or ethnic group:

'archaeological place' means a place pertaining to the past occupation by Aboriginal or Macassan people.

These definitions effectively exclude material from other ethnic groups who may have lived in the NT (such as Chinese, Afghans, British) and from the historic period. Such material may still be protected under the Act, which also defines 'aircraft', 'vehicle', 'vessel' and the catch-all categories of 'heritage object' and 'heritage place'. However this leaves us in the ambiguous position of having historic ruins that are protected as heritage places but which are not considered under the Act to be archaeological. The ambiguity of this situation is heightened by a realisation that the definition of 'heritage place' under the Act is no definition at all:

'heritage place' means a place in the Territory (whether or not covered by water)

declared under section 26 to be a heritage place; (Heritage Conservation Act 1991 section 4).

The section 26 that is referred to describes the mechanisms whereby the minister declares a place to be a 'heritage place', but does not describe the nature of such a place. The lack of any adequate definition within the Act for this crucial term is dealt with by creating a Heritage Advisory Council, which will define the nature of heritage places and objects through its recommendation to the Minister. Given the role of this Council, it is vital that professional archaeologists should be represented on it (see below).

Archaeologists will also be acutely aware of two other ambiguities contained within this definition of 'archaeological place'. Firstly, archaeologists commonly use 'occupation' in specific ways to imply site function and residence length. For example, classifications used by Australian archaeologists not infrequently contain a category of 'occupation site' to imply either stratified deposits and/or the notion of some kind of base-camp. It is not clear precisely what kinds of archaeological materials would be legally recognised as 'pertaining to past occupation', but to ensure that sites are protected under the Act archaeologists working in the NT may need to be extremely careful in stating their criteria for identifying 'occupation'. Identification of 'archaeological places' within the terms of this Act will, no doubt, be a complex and tricky process, at least until operational guidelines are established. The way in which this definition is implemented has the capacity to include or exclude entire classes of archaeological phenomena, and hence it is vital that archaeologists be involved in the formulation of an understanding of this definition (but see below).

Secondly, there is no mention in the Act of the notion of an archaeological site, only of archaeological places. Over the last two decades archaeologists have engaged in debate over the nature and usefulness of the site concept (e.g. Thomas 1975; Foley 1981), and there is clearly no necessity for a site concept to be employed in order to protect sites. Indeed other conceptual devices may have the benefit of designating and protecting not only sites (however defined) but also the more dispersed archaeological material between sites. Nevertheless, in the absence of any statement on the intention of the phrase 'archaeological place' there is little guide to consistent usage of the term as a synonym for site or for some other scale of reference (e.g. a hearth within a site, or a group of sites). The ambiguity of the notion of archaeological place has implications for the management of archaeological sites. The scale at which the term is used will determine the number of applications that will need to be processed by the Heritage Advisory Council, and therefore the response of that part-time volunteer council to requests for declaration of sites under the Act. A further implication is that archaeologists working within the NT, particularly CRM consultants, may need to abandon standard terminology, such as 'site' in favour of the legally acceptable term 'archaeological place' to ensure that materials are offered protection under the Act.

In a similar vein section 4 of the Act also inadequately defines an 'archaeological object' in the following way:

'archaeological object' means a relic pertaining to the past occupation by Aboriginal or Macassan people of any part of Australia which is now in the Northern Territory, being —

- a. an artifact or thing of any material given shape to by man;
- b. a natural portable object of any material sacred to Aboriginal tradition;
- c. human or animal skeletal remains; or
- d. such objects, or objects of a class of objects, as are prescribed.

Excepting human remains, these statements are broad and ambiguous. The first two descriptions (a and b) within this definition are particularly curious. It is implied that not all humanly modified phenomena are artefacts, but no indication is given as to what might fit into that class. Even more ambiguous from an archaeological perspective is the notion that 'sacred objects', physically unmodified by humans, are archaeological for the purposes of resource management. The development of an archaeological survey strategy that can identify such objects will be a marvel indeed! The inclusion of this notion within the definition of archaeological object suggests a failure on the part of the legislators to differentiate between archaeological and anthropological sites or between scientific and ethnic significance. The implications of this confusion for archaeological consultancies, or for the operation of the Aboriginal Areas Protection Authority (which deals with contemporary sites of significance to Aboriginal people), are as yet undetermined. However, the response of Aboriginal people to classifying culturally significant items as 'archaeological objects' is signalled by the speech of Wesley Lanhupuy, member for Amhem, in the NT Legislative Assembly:

Most certainly I would not wish to have a site that is sacred to me protected as if it were an archaeological site. I would not want people to regard it from an historical point of view. (NT Legislative Assembly Parliamentary Record 1991:1336).

Protection

Perhaps of even more concern to archaeologists is the nature of protection for archaeological material delivered by the Act. The Act (part 5) provides for the permanent protection of only those places/objects that have been declared as a heritage place/object by the Minister, which fact is notified in the NT Government Gazette, and that notification published in at least one newspaper. Temporary protection for 90 days is afforded to sites by an Interim Conservation Order, which must also be notified in the Gazette. At the end of 90 days the Minister must either declare the place/object or refuse the declaration, and in either case notification in the NT Government Gazette is Surprisingly, having established these required. categories of protection of heritage items, the Act then attempts to offer protection to archaeological materials in a separate way. In part 6, section 39 of the Act states that 'prescribed archaeological places and objects' are protected by an Interim Conservation Order without time limit. The phenomena encompassed within this statement are described within the associated regulations. These regulations are made by the Administrator of the NT (equivalent to the Governor of a state), and in section 3 of the relevant Heritage Conservation Regulations (1991, No. 53) it is stated:

- 1. For the purposes of Part 6 of the Act, the following archaeological places are prescribed archaeological places:
 - a. places containing rock paintings or rock carvings;
 - b. prehistoric or protohistoric occupation places;
 - c. places (not being cemeteries within the meaning of the *Cemeteries Act*) containing human remains or burial artefacts.
- 2. For the purposes of Part 6 of the Act, archaeological objects which are Aboriginal portable cultural objects (including but not limited to secret and ceremonial objects, log or bark coffins, human remains, portable rock or wood carvings or engravings or stone tools) are prescribed archaeological objects.

These regulations can probably be interpreted as an attempt to provide blanket protection to archaeological materials, although the inclusiveness of the definitions is questionable, hinging for example on the interpretation of terms such as 'occupation places'. Nevertheless, the Act fails to deal with a number of related issues. Firstly, the Heritage Conservation Act apparently offers no protection for places/objects protected

by an Interim Conservation Order but subsequently not declared.

Secondly, the nature and level of protection afforded to gazetted places/objects is not stated within the Act. While there are severe penalties, in terms of fines and imprisonment, for unauthorised alteration of materials subject to an Interim Conservation Order, or declared as heritage places or heritage objects, other portions of the Act seem antithetical to cultural resource management. For example, there is provision in the Act for disclosure of information on all registered sites to any member of the public upon payment of a prescribed fee (Heritage Conservation Act 1991, section 16). Section 56 allows that access to archaeological places can be prohibited or regulated by statements in Regulations. Presumably such prohibition would involve non-disclosure of information since the unrestricted availability of data on site location and content is not consistent with the protection of archaeological materials. Such a presumption is not spelt out in the Act, however, and is therefore dependent on the policies developed by the Heritage Advisory Council.

Thirdly, the mechanisms whereby consent to destroy archaeological materials can be given are poorly detailed within the Act. There are three likely processes by which such consent might be given. One possibility is section 6.3, which allows 'a collection of objects' to be exempt from the provisions of the Act. Another possibility is to employ a 'conservation management plan' (section 30) which allows objects to be moved or modified. Perhaps the most likely mechanism would be simply the removal of protection conferred by the Interim Conservation Order on prescribed archaeological places and objects. This can be done by the Minister notifying the Heritage Advisory Council of his refusal to declare the material in question a Heritage Place or Heritage Object (sections 26 and 39).

Fourthly, the criteria for the identification and evaluation of Heritage Places and Heritage Objects are not set out in the Act. Applications to have sites declared are assessed by the Heritage Advisory Council using criteria that are to be developed by the Council (Heritage Conservation Act 1991, section 22). Under section 18 the Act provides guidelines to the Council for formulating criteria, but does not specify the way 'significance' is to be determined. Since these criteria are to be set by the Council, the composition of the Council is a matter of some importance (see below).

Implementation of the Act

Irrespective of the details of any legislation, its success is often dependent on the policies employed and the skills of the personnel administering the Act. In

this context, the lack of input into operation of the Act from trained archaeologists is disturbing.

The new Act is administered by the CCNT, whereas the repealed Native and Historical Objects and Areas Preservation Act had been administered by the Art Galleries and Museums of the NT. For more than a decade, and through numerous staff changes, the Museum retained professional archaeologists and, in September 1991, two qualified archaeologists were employed by the NT Museum. While not all interest groups were satisfied with the Native and Historical Objects and Areas Preservation Act or its implementation (see Carment 1984, 1991), the professional archaeologists within the body administering the Act did at least have an input in issues of heritage manage-This is not now the case, since the CCNT currently has no permanent employees with professional qualifications in archaeology or experience in archaeological resource management. Nor does there appear to be any intention on the part of the CCNT to hire qualified archaeologists. During the second reading of the Act in the Legislative Assembly an opposition spokesman, John Bailey, specifically stated:

Research in Kakadu has located 5000 archaeological sites in about half the escarpment area. The archaeologist from the Northern Territory University, Peter Hiscock, has suggested that there may be up to 100 000 archaeological sites within the Northern Territory. For this reason, one of our main concerns is that there will not be adequate funding or expertise, either within the advisory council or the Conservation Commission, to carry out the work required to implement the provisions of this bill.

It would be of a great concern to all members on this side of the House and, I would hope, to members opposite, if the Conservation Commission did not have the funds or expertise to implement all the provisions of this bill in whatever form it is passed. (NT Legislative Assembly Parliamentary Records 1991:1340-1341).

In reply the Minister responsible for the CCNT, Michael Reed, gave a commitment to increase funding to the CCNT, but did not provide a comparable assurance to increase professional staffing (NT Legislative Assembly Parliamentary Record 1991:1356).

A central place in the act is held by a Heritage Advisory Council, which consists of nine individuals whose function is to develop criteria for assessment of places/objects, carry out evaluation, recommend to the Minister places/objects for inclusion on the register, and to provide advice on the conservation of places/objects. This council is responsible for overseeing the

Act and for producing the annual report to the Minister. Given the crucial role of this council it could be expected that professional archaeologists might have representation. In fact, there are no qualified archaeologists on the Council! Of the nine places on the council, one each is drawn from the NT Museum, the National Trust, the CCNT and the Aboriginal Areas Protection Authority (AAPA). No archaeologists were nominated by these four bodies. In particular it is worth noting that the NT Museum chose to nominate a staff member other than one of its archaeologists. Similarly, the AAPA chose not to nominate either one of the professional archaeologists on staff or an Aboriginal person. In short, the three sections of the NT government with council representation (Museum, CCNT, and AAPA) all nominated senior administrators who have no professional qualifications in archaeology and little or no background in the management of archaeological resources.

The remaining five vacancies on the council were advertised publicly in newspapers and attracted a large number of nominations, including several wellqualified archaeologists. In March 1992 the Conservation Minister, Mr Michael Reed, announced his appointments to complete the Council. council members were, by profession, a grazier, a lawyer (chairman), two architects and an historian. Whatever the talents these individuals might have it is clear that none have familiarity with archaeology or archaeological resource management. archaeological expertise within CCNT has therefore been compounded by the absence of an archaeologist on the Heritage Council. The composition of the Council, and particularly the poor representation of people whose primary expertise is heritage, was one criticism of the draft Act (Carment 1991:76). This remains a valid criticism of the Heritage Conservation Act.

Aboriginal interests

It will also be of interest to archaeologists that the Heritage Conservation Act pays minimal attention to the interests of Aboriginal groups. I have already referred to the confusion between archaeological and Aboriginal perspectives in the definitions found within section 4 of the Act. The reference to human and animal bones together in section 4.1.C could be seen as relatively insensitive. Furthermore, the threat of public access to site records was of particular concern to Wesley Lanhupuy, who in his address to the Legislative Assembly stated:

Certainly, I would not want other people to observe sites that may be sacred to me, as a traditional owner ... There is a huge difference between putting a 1920s pub on a pub-

lic register and putting the details of a sacred site in that register. That is one of the loopholes which have not been taken into account during the drafting of this legislation. It is the result of the legislation being so broad and attempting to cover every aspect of heritage and conservation. (NT Legislative Assembly Parliamentary Record 1991:1336).

More importantly there is no Aboriginal representation on the Heritage Advisory Council and no requirement within the Act for Aboriginal consultation on matters of archaeological research or management of archaeological materials. These facts concern not only archaeologists, they also diminish Aboriginal faith in the capacity of this Act to protect their sites in particular, and the heritage conservation process in general.

Conclusion

Coming to terms with the new NT Heritage Conservation Act is no simple matter. Ambiguity within the Act, and the placement of virtually all procedural decisions in the hands of a non-expert (in archaeological terms) Heritage Advisory Council, has meant that the functioning of the Act cannot be predicted. Operation of cultural resource management is barely sketched within the Act. The archaeological community will need to be on the alert as policies are developed by the Heritage Advisory Council, in order to monitor the success of the Heritage Conservation Act in managing archaeological resources.

Postscript (September 1993)

In the year and a half since this paper was written there has been little public clarification of the operation of this Act. Thus far only ten localities have been declared historic places, and all are non-Aboriginal buildings from the historic period (mostly homesteads or buildings near Darwin or Alice Springs such as railway cottages or a bakery). CCNT have processed a number of development projects with associated archaeological surveys and/or salvage excavations. Because of the lack of internal expertise reports are often reviewed by archaeologists hired by CCNT specifically for that purpose. Given the declaration of places and the mitigation work imposed upon developers it is clear that the Heritage Advisory Council has developed working criteria for significance evaluation. However the Council is not a public body, and its deliberations, including assessment criteria, have not been revealed. Archaeologists working in the NT have been active in critically reviewing the Act and suggesting policy directions that might overcome some of the weaknesses contained in the legislation (e.g. Sullivan and Carment 1992).

Archaeologists seeking permits to undertake excavations or collections on archaeological sites in the NT should write to the Director of the Conservation Commission of the NT, PO Box 496, Palmerston, NT 0831.

Acknowledgements

I thank David Carment, Philip Hughes, Marjorie Sullivan and several other individuals who chose to remain anonymous for their comments on drafts of this paper. In particular I thank Marjorie Sullivan for her incisive discussions on the issue. Despite the help of these people, the criticisms housed within the paper are, as they must be, the personal view of the author.

References

Carment, D. 1984 Cultural resource management in Australia's Northern Territory: Problems and prospects. *The Public Historian* 6(3):39-48.

Carment, D. 1991 Heritage legislation in the Territory. In J. Rickard and P. Spearritt (eds) *Packaging the Past?* Public Histories, pp.70-7. Melbourne: Melbourne University Press.

Foley, R. 1981 Off-site Archaeology and Human Adaptation in Eastern Africa. An Analysis of Regional Artefact Density in the Amboseli, Southern Kenya. British Archaeological Research International Series 97.

Northern Territory Legislative Assembly Parliamentary Record 1991, No. 4.

Northern Territory of Australia, Heritage Conservation Act 1991, No. 39.

Northern Territory of Australia, Heritage Conservation Regulations 1991, No. 53.

Sullivan, M. and D. Carment 1992 Cultural Heritage Conservation in the Northern Territory. Darwin: North Australian Research Unit The Australian National University. Discussion Paper No. 10.

Thomas, D.H. 1975 Non-site sampling in archaeology: Up the creek without a site? In J.W. Mueller (ed.) Sampling in Archaeology, pp.61-81. University of Arizona Press.

ARC FELLOWSHIPS FOR AAA MEMBERS

Several AAA members received Fellowships in the last round of the Australian Research Council's funding deliberations. We thought our readers would like to know something about the research the successful candidates intend to carry out whilst holding these Fellowships.

Jim Allen

Jim Allen resigned from the Chair of Archaeology at La Trobe University at the end of October 1993 to take up an ARC Senior Research Fellowship for three to five years. Three main research tasks are planned. The first is to bring to completion, with his La Trobe colleagues, the Southern Forests Archaeological Project (SFAP) dealing with the Pleistocene sites of southwestern Tasmania which have been investigated since 1987. The second task, subject to obtaining further ARC funding, is to return to Tasmania to sample three of the SFAP sites to enable a detailed comparison of TL, OSL and 14C dating for deposits in the 20-35 ¹⁴C kyr age range there. The necessary organic and inorganic dating samples across this age are known to exist in these sites. The third task is gathering data for a book on the Pleistocene archaeology of Australia and New Guinea, a project designed to develop concurrently with the Tasmanian work during the Fellowship. In his spare time (!) he vows to get Port Essington and Motupore out of the filing cabinet. Initially at least, he is taking up his Fellowship at La Trobe, the nearest archaeology department to Princes Park, home of the Carlton football team.

Richard Fullagar

Richard Fullagar was awarded an Australian Research Council Fellowship for five years, commencing 1993, at the Australian Museum, Sydney. The project is titled: the role of stone technology in plant food production and the broad objective is to improve understanding of prehistoric Aboriginal subsistence by integrating analyses of technology and tool function. Use-wear and residues on archaeological artefacts provide an indication of resource use and site function. Analyses of stone technology provide a means to test ideas about settlement history and mobility. project focuses on the role of stone artefacts in the exploitation of resources particularly plant foods in Australia and Papua New Guinea, where subsistence spans a continuum ranging chronologically and geographically from foraging to agriculture. Study of assemblages from PNG was the focus of earlier postdoctoral research at the Australian Museum. Several Australian assemblages spanning at least 30,000 years have been selected for current study because of known preservation of organic residues. These include analyses of quarries and excavated