

“All Things Are Connected”:

An auto-ethnography of archaeological practice with and for the Ngarrindjeri Nation

by

Kelly D. Wiltshire

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Cover image:

The distinct weave of Ngarrindjeri basketry

(courtesy of Change Media 2017)

Warning:

This thesis includes the name and images of Ngarrindjeri people who are deceased.

Permission from appropriate family members has been received to include them.

This thesis is dedicated to the memory of
Uncle Tom Trevorrow
(1954-2013)
Leader. Teacher. Mentor.

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Abstract

This thesis presents an auto-ethnography of archaeological practice set within the context of long-term archaeological investigations at Waltowa Wetland, located on the eastern shore of Lake Albert, South Australia. This project has emerged from a collaborative program of research with organisations and leaders of the Ngarrindjeri Nation, who are the traditional owners and Native Title Claimants for the Lower Murray, Lake Alexandrina, Lake Albert, *Kurangk* (Coorong) and Encounter Bay regions of South Australia. At the heart of the Ngarrindjeri Nation lies the philosophy of *Ruwe/Ruwar* (land/body), an interconnected understanding that dictates Ngarrindjeri connection, rights and responsibilities to their *Ruwe* (land). This philosophy is, however, marginalised in the ongoing development and management of *Yarluwar-Ruwe* (sea-country); most notably during the events surrounding the Hindmarsh Island Royal Commission, which failed to comprehend this philosophy whilst denying the existence of gender-based divisions, knowledges and areas. As a result, the ongoing management of *Yarluwar-Ruwe* privileges archaeological driven assessments, which translate and limit Ngarrindjeri connection, rights and responsibilities into a set of confined and manageable archaeological sites. Therefore, archaeological practice and the knowledge it produces maintains a hegemonic and privileged position in the ongoing management of Ngarrindjeri *Yarluwar-Ruwe*.

In order to address the privileged position archaeology maintains, this thesis draws upon Actor-Network Theory (ANT) to reconceptualise archaeological practice as an assemblage, in order to ethnographically describe or disassemble the everyday activities, interactions and connections often marginalised in the production of archaeological knowledges. In doing so, this thesis maintains that disassembling archaeological practice provides an important first step towards reassembling archaeological practice, in order to produce new knowledges that privilege Ngarrindjeri rights, responsibilities and interests; however, the findings of this research highlights how the agency of the Ngarrindjeri Nation has been actively reassembling archaeologists and archaeology long before this research commenced, challenging the premise from which this thesis emerged. At the same time, this agency continues to be marginalised by the self-evident nature of archaeological practice, which instead nurtures a mutually constitutive connection between archaeologist and ‘archaeology’; a connection that contributes towards my development as archaeologist, whilst simultaneously producing the ‘archaeology’ at Waltowa Wetland. The findings of this research also highlight how the key

point of archaeological knowledge production occurs beyond the boundaries of an archaeological ‘site’, through a process of literary transcription that actively assembles and transcribes observations produced by this connection. Lastly, the findings of this research highlight how the existence and agency of Ngarrindjeri gender-based divisions, knowledges and areas continues to play an important role in the ongoing management of *Yarluwar-Ruwe*. Therefore, in many respects the findings of this research challenge the outcomes of the Hindmarsh Island Royal Commission from which this thesis emerged, in turn demonstrating all things truly are connected.

Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and to the best of my knowledge and belief it does not contain any material previously published or written by another person where due reference is made in the text.

Signed: 

Dated: 22.11.2017

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This thesis would not exist without the ongoing support of numerous mentors, colleagues, friends and family. All have contributed to this thesis in some way.

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Lastly, a personal reflection: I am so glad I did this PhD. Despite questioning both the purpose of and my ability to undertake this research, numerous mentors, colleagues, friends and family continued to provide support that allowed this thesis to be completed. As a result of this PhD I have developed both personally and professionally. I am also a little less ignorant. Most importantly, this PhD research has intellectually prepared me for the possibility of an alternative future—both for myself and for the many members of the Ngarrindjeri Nation who supported this research.

List of Abbreviations

AAA	Australian Archaeological Association
AARD	Aboriginal Affairs and Reconciliation Division
AHA	Aboriginal Heritage Act
ANT	Actor-Network Theory
CHM	cultural heritage management
CLLMM	Coorong, Lower Lakes and Murray Mouth
DEP	Department for Environment and Planning
DEH	Department of Environment and Heritage
DEWNR	Department of Environment, Water and Natural Resources
GPR	ground penetrating radar
HIRC	Hindmarsh Island Royal Commission
IHP	Indigenous Heritage Program
KNYA	Kungan Ngarrindjeri Yunnan Agreement
MDB	Murray Darling Basin
NCCHP	Ngarrindjeri Caring for Country Heritage Program
NHC	Ngarrindjeri Heritage Committee
NLPA	Ngarrindjeri Land and Progress Association
NNTMC	Ngarrindjeri Native Title Management Committee
NRA	Ngarrindjeri Regional Authority Inc.
NRAPPU	Ngarrindjeri Regional Authority Policy Planning Unit
NRM	natural resource management
NYR	Ngarrindjeri Yarlurwar-Ruwe
SA	South Australia
SBREC	Social and Behavioural Research Ethics Committee
STS	Science and Technology Studies

List of Ngarrindjeri Terms

<i>KALDOWINYERI</i>	Creation
<i>KORNI</i>	Man, male
<i>KRINKARI</i>	White / non-Ngarrindjeri person
<i>KUMARANGK</i>	Hindmarsh Island
<i>KUNGUN</i>	Listen
<i>KUNGUN NGARRINDJERI YUNNAN</i>	Listen to Ngarrindjeri people talking
<i>KURANGK</i>	Coorong, neck, long-neck of water
<i>LAKINYERI</i>	Clan
<i>LALANGANGGEL</i>	Side by side
<i>MURRUNDI</i>	Murray Bridge area
<i>MIMINI</i>	Woman, female (single)
<i>MIMINAR</i>	Women (plural)
<i>MINGKA</i>	Stone curlew
<i>MIWI</i>	Feeling and knowing, sixth sense
<i>NGARTJI</i>	Totem, special friend
<i>NGAUT NGAUT</i>	Devon Downs
<i>RAUKKAN</i>	Point McLeay, ancient way
<i>RITJARUKI</i>	Willie wagtail
<i>RUWE</i>	Land, Country
<i>RUWAR</i>	Body
<i>TUNGAWA</i>	Fromm's Landing
<i>WARNUNG</i>	Hack's Point
<i>YANNARUMI</i>	Speak as Country
<i>YARLUWAR-RUWE</i>	Sea-country
<i>YUNNAN</i>	Speak

Chapter 1 – Introduction

It's our heritage, buried in the ground...but to take Aboriginal people's word for it,
through our oral history, is not good enough.
(T. Trevorrow in DeBelle 2002)

We know it all in our minds and our memories you know, but that's not good
enough for white people. It has to be something written on paper or that's the only
way they understand us, because we can talk to them till we are black in the face,
blue in the face...
(G. Trevorrow in Wiltshire 2006c:91)

This thesis presents an auto-ethnography of archaeological practice that draws upon Actor-Network Theory (ANT) to describe the practices and often marginalised connections that influence the production of archaeological knowledges. This ethnography is set within the context of long-term archaeological investigations carried out at Waltowa Wetland, an 821 hectare wetland area located on the eastern shore of Lake Albert, South Australia (SA; see Figure 1.1). These archaeological investigations emerge from a collaborative program of research with organisations and leaders of the Ngarrindjeri Nation, who are the traditional

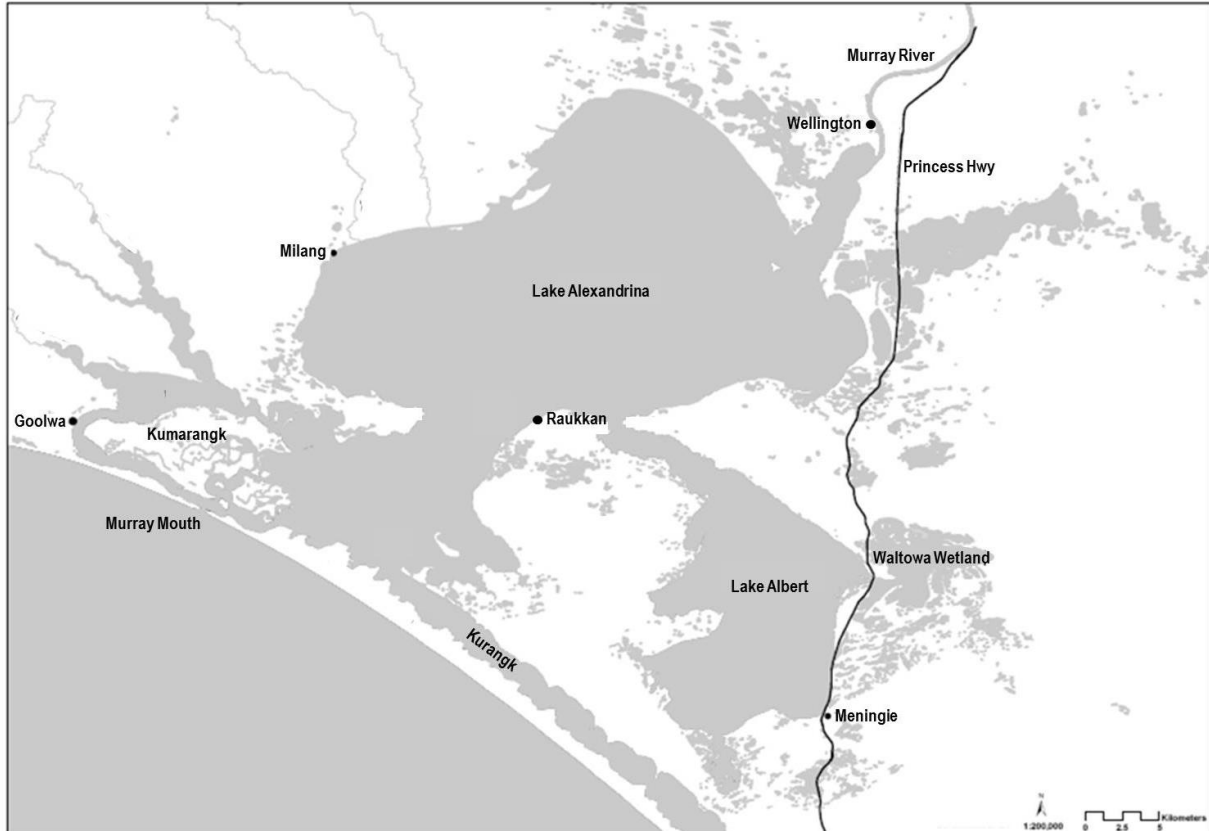


Figure 1.1 Map showing location of Waltowa Wetland (map courtesy of NRA 2015).

owners and Native Title Claimants of the Lower Murray, Lake Alexandrina, Lake Albert, *Kurangk* (Coorong) and Encounter Bay regions of South Australia (see Figure 1.2).

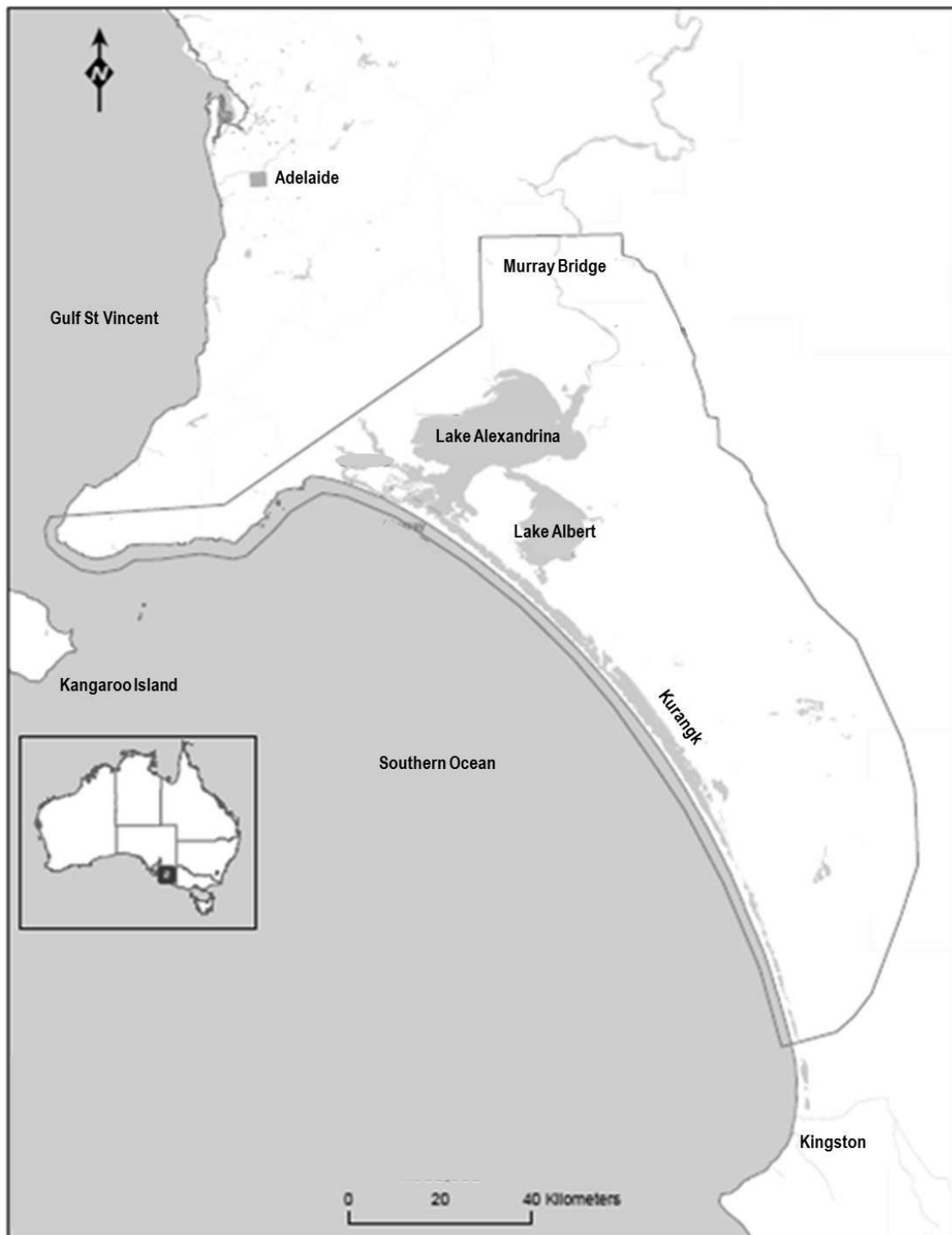


Figure 1.2 Map showing location of Ngarrindjeri Ruwe and Native Title claim area (courtesy of NRA 2015).

At the heart of the Ngarrindjeri Nation lies the philosophy of *Ruwe/Ruwar*¹, an interconnected understanding that dictates Ngarrindjeri connection, rights and responsibilities to their lands, waters and all living things including their Old People². The health of Ngarrindjeri lands, waters and all living things is deeply interconnected with the health of Ngarrindjeri people. The following quote by Ngarrindjeri Elder Uncle Tom Trevorrow responding to drought conditions affecting the region demonstrates this connection.

The lands and waters is a living body. We Ngarrindjeri people are part of its existence. The lands and waters must be healthy for the Ngarrindjeri people to be healthy. We are hurting for country. The Land is dying, the River is dying, the Kurrangk (Coorong) is dying and the Murray Mouth is closing. What does the future hold for us? (T. Trevorrow in Ngarrindjeri Nation 2006:5)

A core principle of this philosophy is the Ngarrindjeri concept of *Yannarumi*, which broadly translates to ‘Speaking as Country’ (Hemming et al 2016:2). In-line with this concept, continually improving the health of Ngarrindjeri lands, waters and all living things to ensure the ongoing health of Ngarrindjeri people resulting in a healthy *Ruwe/Ruwar* is a long-term aspiration of Ngarrindjeri leadership (Hemming and Rigney 2014; Hemming et al. 2011:109; Ngarrindjeri Nation 2006:5). Therefore, the Ngarrindjeri Nation has a responsibility to Speak as Country to ensure the health of *Yarluwar-Ruwe* and in turn the Ngarrindjeri Nation (Hemming et al. 2016:5).

In recent years a combination of historical mismanagement, worsening drought conditions and increased salinity within the Murray Darling Basin (MDB) have resulted in increasing State Government driven, regionalised natural resource management (NRM) regimes in SA. These regimes include the introduction of the *Natural Resources Management Act 2004* (SA), State NRM Plans, State NRM councils and regional NRM boards. Such regimes rely on archaeological driven assessments that translate and limit the complex connection between the Ngarrindjeri Nation and their *Yarluwar-Ruwe* into a set of confined and manageable archaeological sites; that is, a past-orientated, technological and/or economic focused understandings of culture that isolates contemporary Ngarrindjeri people from their rights, responsibilities and interests in water quality and quantity (Birckhead et al. 2011; Hemming 2006). Within this context, these archaeological informed understandings of Ngarrindjeri

¹ Ngarrindjeri terminology is privileged throughout this thesis as part of the collaborative approach that informs the methodology. Refer to ‘List of Ngarrindjeri Terms’ for the definition of terminology included herein.

² The term Old People is used to refer to Ngarrindjeri ancestors who have occupied Ngarrindjeri *Yarluwar-Ruwe* since *Kaldowinyeri* (see Bell 2008:111). This term is also used when discussing ancestral remains; ‘skeletal remains’ or ‘bones’ are problematic terms as they reduce Ngarrindjeri ancestors to objects and do not recognise them as a living part of *Ruwe/Ruwar* (T. Trevorrow, Pers. Comm., 2006).

culture maintain a privileged and hegemonic position, which marginalise contemporary Ngarrindjeri interests in the ongoing management of their *Yarluwar-Ruwe* (Hemming 2006, 2007, 2014; Hemming and Rigney 2008, 2010). Ngarrindjeri Elders quoted at the beginning of this thesis emphasise the frustration associated with this marginalisation. In short, archaeological knowledges have become an expert form of knowledge in government practices to identify, authenticate and manage Ngarrindjeri interests in *Yarluwar-Ruwe*.

Drawing on philosophy by Foucault (1991), L.J. Smith (2000a, 2000b, 2001, 2004) argues archaeological knowledges represent a form of governmentality or a technology of government used to authenticate Aboriginal³ people and their interests. Also drawing on Foucault and discussing similar themes, sociologist Tony Bennett (2007a, 2007b, 2013) explores the historical relationship between government and cultural knowledges; knowledges produced by the knowledge practice of anthropology and the related disciplines of archaeology, heritage studies, natural history and art history. Bennett (2007a, 2007b, 2013, 2014) uses ANT to reconceptualise past anthropological practice as an assemblage to describe the work that goes into producing cultural knowledges as well as the work of these knowledges. In doing so, Bennett (2007b) argues that a distinct historical assemblage, particularly as a result of the influence of anthropologist Baldwin Spencer, mobilised a construct of Aboriginal culture in Australia during the late nineteenth century. Bennett (2007b:11) maintains:

By bringing together artefacts, photographs, films, and sound recordings from diverse locations, combining these in new ways, simplifying and condensing them by subjecting them to further processes of inscription, Spencer produced something that had not existed before: Aboriginal culture, not as a set of autochthonous realities that preceded his inquiries, but as a new surface that organized new sets of governmental and administrative interfaces through which the former might act on the latter and which, in turn, made Aboriginality performable in new ways.

As a result, Aranda culture of central Australia came to represent ‘traditional’ Aboriginal culture (Griffiths 1998:183). These historical, out-dated constructs of culture became “stabilized into institutionally durable forms” (Bennett 2007b:6) and deployed by government as mechanisms for assembling a system of asymmetrical power and authority, which rely on the knowledge practices of anthropology and archaeology as a technology or technique to provide expert knowledge on the authenticity of this culture. In other words, the knowledge practices that create and maintain this construct of Aboriginal culture are also used to

³ This term is used to refer to Aboriginal people in general within a broader national context. The term Indigenous people is used as a general term when discussing an international context.

authenticate it. Within this space, contemporary Aboriginal people and their interests must conform to this constructed notion of Aboriginal culture or risk themselves and their interests being marginalised or labelled as inauthentic or fabricated.

Despite this, describing the process in which the constructions of cultural knowledges are produced allows for the marginalisation of Aboriginal people and their interests to be challenged. Recent developments within the social sciences and humanities as a result of the ANT inspired material and ontological turn maintain that the practices responsible for the production of cultural knowledges need to be described or disassembled in order to flatten out the hierarchy that allows such knowledges to maintain a privileged and hegemonic position (Bennett et al. 2014; Harrison 2013b; Latour 2004). In relation to the Ngarrindjeri Nation, Hemming (2014) argues that describing such practices go hand-in-hand with the development of strategies that challenge these cultural knowledges. In particular, Hemming's (2014) research examines the outputs of cultural knowledges produced by archaeological practice within this context, whereas research by Wilson (2017) seeks to actively reassemble these cultural knowledges by privileging a Ngarrindjeri standpoint. Contributing to this existing program of research, this thesis seeks to describe not just the practices responsible for the production of archaeological knowledges, but the connections often marginalised in the production of this knowledge; in other words, the inputs of cultural knowledges produced by archaeological practice. In doing so, this thesis will contribute to a thorough consideration of archaeology's "knowledge place" (Law 2011:8-10) within Ngarrindjeri *Yarluwar-Ruwe*; its inputs, its outputs and how it can be reassembled to privilege contemporary Ngarrindjeri rights, responsibilities and interests.

1.1 Historical Context

The outcomes of the Hindmarsh Island Royal Commission (HIRC) set the scene for the focus of this thesis to emerge; as feminist anthropologist Diane Bell (1998:372) poignantly notes, anyone working with the Ngarrindjeri Nation does so in the shadow of the HIRC. The HIRC concluded that contemporary Ngarrindjeri culture, including the existence of gendered knowledge, did not reflect more 'traditional' and 'accurate' representations contained within anthropological texts. These texts together with statements by Western, museum-based male 'experts' were used to construct a history, culture and identity for Ngarrindjeri people, which was perceived to lack gender-based knowledge divisions and to now be 'extinct' (Hemming 1996, 1999, 2007; Hemming and Rigney 2010; Hemming and Trevorrow 2005; Trevorrow and Hemming 2006). In response to these outcomes, Ngarrindjeri Elder Auntie Doreen

Kartinyeri (in Kartinyeri and Anderson 2008:170) expressed a sense of clear injustice and bewilderment, stating that “as far as [the anthropologists]...were concerned, they were the experts on my culture, which I still can’t understand how that could be when they are not Ngarrindjeri...” The HIRC concluded Ngarrindjeri Elders including Aunty Doreen Kartinyeri, Aunty Veronica Brodie, Aunty Maggie Jacobs, Uncle Tom Trevorrow and Uncle George Trevorrow had ‘fabricated’ Ngarrindjeri gendered knowledge in order to stop a proposed bridge development (see Bell 1998, 2014; Hemming 1996, 1999; Hemming and Trevorrow 2005; Kartinyeri and Anderson 2008). This was a devastating outcome for Ngarrindjeri Elders, who had put their faith in State and Federal legislation, as well as the judicial system, in order to fulfil their rights and responsibilities in-line with *Ruwe/Ruwar*. Consequently, the HIRC enforced the myth that ‘authentic’ Aboriginal culture in south-eastern Australia could only be found within anthropological texts and/or the archaeological record, ensuring both anthropology and archaeology maintained a privileged and hegemonic position in the ongoing management of Ngarrindjeri *Yarluwar-Ruwe*.

In spite of this, the outcomes of the HIRC created a turning point in the way the Ngarrindjeri Nation engage with and respond to the ongoing development and management of their *Yarluwar-Ruwe*. When the burials of two Ngarrindjeri Old People were disturbed in 2002 during the re-development of the Goolwa wharf, only metres from the completed bridge, Ngarrindjeri leaders were well within their rights to prosecute the Alexandrina Council under the *Aboriginal Heritage Act 1988* (SA; AHA 1988). Ngarrindjeri leaders were, however, cautious of relying on State and Federal legislation again to fulfil their rights and responsibilities to protect their heritage. Furthermore, using this legislation “...may have resulted in a series of expert reports from archaeologists and anthropologists and another testing of the ‘authenticity’ of Ngarrindjeri traditions based on the effectiveness of expert evidence and reports in a court-room setting...” (Hemming and Trevorrow 2005:247-249). Ngarrindjeri leaders decided to work around the AHA 1988 and instead negotiated through their lawyer an agreement with the Council, entitled a *Kungun Ngarrindjeri Yunnan Agreement* (KNYA), with the aim to build a new relationship based on principals of reconciliation, sharing and respect; principals that also inform the philosophy of *Ruwe/Ruwar* (see Hemming and Trevorrow 2005:243-4; Kartinyeri and Anderson 2008:11, 20; MacGill 2014; Ngarrindjeri Nation 2006:16). This legally binding agreement formally recognised Ngarrindjeri rights and responsibilities in-line with *Ruwe/Ruwar*, providing an alternative to relying on State and Federal legislation and shifted negotiations away from the

‘authenticating’ nature of anthropological and archaeological knowledges (Hemming and Trevorrow 2005:247-9; also see Hemming 2006, 2014; Hemming and Rigney 2008; 2010; Hemming et al. 2010).

Today, this agreement-making strategy has been developed and expanded as part of a broader Ngarrindjeri-initiated, controlled and collaborative research program with Flinders University-based researchers, to develop strategies that support Ngarrindjeri rights and responsibilities in the ongoing management of their *Yaluwar-Ruwe* (see Hemming and Rigney 2008, 2010, 2011, 2012; Hemming and Trevorrow 2005; Hemming et al. 2008; Hemming et al. 2007, 2008). This research program has also resulted in the establishment in 2007 of the Ngarrindjeri Caring for Country Heritage Program⁴ (NCCHP) in an effort to further address the marginalisation of Ngarrindjeri rights and responsibilities by promoting the Ngarrindjeri philosophy of *Ruwe/Ruwar* in long-term management planning within the region. The NCCHP includes research based case studies designed to further develop theoretically-informed, transformative strategies such as agreement-making and capacity building. Subsequently, this research program resulted in the establishment of the Ngarrindjeri Nation’s governing body: the Ngarrindjeri Regional Authority Inc. (NRA).

Since 2007 the NRA has been a centralised and formal point of contact for the Ngarrindjeri Nation. The development of this Ngarrindjeri governance structure has shifted the system of asymmetrical power and authority to allow for a ‘nation-to-nation’ relationship between the Ngarrindjeri Nation and the State where a government of Ngarrindjeri leaders negotiate directly with State Government Ministers (M. Rigney in DEWNR and NRA 2012:8; NRA 2013:4). In 2009, this ‘nation-to-nation’ approach resulted in the signing of KNYA with the State Government, underpinned by the same principles as the previous KNYA (see DEWNR and NRA 2012). As a result, this KNYA formalised:

...a shift from positioning Ngarrindjeri as a stakeholder group to one that was recognized as the traditional Indigenous owners of the area who held the responsibility to manage Ngarrindjeri lands and waters. It would therefore no longer be acceptable for non-Indigenous people, organizations and governments to assume the position of complete control over the Ngarrindjeri nation (Rigney and Hemming 2014:542).

This KNYA also established a regular Taskforce between NRA and the State, which provides a formal structure of meetings to ensure the inclusion of Ngarrindjeri rights and responsibilities into long-term government policy and management planning of Ngarrindjeri

⁴ The NCCHP later became the Ngarrindjeri Yarlwar-Ruwe (NYR) Program.

Yaluwar-Ruwe. In other words, these KNYA Taskforce meetings allow for Ngarrindjeri philosophy of *Ruwe/Ruwar* to become central in the future management of Ngarrindjeri *Ruwe* and no-longer marginalised (DEWNR and NRA 2012; Hemming and Rigney 2011, 2013; Hemming et al. 2011). These KNYA Taskforce meetings also resulted in the signing of a Ngarrindjeri Partnerships Agreement establishing a formal partnership between the SA Department of Environment, Water and Natural Resources (DEWNR) and NRA to deliver the State Government's *Murray Future: Lower Lakes and Coorong Recovery* program, which provides management planning for the region for the next decade (DEH 2009; Hemming and Rigney 2008, 2011; Hemming et al. 2010). Specifically, this program provides long-term resourcing for NRA to further develop their capacity to respond to increasing pressures from government agencies, industry partners and researchers as a result of this increased management of Ngarrindjeri *Yarluwar-Ruwe*. As part of this capacity development, NRA established a Policy and Planning Unit (NRAPPU) and used this as a basis to establish the Ngarrindjeri Yarluwar-Ruwe (NYR) Program. The NRAPPU supports the NYR Program in:

coordinated development and implementation of Caring for/as Country strategies and activities within Ngarrindjeri *Ruwe/Ruwar*; a forum for engagement, discussion and innovation; the provision of advice and formal responses to requests from the Ngarrindjeri nation and external bodies such as government at all levels, education and research organisations, and the business sector; promotion of the NRA and its activities; and supporting the NRA in achieving its goals to build capacity and create increasing opportunities to manage Ngarrindjeri lands, waters and all living things (Hemming et al. 2016:11).

This capacity development also allowed for the NRA to engage a range of specialists including a Research Officer, Policy and Planning Officer and Heritage Specialists⁵, which support NRA in delivering the *Murray Futures* program and assist in the development of training, employment and economic opportunities for the Ngarrindjeri Nation (Hemming 2009:252; Rigney and Hemming 2014:542; Hemming et al. 2010:95, 2011:110). More recently, the NYR Program has developed a process of Ngarrindjeri *Yannarumi* assessment to ensure management planning within *Yarluwar-Ruwe* recognises Ngarrindjeri rights and responsibilities in-line with the philosophy of *Ruwe/Ruwar* (Hemming et al. 2016:15-18). Working with the Mannum Aboriginal Community Association Inc. (MACAI)—who are a founding member of the NRA—this assessment process has been applied to wetland planning within *Murrundi*, “...to ensure that NRA visions and aspirations were included throughout the development of the whole plan—rather than tacking a “cultural” chapter into a

⁵ Archaeologists.

mainstream wetland management plan” (Hemming et al 2017:13). As a result of its ongoing success, the NYR Program recently won the Australian Riverprize 2015 for excellence in river management (NRA 2015).

Despite this success, increasing pressures from government, industry and researchers continue to create constraints on the Ngarrindjeri Nation’s capacity to develop transformative strategies to challenge the marginalisation of their rights, responsibilities and interests. As Hemming et al. (2010:94-95) argue, challenging a system of asymmetrical power and authority takes time, resources, expertise, legal advice and strategic programs, most of which exist as “scarce commodities” (Bell 2008:107) for the Ngarrindjeri Nation. As a result, short-term archaeological surveys remain the prominent means to assess Ngarrindjeri interests in *Yarluwar-Ruwe*, ensuring limited archaeological understandings maintain a privileged and hegemonic position (see Hemming 2006; Hemming and Rigney 2010). Despite this, the Ngarrindjeri Nation continue to engage with archaeology and archaeologists as part of the NCCHP, which provides a program of research to challenge the marginalisation of their rights and responsibilities. Indeed, research that challenges this marginalisation is considered a priority for the Ngarrindjeri Nation (Hemming and Rigney 2010; Hemming et al. 2011:102). As a result, this PhD research was developed as part of the NCCHP with a broader aim to address the privileged and hegemonic position archaeological knowledges maintain within this region. Therefore, this thesis sets out to ethnographically describe the practices responsible for the production of archaeological knowledges, in order to inform the development of transformation strategies to challenge the hegemonic and privileged position of these knowledges.

This thesis is not, however, a rejection of archaeology nor does it seek to undermine archaeological knowledge; rather, this thesis seeks to enrich archaeological practice by better understanding the often marginalised connections that influence the production of archaeological knowledges. Indeed, the lack of archaeological investigations within Ngarrindjeri *Yarluwar-Ruwe* has resulted in a limited understanding of the nature and complexity of Ngarrindjeri lifeways⁶, which continue to emphasise technological and economic understandings of Ngarrindjeri culture. Despite this, NRA continues to engage with archaeology and archaeologists every day to support Ngarrindjeri rights and responsibilities in the ongoing management and protection of their *Yarluwar-Ruwe*. Prior to this engagement,

⁶ The use of the term ‘lifeways’ refers to the Ngarrindjeri Nation’s continuing interconnection with their *Yarluwar-Ruwe*, which may manifest itself archaeologically.

archaeological knowledges produced from the investigation of Old People's places⁷ within the *Kurangk* informed the development management strategies for their protection (see Luebbers 1981, 1982). Similarly, when the two Ngarrindjeri Old People were disturbed during the re-development of the Goolwa wharf that resulted in a *KNY Agreement* between the Ngarrindjeri Nation and the Alexandrina Council, archaeology provided the 'proof' of the area's significance despite ongoing concerns from Ngarrindjeri Elders that the development would disturb their heritage (Debelle 2002; Trevorrow and Hemming 2006:301). In this instance, 'archaeology' was used as a facilitator for Ngarrindjeri people to reassert their rights and responsibilities in the area following the outcomes of the HIRC⁸ (Hemming and Trevorrow 2005:247-9). At the same time, however, 'archaeology' was also privileged over the ongoing concerns from Ngarrindjeri Elders. Thus, there is a need to better understand the production of archaeological knowledges in order to challenge the hegemonic and privileged position it maintains in the ongoing management of *Yarluwar-Ruwe*.

1.2 Broader Research Scope

By undertaking an ethnography of archaeological investigations, this research draws on two key bodies of literature: sociologies of scientific practice and ethnographies of archaeological practice. First and foremost, sociologies of scientific practice developed in the early 1980s within the field of Science and Technology Studies (STS) by Bruno Latour, Michael Callon and John Law. Although, prior to this in the mid-1970s:

...a few researchers hit on the idea of treating contemporary scientific laboratories as workplaces in which knowledge and facts were 'constructed' or 'manufactured', and they began to conduct what came to be known as *laboratory studies*...(Lynch 1993:xvii).

Sociology of scientific practices "follow scientists" and observe "science in action" (cf. Latour 1987) within a laboratory environment. These studies use participant observation to produce detailed ethnographic descriptions of scientific 'data' and 'fact' production. In doing so, these studies do not take scientific 'facts' as self-evident and seek to understand the establishment of such facts and their actual factuality. Key case studies such as *Laboratory Life: The Social Construction of Scientific Facts* (Latour and Woolgar 1979), *Science in*

⁷ The term 'Old People's places and/or belongings' refers to physical traces left by Ngarrindjeri ancestors and is used throughout this thesis in lieu of 'sites' and 'artefacts', which are archaeologically imposed terms that reduce these physical traces to objects of study that are disconnected from *Ruwe/Ruwar* (cf. T. Trevorrow, Per. Comm., 2006).

⁸ Following the HIRC a newly elected federal Liberal government introduced the *Hindmarsh Island Act 1996*, which exempt the *Kumarangk* area from the purview of both State and Federal legislation in order to proceed with the bridge development. As a result, the Ngarrindjeri Nation had no legislative means to legally protect the *Kumarangk* area from development.

Action: How to Follow Scientists and Engineers Through Society (Latour 1987) and *Art and Artifact in Laboratory Science* (Lynch 1985) were part of a movement that de-mystified scientific practice and the production of scientific ‘facts’, challenging the objective nature of scientific practice and knowledge as well as the authority afforded to scientists. For the most part, these classic sociologies concluded scientific knowledge to be a socially constructed product or “artefact” (Lynch 1985, 1993:92) of both laboratory cultural practices and the social connections that exist between scientists, with the knowledge produced relative to the social context or culture of the laboratory (Byrne et al. 2011:11; Harman 2007:43; Law 2011:2; Lynch 1993:91-2; Woolgar 1988:18). These conclusions are not too dissimilar from arguments made decades earlier by influential sociologist of science Thomas Kuhn (1962), who maintains that scientific ‘facts’ are relative to the research framework or “paradigm” from which they emerge.

Despite being an early proponent in the social construction of scientific knowledge, sociologist and philosopher Bruno Latour was also the first to abandon social construction, claiming it to be the key weakness of early sociologies of science (Van Rebrouck and Jacobs 2006:36-7; see Latour 1993, 1999). As a result, the term ‘social’ was omitted from the subtitle of the second edition of Latour and Woolgar’s (1986) *Laboratory Life: The Construction of Scientific Facts*. Latour (2005:7) argues there is an assumption within traditional sociology that the social is a distinct micro-context of reality separate from economic and/or political contexts. Furthermore, Latour argues the entire notion of contexts, particularly social contexts, creates an unnecessary dichotomy that restricts ethnographic descriptions of knowledge production to social contexts and socially derived outcomes. In response to this, Latour took inspiration from French philosopher Giles Deleuze’s assemblage theory in order to reconceptualise or “reassemble” (cf. Latour 2005) the nature of social contexts. In doing so, Latour (1999, 2005; Callon and Latour 1992) developed ANT as an inductive method of ethnographic description to describe the production of knowledge outside a given context.

Turning to ethnographies of archaeological practice, this body of literature emerged as a hybrid practice of archaeology and anthropology as a result of an increasing concern with reflexivity in archaeological practice. Ethnographies of archaeological practice use anthropological methods to reflexively describe the cultural practice of archaeology (Chadwick 2003; Edgeworth 2006, 2010; Hodder 1997, 1999, 2000; Lucas 2012). Edgeworth (2010:53-55) describes the importance of this field by stating:

As well as studying material artefacts from the past, it is also important to be reflexively aware of the artefacts of archaeological practice through which material evidence is shaped and fashioned by archaeologists in the present...we cannot explain other cultures without attempting to understand our own culture of explanation: to produce viable knowledge about the past we must also at least partially understand the cultural and material processes through which that knowledge is produced. In this important sense ethnography of archaeology does not seek to undermine archaeological knowledge...[but] to augment and enrich archaeological practice by illuminating crucial and up to now neglected dimensions to it.

Ethnography of archaeological practice is interested in how the collection of data and its interpretation during field-work is influenced by factors, such as an archaeologist's socio-political position, the use of particular techniques and equipment, and the broader social context of field-work (see Chadwick 2003; Edgeworth 1991, 2003; Gnomes 2006; Kawelu 2007; Lucas 2001; Roveland 2000, 2006; Van Reybrouck and Jacobs 2006). As a result, ethnographies of archaeological practice have a tendency to focus on archaeological practices undertaken during field-work, particularly excavation, in much the same way that traditional sociologies of scientific practice focus on scientific practices within a laboratory environment. For example, in his Doctoral research, Edgeworth (1991) focused upon the connection between archaeologist and 'archaeology' that occurred during the "act of discovery" in the context of excavation as the basis for the production of archaeological knowledge. This research did not, however, venture beyond the boundaries of excavation, nor did it consider or account for pre-existing connections beyond the field that influence this "act". As such, there appears to be an assumption within much of this literature that excavation is the key context where archaeological knowledge is produced. Very few accounts describe the production of archaeological knowledge beyond the boundaries of 'site' based field-work. In particular, the production of archaeological knowledge during or as a result of pedestrian surveys is significantly lacking (for exception, see Gnomes 2006). Furthermore, as Indigenous Hawaiian archaeologist Kathleen Leinani Kawelu (2007:13-4) points out, most ethnographies of archaeological practice also focus on the perspectives and experiences of Western archaeologists, with very few including Indigenous perspectives or focusing on the ways in which relationships with Indigenous people influence archaeological practice (for exception, see Gnomes 2006). Furthermore, ethnographies of archaeological practice tend to privilege the perspectives of Western archaeologists, whilst other participants who either directly or indirectly contribute to the production of archaeological knowledge remain invisible and marginalised (cf. Lucas 2012:239). This view is supported by Lucas (2001:13), who points out:

Archaeology is a practice we do with others, perhaps in fieldwork particularly, and there is a violence which accompanies this when people are silenced in the name of...the production of knowledge.

As a result, very few ethnographies of archaeological practice explicitly draw upon ANT in order to consider the production of archaeological knowledge outside a field-work context (Webmoor 2013:109; Yaneva 2013:122), including the influence of Indigenous peoples. There are, however, a few notable exceptions. Andrew Jones' (2002) *Archaeological Theory and Scientific Practice* explicitly draws upon STS and ANT in his analysis of archaeological practice, arguing research questions, hypothesis', techniques, sampling strategies and scale limit the production of archaeological knowledges. In addition to this, Jones draws upon the ANT concept of symmetry to explore the agency of archaeological traces in influencing the production of archaeological knowledge. This concept has been applied in recent years to form the field of symmetrical archaeology (see Olsen 2010, 2012; Shanks 2007; Witmore 2007; Webmoor 2007). Symmetrical archaeology has emerged as a result of the 'material turn' in archaeology and aims to emphasis the agency of archaeological traces as an active contributor in the production of archaeological knowledges. ANT has also recently been applied to museums studies in order to reconceptualise museum collections as an assemblage comprised of people, things and institutions (see Byrne et al. 2011; Harrison et al. 2013). In particular, Harrison et al. (2013) use ANT to consider the ways in which the interactions between people as part of this assemblage, including the agency of Indigenous people, contributed to the production of museum collections.

One of the most useful examples of the application of ANT within an archaeological context derive from recent literature by Rodney Harrison (2011), who provides a philosophical discussion that uses ANT in order to reconceptualise archaeological practice as assemblage. More recently, Harrison (2013a, 2014, 2015) has applied this philosophy more thoroughly, to reconceptualise heritage as a concept that emerges from a process of assembling the past, present and future, stating that:

While heritage is produced as part of a conversation about what is valuable from the past, it can only ever be assembled in the present, in a state of looking toward, and an act of taking responsibility for, the future (Harrison 2015:35).

Drawing on STS and Law's (2004) concept of "ontological politics"⁹, Harrison (2015) argues that reconceptualising heritage as an assemblage also allows for a process of reassembling the

⁹ Ontological politics refers to the capacity of cultural or knowledge practices to produce new realities through a process of assembling and reassembling (Bennett 2013:2).

practices responsible for its production, resulting in the production of new knowledges; or as Harrison (2015:24,28) refers to them, new "heritage ontologies", which enact new or alternative pasts, presents and futures to privilege particular philosophies and economic, social or political interests. Harrison's (2015) discussion highlights the potential for reconceptualising archaeology as an assemblage in order to disassemble as well as reassemble its practice, and to allow for the privileging of contemporary Ngarrindjeri interests, rights and responsibilities in-line with *Ruwe/Ruwar*. Above all, Harrison (2013a:32; 2015:37) points out that describing, disassembling and understanding the practices responsible for the production of heritage is the first step towards reassembling practice to allow for new or alternative heritage ontologies. For the most part, however, Harrison's (2011, 2013a, 2014, 2015) work is not set within the context of any empirical case studies and has remained mostly philosophical in nature.

1.4 Research Objective, Aims and Question

Drawing upon the two key bodies of literature outlined above, the main objective of this thesis is to reconceptualise archaeological investigations at Waltowa Wetland as an assemblage to ethnographically describe and discuss the everyday activities, interactions and connections often marginalised in production of archaeological knowledges. This broad objective will be achieved through the following specific aims:

1. Use key metaphors and concepts from ANT to reconceptualise archaeological investigations at Waltowa Wetland as an assemblage.
2. Use the methods of ANT to ethnographically describe archaeological investigations at Waltowa Wetland, including the everyday activities, interactions and connections that occur beyond the boundaries of 'site' based field-work.
3. Discuss the ways in which reconceptualising and ethnographically describing the everyday activities, interactions and connections allows for a better understanding of archaeological practice and the knowledges it produces.

With these aims in mind, this thesis seeks to address the following research question:

Is disassembling archaeological practice the first step towards challenging the privileged position of archaeological practice and the knowledges it maintains?

Given ANT allows us to consider how connections outside a given context influence the production of knowledge, this research is particularly interested in how interactions and connections with members of the Ngarrindjeri Nation also contribute to the production of archaeological knowledges.

1.5 Thesis Structure

Chapter 2 introduces the methodology employed in this thesis and outlines the collaborative and reflexive approaches that inform every stage of research. Following this, the methods used to address the research question are outlined. These methods include the key concepts and metaphors of ANT used to reconceptualise archaeological practice as an assemblage, followed by the methods of ethnographic description used within this research. Limitations regarding the methodology and methods are discussed throughout the chapter.

Chapter 3 presents a review of literature pertaining to Waltowa Wetland that privileges Ngarrindjeri knowledges in-line with the methodology presented in the previous chapter. This chapter presents an alternative account of Waltowa Wetland that moves away from privileged pastoral and scientifically informed histories, while also discussing the “politics” (cf. Latour 2004) of Waltowa Wetland; that is, the ways in which scientifically informed knowledges are privileged in ongoing management of Ngarrindjeri *Yarluwar-Ruwe*, setting the scene for the development of the NCCHP from with this research emerges.

Chapter 4 provides a detailed discussion of previous archaeological practice within the region, focusing on archaeological investigations undertaken along the Murray River, the *Kurangk* estuary and Lake Alexandrina. This chapter seeks to critically review archaeological knowledges produced by this previous practice as a cultural artefact, which have “defined and confined” (Griffiths 1998:55) understandings of Ngarrindjeri culture. In doing so, this chapter sets the scene to consider how the agency of these knowledges influences archaeological investigations at Waltowa Wetland.

Chapter 5 presents the outcomes of this research; that is, a detailed auto-ethnography of archaeological investigations focused on Waltowa Wetland. In doing so, this chapter commences with a personal biography describing my development as an archaeologist as well as the development of my connection with the Ngarrindjeri Nation. The remainder of the chapter follows archaeological investigations at Waltowa Wetland as they unfold, including the connections that emerge to allow for and resist the production of archaeological knowledges.

Chapter 6 presents a detailed discussion that further disassembles the auto-ethnography presented within the previous chapter. This chapter presents a summary of the key findings that provide insights into the everyday activities, interactions and connections often marginalised in the production of archaeological knowledges. In particular, this chapter discusses the agency of the Ngarrindjeri Nation, the ways in which archaeological investigations remain sheltered from this agency and how archaeological knowledges are actively assembled beyond the boundaries of an archaeological ‘site’ during a process of literary transcription.

Chapter 7 presents the key conclusions of this research. This chapter discusses how the key findings address the objectives, aims and research question, compare to existing sociologies of scientific practice and ethnographies of archaeological practice literature, and make a contribution to the archaeological discipline more broadly. This chapter concludes by outlining the limitations of this research and proposing recommendations for future research.

Chapter 2 – Methodology and Methods

Throw away this colonial frame. Let us all sit down and create a new frame.
(T. Trevorrow in Change Media 2012a)

This chapter presents the methodology that informs all stages of the research, followed by the methods used in order to address the research question. Foremost, the methodology used in this thesis is a “mutually reinforcing hybrid” (cf. Harman 2007:41; Latour 1993:108) that draws upon a combination of collaborative and reflexive approaches. These approaches provide a framework that ensures the collaborative approach used in this research is also ethically, politically and socially engaged with Ngarrindjeri interests, aspirations and agendas. Following this, the methods used to address the research question are outlined; these methods include the key concepts and metaphors of ANT used to reconceptualise archaeological practice as an assemblage, followed by the methods of ethnography used to allow for ethnographic description of the connections often marginalised in production of archaeological knowledges. The methods of ethnography applied in the context of this research are ethnomethodology and auto-ethnography, which frame the focus and content of ethnographic descriptions.

2.1 Methodology

Collaborative Approach

The methodology used in this thesis is informed by the collaborative approach of community-based and Indigenous archaeologies. Both community-based and Indigenous archaeologies emerged in Australia during the 1990s as distinct approaches to archaeological practice, in response to critiques of archaeological research by Aboriginal people (see Langford 1983) as well as post-colonial critiques from within the discipline itself (see Byrne 1991, 1996). As a result, archaeologists shifted their methodologies in recognition of Aboriginal people’s right to and ownership of their heritage. Specifically, Clarke (2002:251) describes community archaeology as moving beyond consultation to:

...encompass approaches that include community members in decision making about research topics, research sites, analysis of data, curation and management of collections and the production of materials that are culturally appropriate and useful.

Furthermore, Clarke (2002:251-2) also observes that community archaeology encompasses a:

...shift of power relations [where] the researcher acknowledges the right of the community to stop or change the research at any point. A community approach is

not merely one of courtesy, as in a host/guest relationship, it is an explicit restructuring of power relations and a political recognition of the rights of the communities to have a role in directing how research about their lives (past or present) is conducted.

In short, one of the key characteristics of community archaeology is the relinquishing of control by the researcher, allowing Aboriginal people to exert greater control over archaeological practice. In an issue of *World Archaeology* dedicated to the topic, Marshall's (2002:211-2) introductory essay states the methodology for community archaeology:

...concern all part of an archaeological project from the initial point of devising research questions or areas of interest, to setting up a project, field practices, data collection, analysis, storage and dissemination, and public presentation...[where] at every step in a project at least partial control remains with the community.

In relinquishing such control, community archaeology tends to be transformative in nature as a research project responds to the changing needs and interests of community (see Clarke 2002; Ross and Coghill 2000). In addition to this, research carried out under the auspices of community archaeology has seen the emergence of locally-specific research agendas that “vary according to project, place and people” (Clarke 2002:262).

Similar to this community-based approach and influenced by international literature from the United States (see Nicholas and Andrews 1997; Watkins 2000), the approach of Indigenous archaeologies focuses upon collaboration with Indigenous peoples at every stage of research; however, Indigenous archaeologies is not archaeological practice about Indigenous peoples, but rather practice that “is informed by Indigenous values and agendas” (Smith and Wobst 2005a: 15). Indigenous archaeologies emphasises a number of key objectives that seeks to challenge, reconceptualise and transform traditional archaeological practices, including archaeological research that is initiated and controlled by Indigenous people while privileging Indigenous philosophies, interests, aspirations, agendas and concerns (see Atalay 2006, 2007; Nicholas 1997, 2001; Silliman 2008, 2010; Smith and Wobst 2005b; Watkins 2000). As a result, Indigenous archaeologies is considered to be a “change in mindset” (Smith and Wobst 2005a:7) towards Western forms of archaeological practices that can only emerge by undertaking collaborative or community initiated research. As Bruchac et al. (2010:11) explain, practioners of Indigenous archaeologies “are working to devise less colonial, more culturally sensitive methods to redress historical wrongs and reorient with Indigenous values”. Therefore, Indigenous archaeologies is considered a tool for engaging in the broader “decolonization project” in Indigenous research that has global significance for the recognition of Indigenous rights (Nicholas 2010).

Like community-based archaeology, there are varying ways to undertake Indigenous archaeologies that reflect the dynamic experiences, knowledges and cultures of Indigenous peoples globally this approach seeks to privilege (Atalay 2008: 30). Given the similarities that exist between these approaches, community-based and Indigenous archaeologies are often used interchangeably to refer to the same approach (see Atalay 2012); however, Lippert (2016) maintains Indigenous archaeologies is distinct from community-based archaeology due to its efforts to decolonise the discipline.

In-line with this methodology, this research emerges from a locally specific and collaborative program of research with organisations, Elders and leaders of the Ngarrindjeri Nation, as a means to address the marginalisation of Ngarrindjeri rights, responsibilities and interests within the ongoing management of *Yarluwar-Ruwe*. This research forms part of the NRA's NYR program, which provides a platform for regular meetings with Ngarrindjeri organisations, Elders and leaders regarding this research. In doing so, these meetings allow for detailed discussion and decision making, where Ngarrindjeri organisations and individuals can exercise significant control in the focus and direction of this research. This program also provides an opportunity for Ngarrindjeri organisations and individuals to offer advice and critical feedback throughout every stage of research. Therefore, the NYR program provides a significant setting to ensure a collaborative approach is maintained despite the capacity constraints faced by the Ngarrindjeri Nation.

In taking a collaborative approach, this thesis seeks to privilege Ngarrindjeri knowledges, interests and aspirations informed by the philosophy of *Ruwe/Ruwar* through all stages of research; an approach that also informs the literature reviews presented in chapters three and four respectively. These chapters seek to privilege Ngarrindjeri knowledges as a means to critique dominant understandings of Ngarrindjeri lifeways. Specifically, chapter three privileges Ngarrindjeri knowledges as a means to provide an alternative account of Waltowa Wetland, whilst critiquing the scientifically informed knowledges that remain privileged within this landscape. Similarly, chapter four draws upon the Ngarrindjeri philosophy of *Ruwe/Ruwar* to critique privileged understandings of Ngarrindjeri history, culture and identity produced by previous archaeological practice. In-line with this approach, this thesis also privileges the use of Ngarrindjeri terminology rather than Western terminology, which tends to describe and confine the complexity of the Ngarrindjeri Nation into a Western understanding.

For the most part, however, Ngarrindjeri knowledges presented herein should not be considered an authority, but instead are included to allow for the presentation of a “counter narrative” (cf. Hemming 2002, 2006). Specifically, Ngarrindjeri knowledges drawn from the literature “(only) provide a glimpse into the depth and complexity of Ngarrindjeri oral tradition” (Hemming et al. 1989:4). As Ngarrindjeri Elder Uncle George Trevorrow (in Department of Education 1990:25) explains, “We’ll always hold back some [when sharing knowledge]...”. In addition to this, Ngarrindjeri knowledges may emphasise or obscure particular elements, meanings and geographic areas, depending on the context or people present when knowledge is shared (Bell 1998:94-5,103; Watson 2002:76; Wilson 2005:39; also see Tindale 1937:108). Ngarrindjeri knowledges may also be heard and recorded differently depending on the questions and interests of the researcher (Bell 1998:96). All this contextual and subjective variability account for the variation that exists between Ngarrindjeri knowledges contained within the literature. Therefore, as Bell (1998:94-5) points out, “(it) is folly for a researcher to seek the “authentic” or “pristine” version” of such knowledges.

Reflexive Approach

The methodology used in this research is also informed by a reflexive approach, in order to ensure this research is ethically, politically and socially engaged with Ngarrindjeri interests, aspirations and agendas. Hamilakis (2007:23-5) argues that archaeologists have ceased to engage in the ethical or political implications of archaeology, with politically engaged archaeology now absent from the discipline. Recent critiques regarding the ethical and political nature of archaeology claim the adoption of ethical codes and best practice doctrines by the World Archaeological Congress (WAC), the Australian Archaeological Association (AAA) and other organisations have effectively “closed-off” or sanctioned the politics of archaeological practice from further consideration (Hamilakis 2007; Meskell and Pels 2005). Hamilakis (2007:23) refers to ethical codes as a “decoy” used to avoid the political nature of archaeology. Furthermore, he interprets ethical codes:

...as a tool, as a purely technical device, that can be used to achieve something else, most commonly to continue doing archaeology as normal, to declare that it is ‘business as usual’, now with the additional advantage of a clear ethical consciousness (Hamilakis 2007:24).

In many respects the same argument could be made in regards to the adoption of a collaborative approach, which also allows archaeology to carry on ‘business as usual’ under the assumption that archaeological practice is universally beneficial to those with whom one

is collaborating (cf. Hamilakis 2007:24). In-line with this argument, adopting a collaborative approach does not necessarily guarantee research is ethically, politically and socially engaged with the concerns of collaborative partners.

Archaeological practice operates within a dominant, positivist paradigm. Within this paradigm the perspectives of the archaeologist are privileged, informed by the positivist assumption that archaeological data can be ‘collected’ using a linear form of practice, based on objective observations that exist independent of any individual’s subjective experience (Chadwick 2003:104; Hodder 1999:x; Lucas 2001:15-16, Lucas 2012:1). Despite post-processual critiques of archaeological practice, a tenet of objectivism still remains a dominant ideology within the discipline particularly in relation to archaeological field-work. As Marciniak (2003:210) points out:

Despite the development of archaeological theory, site reports remain written within a rationalist and objectivist framework. This is where requirements of culture-historical analysis are preserved, even when a person with a different theoretical orientation excavates the site.

Archaeological practice has a tendency to privilege so called ‘objective’ practices and the knowledge that derives from them, which act to marginalise Indigenous philosophies and interests despite a collaborative approach. Consequently, if positivism remains the dominant paradigm through which the results of collaborative archaeological practice are interpreted, then the collaborative approach of Indigenous archaeologies is no more than “positivism dressed in drag”, where positivism is simply given a “new guise” in order for research to proceed (Giddings 2006:198,200). A reflexive approach is essential to consider the ways in which positivist assumptions influence archaeological practice, in order to address the marginalisation of Indigenous philosophies and interests (Giddings 2006:200; Hesse-Biber 2010:76; Nicholas and Hollowell 2007:63; Pillow 2003:178). A reflexive approach also allows for consideration of the asymmetrical power structures and unethical tendencies that are maintained by positivism, including the privileged position of a researcher to produce knowledges that may marginalise Indigenous philosophies and interests despite a collaborative approach (cf. L.T. Smith 1999:176). That being said, researchers occupy a unique position in knowledge production with the capacity to engage with the ethical and political nature of their research, to undertake research that is ethically and politically responsible in order to challenge this marginalisation (Hemming et al. 2010:101). According to Hemming et al. (2010:96-7), research that seeks to challenge the marginalisation of Ngarrindjeri rights, responsibilities and interests is the basis for research that is ethical,

politically and socially engaged. Hemming (2014:10) argues a combination of collaborative and reflexive approaches is essential in order to undertake ethical and politically engaged research with the Ngarrindjeri Nation. Without a reflexive approach we pat ourselves on the back for being progressive and fail to engage with ongoing ethical and political nature of our research. Therefore, collaborative and reflexive approaches go hand-in-hand to ensure an ethically, politically and socially engaged archaeology is ethically, politically and socially responsible archaeology (cf. Hamilakis 2005).

Approach Application

Since the late 1980s many archaeologists have adopted collaborative and/or reflexive approaches to archaeological practice (see Burke et al. 1994; Davidson et al. 1995), guided by the establishment of the Australian Archaeological Association's (AAA) Code of Ethics; however, the tensions between Indigenous peoples and archaeologists that heralded these shifts still remain. Specifically, McNiven and Russell (2005) claim further post-colonial critiques are required in order to continue decolonization of the discipline and its colonial foundations in order to address these tension. This sentiment is also echoed internationally, For example, Lippert (2016) argues Indigenous archaeologies "is not widespread...[and] we need to think about how Indigenous archaeology draws in and addresses colonial legacies and seeks to dismantle power structures that prevent Indigenous people from fully participating in sciences". Furthermore, the exact constituents forming Indigenous archaeologies are still in a process of discussion, debate, and transformation as more Indigenous peoples became actively involved within the discipline. With these arguments in mind, the full potential of Indigenous archaeologies in Australia has yet to be realised, partly due to the under representation of Indigenous people within the discipline (Mate and Ulm 2016:171). For the most part, Indigenous archaeologies within an Australian context mostly refers to collaboration between non-Indigenous archaeologists and Indigenous community, rather than Indigenous archaeologists working for Indigenous communities (McNiven 2016:28). McNiven (2016) also points out that Indigenous archaeologies have focused on collaborative aspects of archaeological practice and the move towards decolonisation. As a result, the theoretical framework for Indigenous archaeologies is still yet to be defined and remains mostly aspiration (also see Atalay 2008: 29). In addition to this, the contribution of Indigenous archaeologies to archaeological interpretation also remains under developed, with Western archaeological knowledges maintaining an overall privileged position in the interpretation of archaeological materials. In order to address this lack of theorisation as well

as the privileged position archaeological knowledges maintain, McNiven (2016; also see McNiven and Russell 2005:241) argues addressing the dichotomies that lie at the heart of Western archaeological practice is key for producing understandings that privilege Indigenous philosophies and understandings. In this regard, by using the key concepts and metaphors of ANT to better understand and address the privileged position of archaeological knowledges, this research contributes to the further theorisation of collaborative and reflexive approaches within an Australian context.

2.2 Methods

Actor-Network Theory

Actor-Network Theory (ANT) is the first key method used to address the research question. Despite the inclusion of the word ‘theory’ in its title, ANT is a method rather than a theory (Latour 1999:19). As Latour (1999:15) argues: “...there are four things that do not work with actor-network theory, the word actor, the word network, the word theory and the hyphen!” More recently, however, Latour (2005:19) has described the term as “so awkward, so confusing, so meaningless that it deserves to be kept”. In order to fully comprehend ANT as a method it needs to be described in relation to the specific case study in which its being applied (see Latour 2005:141-156). Despite this, ANT does emphasise the use of key concepts including the concept of *symmetry*, the metaphor of *assemblages* and the concept of *translation*. These concepts have remained at the heart of ANT since the 1980s despite its dynamic and boundless nature (Harman 2007:33).

Firstly, ANT uses the concept of *symmetry* to draw attention to the often marginalised or silenced agency of non-humans. The agency of non-humans is considered in great depth by Latour (1988, 1993, 1999, 2004), who argues their agency has been concealed as a result of the conditions of modernity that he seeks to critique, challenge and reconceptualise. Specifically, Latour (1999:190) argues the agency of non-humans has resided in a “blind spot” in society, with their agency ignored socially, politically and philosophically despite the fact humans depend on and care for non-humans in our everyday lives. Latour (2005:73) argues non-humans are, “like humble servants, they live on the margins of the social doing most of the work but never allowed to be represented as such” (Latour 2005:73). ANT maintains non-humans are not passive, inert or inanimate but are *actors* with the capacity to act alongside human actors (Latour 1993; Harman 2007; Harrison 2011; Hodder 2012; Olsen et al. 2012; Webmoor and Witmore 2008). Thus, the concept of symmetry seeks to promote

the equal agency of human and non-human actors in order to create a ‘flat ontology’, which treats all human and non-human democratically.

One of the main criticisms of ANT relates to this ‘flat ontology’. Critics claim this democratic approach does not account for or challenge pre-existing systems of asymmetrical power and authority, or inequality based on culture, gender, class, sexual orientation or physical ability (Amsterdamska 1990; Restivo 2005, 2011; Rudy and Gareau 2005; Whittle and Spicer 2008). Utilising ANT has the potential to obscure systems that marginalise particular groups or individuals, or their agency, in resisting this marginalisation. Despite this, ANT understands hegemonic systems of power and authority as a product or effect of pre-existing assemblages and not a pre-determined reality (Latour 1986:268, 2005:64; Law 2011:3). Therefore, despite not recognising or challenging pre-existing hegemonic systems of power and authority, ANT can be used to describe the assemblages that create and maintain such systems, which becomes a useful tool in challenging such structures.

Another criticism of ANT relates to its own unique vocabulary, which is used in order to describe human and non-humans democratically. Specifically, ANT uses the term *actant* in describing an animal, object or concept in preference to the term ‘actor’, which emphasises an anthropocentric understanding that is at odds with ANT’s concept of symmetry. Indeed, actants can comprise “(all) those enormously varied physical entities we refer to as ‘material culture’, [and] are beings in the world alongside other beings such as humans, plants, and animals” (Olsen 2003:88; 2012:212). Actants also include texts, equipment, practices and organisations, as well as less tangible entities such as decisions, ideas, concepts and metaphors (Harman 2007:36; Hicks and Beaudry 2010:12-13; Olsen 2007:582, 2010:25; Webmoor 2007:568). Therefore,

everything that exists must be regarded as an actant...We cannot begin by splitting actants into zones of animate and inanimate, human and nonhuman, or subject and object. Every entity is something in its own right, and every entity becomes involved in associations, love affairs, and duels with many others (Harman 2007:36).

In doing so, however, this democratic vocabulary has been criticised as dehumanising humans by describing human and non-humans democratically (Jackson 2015:37-8; McLean and Hassard 2004:503-4; Vandenberghe 2002). In line with this criticism, the vocabulary that ANT utilises runs the risk of dehumanising Ngarrindjeri individuals and their agency that form part of the archaeological practices being described herein. Despite this criticism Latour (1999) argues the premise of ANT is not to diminish the status of humans, but instead to raise

the profile of often ignored non-humans that studies have sought to highlight. For example, one of the earliest ANT informed studies focused on the scallop fishing industry, which treated scallops as actants with agency rather than passive and inert subject of human activity (Callon 1984). Other examples of actants in this study included gulls, wind, ocean currents, fishermen and scientists. Sociologies of scientific practice literature demonstrate that technologies, texts, funding and people are all actants that play equally important roles in the production of scientific knowledges. On the other hand, some of the actants that comprise archaeological practice include archaeological ‘sites’, ‘artefacts’, tools and equipment, people including their education and skills, supervisors and mentors, funding and texts; all of these heterogeneous actants assemble together to comprise archaeological practice. In describing such actants, Lynch (1993:97) argues the terms specific to archaeological practice—the “artefacts” of this cultural practice (Lynch 1985, 1993:92)—should also be subjected to re-description in order to further disassemble them. Indeed, these terms are used and disassembled as part of the ethnography of archaeological practice presented within this thesis.

Secondly, ANT uses *assemblage* as a metaphor to understand the agency of actants. Accordingly, an actant’s capacity to act alongside and influence other actants is a result of the reciprocal, mutually constitutive relationship that exists between actants as part of an assemblage. In other words, the agency of an actant is possessed in connections between actants rather than in actants themselves, with agency relative to and distributed via the assemblage within which they are situated (Knappet 2002:100; Knappet and Malafouris 2008:xi; Lucas 2012:162; Malafouris 2013:123). As Byrne et al. (2011:11) explain:

By distributed agency we mean that people [or things] cannot enact agency on their own. They require the scaffolding of other people and things to make actions happen in the world.

Actants work together to form an assemblage and exercise agency via said assemblage; without the assemblage, an actant has no agency (Harman 2007:43; Latour 1988:160). As such, the metaphor of an assemblage allows for the description of agency that exists in connections between actants, including:

...analysis that treat everything in the social and natural worlds as a continuously generated effect of the webs of relations within which they are located. It assumes that nothing has reality or form outside the enactment of those relations (Law 2009:141).

Consequently, archaeologists do not ‘discover the past’ as if acting in isolation or within a vacuum, but rely on various connections with heterogeneous actants, including: technologies and equipment to undertake fieldwork, archaeological traces to study, institutions and resources to support their investigations, as well as concepts and ideas that frame their research (Byrne et al. 2011:11; Shanks and McGuire 1996; Latour 1988). Therefore, the production of archaeological knowledges is best thought of as a ‘process’ rather than a ‘product’ (Byrne et al 2011:15); a process ANT seeks to disassemble by describing the connections between heterogeneous actants that comprise the assemblage of archaeological practice (cf. Harrison et al. 2013; Latour 2005).

Thirdly, ANT uses the concept of *translation* to understand the ways heterogeneous actants connect in order to become part of an assemblage. Translation is a process where one actant transforms another through connections that involve work, negotiation and resistance between actants (Harman 2007:40-1). When translation has succeeded, one actant has worked upon another to translate it to become part of an assemblage (Latour 1987, 1999). All actants must have the capacity to act upon and transform other actants and be transformed themselves to be considered actants (Callon and Latour 1981:287). If all actants maintain their original characteristics they cannot connect with other actants and a new assemblage will not be created. Alternatively, when actants are not transformed by other actants, they do not form part of an assemblage. As Harman (2007:41) points out, “No actant is inherently strong or weak. It only becomes strong through assembling numerous allies, and grows weak when it becomes isolated”. As a result of this process of translation, assemblages are continually being made, re-made, shaped, re-shaped and are constantly shifting through the dynamic connections that exist between actants. Therefore, assemblages are not static or permanent but are dynamic. ANT allows for the study of numerous moments of translation by describing how the connections between actants assemble, shift and fall-apart (Latour 2005:132).

When the connections between actants assemble successfully, this process of translation is referred to as *intermediary*. An intermediary translation forms part of everyday practice that does not create dramatic shifts in a given assemblage and are usually ignored. As Latour (2005:39) explains, “an intermediary, in my vocabulary, is what transports meaning or force without transformation: defining its inputs is enough to define its outputs...” In other words, this type of translation and its outcomes are predictable. On the other hand, when connections between actants fail or resist assembling, these types of translations are referred to as

mediators. A mediator translation creates dramatic shifts within a given assemblage and the outcomes of this type of translation cannot be predicted. As Latour (2005:39) explains:

Their input is never a good predictor of their output; their specificity has to be taken into account every time...No matter how apparently simple a mediator may look, it may become complex; it may lead in multiple directions which will modify all the contradictory accounts attributed to its role.

These types of translation can result in friction or conflict causing the assemblage to stall or cease functioning (Bennett 2010:23; Harrison 2013b:17,19). Given the unrestricted nature of ethnographic description, ANT emphasises disruptive types of translation are just as important as predictable types and should also be subject to ethnographic description. As such, the assemblage metaphor allows not only for the description of successful instances of translation that result in the production of knowledge, but also allow for the description of unsuccessful instances that resist its production (Bennett 2010:23).

Once successful translation has occurred an assemblage appears static, stable, and self-evident, which conceals the successful and unsuccessful connections that have brought the assemblage into existence. This concealment is referred to as a *black box*, being *black boxed* or *black boxing* (Latour 1987, 1999). When an assemblage stabilises the heterogeneous actants that comprise it become hidden and focus is directed towards one or few actants (Latour 1987, 1999). For example, the ‘discovery’ of archaeological ‘facts’ is attributed to the authoritative archaeologist, whilst other human and non-human actants that are part of the assemblage of archaeological practice and contribute to the production of these ‘facts’ are marginalised and silenced. The many connections involved in the production of knowledge become forgotten once it is black boxed (Lynch 1993:94).

Black boxing also allows for particular knowledges and/or practices to become accepted, rather than allowing them to be continually critiqued, refined and reproduced to reflect the dynamic nature of the assemblage that produced them. In describing the concept of black boxing in relation to archaeological practice, Leighton (2015:68) explains:

Black-boxing refers to the extent to which a scientific knowledge claim needs to be justified and explained within a specific scientific community. For instance, when radiocarbon dating was a new technology, its use was a matter of uncertainty and debate, but today an author writing in an archaeological journal does not need to explicitly convince his or her readers that C14 is an appropriate way to date an archaeological layer. Archaeologists no longer have to explain, justify and prove the concept of radioactive decay every time they want to make use of a C14 date in a paper, and in this sense C14 dating has become a black-boxed ‘matter of fact’ rather than an open problem one needs to think about, pay attention to and justify explicitly.

Similarly, Law (2011:8; author's original emphasis) points out, knowledges and practices "...get themselves so *deeply embedded* that they become naturalised...difficult or impossible to shift in particular locations". For example, particular scientific or archaeological practices are accepted or normalised, largely due to the assumption that such practices represent an objective process of 'data collection'; an assumption that not only justifies the use of particular archaeological practices, but has allowed for archaeological practice to remain 'sheltered' from theoretical reflection (Hodder 1999:x). As Lucas (2012:239) argues:

...the process of translation that archaeologists routinely use today are so taken for granted that they appear obvious and unproblematic...we no longer need to worry about them how or why they work, we just use them...

Therefore, archaeological practices in themselves remain black boxed and there is little critique of their practical methods in spite of the influence of post-processualism (Hodder 1999:x; Leighton 2015:68; Lucas 2012:1). On the other hand, scientific practices remained black boxed until the publication of Kuhn's (1962) influential sociology of science, *The Structure of Scientific Revolutions*, which maintains scientific revolutions or "paradigm shifts" disrupted normative and linear scientific practice allowing for adoption of new practices previously considered invalid. In doing so, Kuhn (1962) opened the black box of scientific practices and influenced new ways to consider the construction of scientific knowledge.

Consequently, "closing a black box" (Latour 1987) allows such practices and the knowledges they produce to be perceived as a self-evident entity or a "box", which is "mobilised" through texts or inscriptions including graphs, statistics, reports, journal articles, conference papers and presentations. As Latour and Woolgar (1986:63) argue:

...once the end product, an inscription, is available, all intermediary steps which made its production possible are forgotten. The diagram or sheet of figures becomes the focus of the discussion between participants, and the material processes which give rise to it are either forgotten or taken for granted as being merely technical matters.

Latour and Woolgar (1986) argue these texts or inscriptions are one of the major—if not *the* major—products of scientific practice, which allow for both scientific practices and the knowledge they produce to appear stable and therefore become black boxed. Latour (1987:227,287) refers to these texts and inscriptions as *immutable mobiles*; durable, transportable and manageable static representations of complex assemblages, which are transported—in simplistic terms—from the laboratory or 'site' to the office, from the office

to a seminar or conference, and from the conference to publication, resulting in the production of a written text. These texts seem stable and self-evident as well as seamless and objective, allowing them to travel across space and time to other people and institutions, circulating in systems of exchange within the research community where they are read, cited, gather allies, shape thoughts and actions and create new assemblages (Latour 1990:23; Latour and Woolgar 1986:150; Law 2011:10; Lynch 1993:95); all the while concealing the many successful and unsuccessful connections that produced them. The effects of immutable mobiles are ongoing no matter how old or distant they are from where they were constructed; as Latour (1987:227) argues, they are “conveniently at hand and combinable at will”. Therefore, texts that are the products of previous assemblages are considered actants in their own right and ANT studies their agency, rather than what they mean or how they were constructed.

Overall, this research seeks to ‘open the black box’ of archaeological practice by ethnographically describing the assemblage of heterogeneous actants that enact the reality of archaeological investigations at Waltowa Wetland. A key focus of this thesis will be describing numerous instances of translation where connections between actants allow for the production of archaeological knowledges, as well as the ways in which connections fail or fall-apart to resist or disrupt knowledge production. This includes discussing the influential decisions, complexities, sensitivities, tensions, assumptions, rationalities, uncertainties, contradictions and subjectiveness, as well as the stressful and at times emotional experiences associated with archaeological investigations; experiences that are usually obscured within linear accounts of research (cf. Edgeworth 1991:57; Harrison 2013b:22; Hodder 1989:273, 1999:95-6; Latour 1993:144-145). As a result, this thesis aims to gain insights that can be critiqued in order to understand the production of archaeological knowledges (Hodder 1999:191; Pillow 2003:178-9). In doing so, this research does not shy away from presenting the “mess” or “messy reality” of archaeological practice (cf. Edgeworth 1991; Latour 1987, 1999; Law 2004; Lynch 1993; see Figure 2.1).

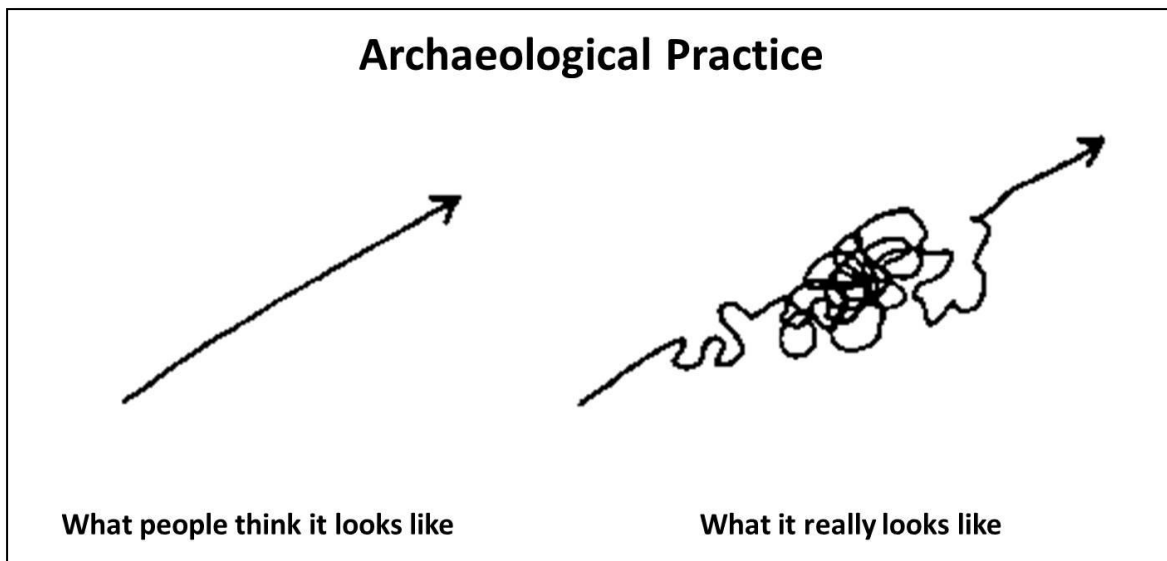


Figure 2.1 *The messy reality of archaeological practice.*

Ethnography

In applying ANT, this thesis uses two distinct methods: firstly, *ethnomethodology* in order to ethnographically describe the connections located beyond the boundaries of ‘site’ based field-work; and secondly, *auto-ethnography*, a method of ethnography that emphasises the position of the researcher in ethnographic descriptions. Ethnomethodology is used to determine *what* ethnographic descriptions focus on, whereas auto-ethnography is used to determine *how* these ethnographic descriptions are constructed.

Primarily ANT uses *ethnomethodology* as an inductive method of ethnographic description in order to produce unrestrictive ethnographic descriptions that focus on the daily activities, interactions and decisions of a given cultural practice (Latour 1999b:5, 2005:9; Latour and Woolgar 1979:40). Ethnomethodology was originally established as a means to study sociology in the 1950s and is defined as: “(paying) to the most commonplace activities of daily life the attention usually accorded extraordinary events...” (Garfinkle 1967:1). Rawls (2002:6) compartmentalises the term to provide a more general definition, explaining the “ethno” in ethnomethodology refers to a particular cultural group, the “method” refers to the routine actions or practices associated with that cultural group, and the “ology” refers to the study of these routine actions or practices. Therefore, in the context of this thesis ethnomethodology is used to ethnographically describe the commonplace and routine activities of archaeological practice.

Ethnomethodology, however, has its limitations, as the activities that form the focus of ethnographic descriptions are “*hard to notice* in ordinary situations, because they are constitutive of those very situations; [and] *unavoidably used* in any research practice itself” (Ten Have 2004:53; author’s original emphasis). As a result, there is a certain level of difficulty involved in describing the usually unnoticed, self-evident, embodied, normalised and taken for granted activities of archaeological practice. Indeed, Edgeworth (1991:42) referred to ethnographically describing such activities as attempting to be an “ethnographer of the familiar”. That being said, whilst reflexivity sits at the core of ethnomethodology and helps address this issue to a degree, it may be necessary to go beyond reflexivity in order to observe and describe the self-evident activities that comprise archaeological practice (Edgeworth 2010:54; Garfinkle 1967:vii; Ten Have 2004:19-20). This is where an assemblage metaphor utilised by ANT is essential. In remembering ANT uses this metaphor to describe the connections that exist between actants, Donna Haraway (1991) reminds us the use of this metaphor can be helpful in addressing and disassembling self-evident, embodied and normalised activities. Some connections are so self-evident no-one thinks to reconceptualise them using metaphors, yet metaphors provide the approach necessary to describe and disassemble such connections in order to better understand them.

This assemblage metaphor also has its limitations. Assemblages result from a series of historical processes and no natural start or end point to the assemblage is assumed (Byrne et al. 2011:8). As a result, determining the point from which to commence ethnographic description of an assemblage of heterogeneous actants can be problematic; but an actant must be selected from which to commence description of an assemblage. In the context of this research, ethnographic descriptions commence with a personal biography, thus positioning myself as the actant in which to commence describing the assemblage of archaeological investigations at Waltowa Wetland. This entails briefly outlining my socio-political position, how this influenced my development as an archaeologist and contributed to the development of my connection with the Ngarrindjeri Nation. In order to produce this personal biography a combination of sources were used, including personal communications with family and friends, photographs, archived emails and documents produced during my long-term relationship with the Ngarrindjeri Nation, such as my honours thesis, funding applications and reports. Overall, these sources provided a valuable window into the connections that have influenced my development as an archaeologist and the production of this thesis.

In addition to ethnomethodology, this research also uses *auto-ethnography* as a means to produce ethnographic descriptions. Auto-ethnography emerged as a critical response to the call for increased reflexivity within the anthropological discipline, following critiques of the objective, authoritative, alienating and sometimes exploitative nature of ethnography (Clifford and Marcus 1986; Ellingson and Ellis 2008:450; Ellis 2007). In response, auto-ethnography was developed as a means to consider the ways in which anthropologists influence their data. As Coffey (2002:327) points out, auto-ethnography “...makes visible that which is often dismissed or rendered invisible in qualitative inquiry”. Furthermore, auto-ethnographer Deborah Reed-Danahay (1997:2) outlines:

It synthesizes both a postmodern ethnography, in which the realist conventions and objective observer position of standard ethnography have been called into question, and a postmodern autobiography, in which the notion of a coherent, individual self has been similarly called into question (Reed-Danahay 1997:2).

Ethnographic descriptions produced using auto-ethnography seek to “weave” (cf. Bell 1998, 2014) the researcher into the ethnographer, as an active and visible participant in the cultural practice being described. Auto-ethnography as a method focuses on the researcher as the primary subject and seeks to describe, critique and analyse their personal experiences, observations and emotions in relation to a particular culture or cultural practice (Ellis 2004:xix; Ellis and Berger 2001:853; Reed-Danahay 1997:9). As prominent auto-ethnographers Carolyn Ellis and Arthur Bochner (2000:739) articulate, auto-ethnography involves:

...connecting the personal to the cultural. Back and forth ethnographers gaze, first through an ethnographic wide-angle lens, focussing outward on social and cultural aspects of their personal experience; then, they look inward, exposing a vulnerable self that is moved by and may move through, refract, and resist cultural interpretations.

As such, a critical approach to reflexivity is essential in order to produce auto-ethnographic descriptions that address the research question and avoid self-indulgence (Bochner 2000:264-266; Ellis and Bochner 2000:737-8; Ellis 2004:253-254).

Due to its reflexive nature, auto-ethnography is a method of ethnography that has previously been utilised within ethnographies of archaeological practice (see Brown 2010, 2015, 2016; Gnomes 2006; Roveland 2000, 2006). Indeed, auto-ethnography allows a rare insight into the archaeologist behind the archaeology (Roveland 2000:19). Notably, Edgeworth (2006:xiii) points out:

...archaeological methods embody ways of seeing that look outward and rarely inward, and which set up objectified fields that are not usually taken to include the very subjects who are doing the looking and the objectifying.

Despite this, auto-ethnography has the potential to marginalise the role of others due to the emphasis placed on the researcher in ethnographic descriptions (Adkins 2002). Once again, Donna Harraway (1999) reminds us there is no neutral point from which to make observations and ethnographic descriptions are always situated.

As a method of ethnographic description, auto-ethnography requires immersion, or at least participation, in the culture and/or cultural practices being studied. This approach:

...enables the fieldworker to directly and forcibly experience for herself both the ordinary routines and conditions under which people conduct their lives, and the constraints and pressures which such a living is subject...Immersion in ethnographic research, then, involves both being with other people to see how they respond to events as they happen and experiencing for oneself these events and the circumstances that give rise to them (Emerson et al. 1995:2).

There is a great advantage to an archaeologist undertaking auto-ethnography of archaeological practice, as such a position allows for extended periods of “deep immersion” (Emerson et al. 1995:2) or embedded self-reflection from within the profession, which can result in more detailed ethnographic descriptions (Rawls 2002:6-7). Another advantage of undertaking an auto-ethnography of one’s own practice is familiarity with the concepts and terminology that creates the basis for this said practice; however, such familiarity can also result in the danger of “going native” (Latour and Woolgar 1986:38). In other words, an auto-ethnography of archaeological practice may result in uncritical descriptions and use of archaeological concepts and terminology.

Despite this limitation, recent arguments outlined within the *Oxford Handbook of the Archaeology of the Contemporary World* maintain we must approach an ethnography of archaeological practices from “embedded” within a contemporary context (Graves-Brown et al. 2013:15-6). Furthermore, sociologist Albena Yaneva (2013:126) argues we can only understand the context we are trying to describe through a process of painstaking, careful and detailed observation of our continuous interactions with and experience of it. Yaneva (2013:126) describes this approach as “following the process slowly as it unfolds, trying to make sense of the agency...and the networks of human and non-humans...” In-line with this statement, Yaneva (2013), Latour (2004) and Law (2011) believe ethnomethodology should emphasise a type of slow ethnography; ethnographic description that seeks to slowly disassemble the assemblage of heterogeneous actants that comprise archaeological practice.

In undertaking an auto-ethnography of archaeological practice, Hamilakis and Anagnostopoulos (2009:75) argue:

The ethnographer has to be familiar with the social context in which he or she is working, in order to acquire the necessary confidence to interpret, or at least offer a range of possible interpretations of, the traits being observed...The homological links between attitudes towards antiquities and attitudes towards other material and non-material entities could easily get lost to an ethnography focusing exclusively on the material or archaeological past (Hamilakis and Anagnostopoulos 2009:75).

Given the collaborative approach of this research, my connection with Ngarrindjeri organisations, Elders and individuals form a large part of the archaeological practice this research sets out to describe. Being familiar with Ngarrindjeri philosophy, knowledges and associated cultural protocols that frame this connection is essential in order to understand the ways in which they influence archaeological practice. Indeed, making reference to the ways in which Ngarrindjeri cultural protocols influence archaeological practice is referred to by Hamilakis and Anagnostopoulos (2009:75) as a “total ethnography”; an ethnography that moves beyond the boundaries of ‘site’ based archaeological field-work to consider the everyday interactions that form part of archaeological practice.

Given my long-term relationship with the Ngarrindjeri Nation, observing and respecting these cultural protocols has become a self-evident characteristic of my interactions with Ngarrindjeri organisations and individuals. Therefore, this thesis draws upon contemporary Ngarrindjeri ethnographies by feminist anthropologist Diane Bell (1998, 2008, 2014) in order to articulate the cultural protocols that have become—for the most part—second nature in my interactions. These cultural protocols include: respecting Elders and their authority; respecting Ngarrindjeri knowledge; respecting the right to learn and share Ngarrindjeri knowledge; and respecting knowledge boundaries relating to age, gender and context (Bell 1998:361-417, 2008:100).

In focusing on the everyday interactions that comprise archaeological practice, auto-ethnography seeks to organise descriptions into a series of experiences that emphasise the coherent development of an overall narrative (Ellis 2004:142; Ellis and Ellingson 2000). The personal observations and emotions associated with these experiences are also included. Several ‘interludes’ to this narrative are also included as a means to interrupt these “painstaking” (cf. Yaneva 2013:126) descriptions, as well as to further disassemble personal observations. In doing so, auto-ethnography emphasises a confessional approach that moves beyond superficial descriptions in order to admit the uncertainty, confusion, mistakes and

doubts in confidence most researchers experience, but are usually suppressed and obscured within linear accounts of research (Ellis and Bochner 2000; Kleinman 2002); emotions that may have remained concealed through a participant-observation approach. Kleinman (2002:377, 388-9) argues the suppression of the emotions associated with research creates a dichotomy between objective and subjective, where the subjective experiences associated with research are not considered serious, systematic, rigorous or academically valid. By emphasising the subjective experiences associated with research, auto-ethnographic descriptions disrupt the objective-subjective dichotomy that characterise ‘traditional’ accounts of research.

Despite this, auto-ethnography is often critiqued as a “soft” qualitative research method that involves unobjective, self-absorbed navel-gazing (Denzin and Lincoln 1994:4-5; Ellis 2009; Ellis et al. 2011; Kleinman 2002:377; Maréchal 2010:45). According to this line of argument, research can either be objective or not; there is no middle ground. In response, Ellis and Bochner (2000:746) argue:

Why should caring and empathy be secondary to controlling and knowing? Why must academics be conditioned to believe that a text is important only to the extent it moves beyond the merely personal?

Objective and linear accounts only tell part of the story of what undertaking research really entails. As Charmaz and Mitchell (1996:212-213) point out: “We do ourselves and our disciplines no service by telling half tales, by only reporting finished analyses in temperate voice, by suppressing wonder or perplexity or dread”. Therefore, in-line with the description of the research journeys of my colleagues¹⁰ (see Hemming 2014; Wilson 2017), this thesis maintains personal experiences are part of the story of research and should not be suppressed when sharing that story.

In producing ethnographic descriptions, auto-ethnography draws upon autobiography and ethnography in order to *retrospectively* describe experiences, thoughts, feelings and observations as closely as they can be remembered (Bochner 2001:151; Ellis 2004:126). This is in contrast to ‘traditional’ ethnography, where an ethnographer writes down what they observe regularly and systematically (Emerson et al. 1995:1). Despite this, Coffey (2002:325) believes the differences between auto-ethnography and ethnography are less pronounced,

¹⁰ Hemming (2014) discusses the ways in which his personal experiences of the HIRC framed the focus of research, whilst Wilson (2017) discusses the ways in which his identity as a Ngarrindjeri man influences archaeological investigations undertaken as part of his research.

claiming: “Ethnography is about experiencing, remembering and sharing lives through the act of memory, and as such auto-ethnography is no different from this”. By retrospectively describing experiences, auto-ethnography allows for the application of hindsight that act as a means of analysis in determining an auto-ethnography’s significance, including how it addresses the research question and contributes to understanding the culture being studied (Ellis and Berger 2001:866; Richardson 2000:15–16). In relation to this, sociologist Tony Bennett (2007b:4) argues a process of description in itself provides a means for analysis, as:

...actor-network theory proposes a single-levelled reality which...merges the process of explanation with that of description: to describe how socio-material networks of relations are assembled, disassembled and reassembled in new configurations is – if the range of the networks that are thus traced is extensive enough – also to explain how those networks are made up and operate.

Therefore, auto-ethnography should be judged on their significance or ability to understand a cultural practice rather than its accuracy (Ellis 2004:126). As well-known auto-ethnographer Carolyn Ellis (2004:126) also argues:

...it’s not so important that knowledges represent lives accurately...we can judge one narrative interpretation of events against another, but we cannot measure a narrative against the events themselves because the meaning of the events comes clear only in their narrative expression.

In order to produce auto-ethnographic descriptions retrospectively, this research analyses the ‘artefacts’ produced by archaeological investigations; that is, ‘data’ including field notes, recording forms, reports, databases and photographs, many of which are included as Appendices within this thesis. In addition to this, the auto-ethnography also utilised a personal archive including letters and emails, which provided a means to excavate, re-discover and analyse hidden and long forgotten actants that formed part of archaeological practice. Overall, producing auto-ethnographic descriptions retrospectively was fundamental in order to analyse the artefacts and archives produced by ‘normative’ archaeological practice.

2.3 Summary

Overall, this chapter outlines the collaborative and reflexive approaches that frame this research, followed by a detailed discussion of ANT and ethnographic methods used to address the research question. In doing so, this chapter has outlined the justification for a combined methodological approach and dual ethnographical methods used in order to address the research question.

Chapter 3 – The Nature and Politics of Waltowa Wetland

...even though we construct nature, nature is as if we did not construct it.
(Latour 1993:32)

This chapter presents a review of literature pertaining to Waltowa Wetland that privileges Ngarrindjeri knowledges, providing an alternative account to the pastoral and scientifically informed histories that dominant this landscape. In doing so, this chapter presents Ngarrindjeri knowledges regarding the formation of Waltowa Wetland, including the active role *Kaldowinyeri* ancestors played within this formation. The characteristics of the Ngarrindjeri philosophy of *Ruwe/Ruwar* are also detailed in order to consider how this philosophy contributes to the long-term management and nature of Ngarrindjeri *Yarluwar-Ruwe* more broadly. In doing so, this section highlights the ways in which the Ngarrindjeri Nation contributed to the pre-colonial nature of Waltowa Wetland. Following this, the chapter describes the historical mismanagement of *Yarluwar-Ruwe* that has occurred since colonisation and how—despite the impacts of colonisation—the philosophy of *Ruwe-Ruwar* continues to inform its ongoing management, highlighting the ongoing resistance and agency of the Ngarrindjeri Nation. This chapter concludes by discussing the contemporary nature of Waltowa Wetland as a result of this mismanagement and the “politics” (cf. Latour 2004) that inform its contemporary management.

3.1 The Formation of Waltowa Wetland

Ngarrindjeri knowledges emphasise the roles of key *Kaldowinyeri* ancestors in the formation of *Yarluwar-Ruwe* including Waltowa Wetland. In particular, *Kaldowinyeri* ancestor *Ngurunderi*, his two wives, his brother *Nepelli*, sorcerer *Parampari* and the Murray Cod *Pondi* all played significant roles in the formation of the landforms, waterways and all living things (Hemming et al. 1989:1-4; Ngarrindjeri Nation 2006:8). The following account explains the formation of some of these features:

In the Dreamtime, in search of his two wives, *Ngurunderi* travelled [in his canoe] down the Murray River which at the time was only a small stream. A giant Murray cod, *pondi*, swam ahead and with each swish of its mighty tail widened the stream. *Ngurunderi* tried to spear the cod from his canoe. *Lenteilin*, Long Island, near Murray Bridge, represents one spear which missed. At Tailem Bend he threw another spear and the *pondi*, wounded, surged ahead, eventually escaping into Lake Alexandrina...Meanwhile his wives had made a camp and were cooking bony bream, a fish prohibited to women. *Ngurunderi*, smelling the aroma of the cooking fish, stood on his two huts, now the two hills at Mount Misery, and placed his canoe into the sky, where it became the Milky Way. He then pursued his wives. In their

effort to escape, the women built a raft of grass-trees and reeds and crossed Lake Albert. At the spot where they landed, their raft turned back into grass trees and reeds. The women hurried south. *Ngurunderi* followed them south to Kingston where he met, fought and finally triumphed over *Parampari*, a great sorcerer whose burned body is now visible as granite boulders. *Ngurunderi* then travelled north, and made camp several times on the Coorong, where he dug soakages and fished...At Victor Harbor, still not having found his wives, he became so angry he threw his spears into the sea where they became the offshore islands. Finally, near King's Beach, he heard his wives laughing and playing in the water. His club, which he hurled into the ground, became the bluff [at Encounter Bay] known as *Longkuwar*. His wives, realising he was catching up with them, fled in terror until they reached Cape Jervis. He strode after them. They began to hurry across the land bridge to what is now Kangaroo Island. Seeing his wives once again escaping, *Ngurunderi* called out in the voice of thunder for the water to rise. Wave after wave rushed in, drowning the women, whose bodies became the rocky islands known as The Pages...(Bell 1998:91-2).

Despite presenting Ngarrindjeri knowledges as an alternative account to the formation of *Yarluwar-Ruwe*, comparisons can still easily be made to scientifically informed knowledges. Most notably, the rising of sea levels that filled the land bridge between Kangaroo Island and the mainland, known as Backstairs Passage, and that subsequently drowned *Ngurunderi's* wives, commenced—according to scientifically informed knowledges—around 18,000 BP and occurred over a period of approximately 12,000 years. Therefore, these knowledges not only demonstrate generations of Ngarrindjeri people witnessed a long history of climatic and sea-level change that resulted in the formation of *Yarluwar-Ruwe*, but also transmitted knowledge of this formation over generations. In doing so, these knowledges demonstrate a long history of Ngarrindjeri occupation within *Yarluwar-Ruwe*:

We were here when the sea level began rising about 18,000 years ago, and our ancestors watching the sea flooding over our coastal plains...We were here when the sea stabilised at its current level about 5,000 years ago. Our Creation stories record these dramatic changes...And we are still here! (Ngarrindjeri Nation 2006:11)

For the Ngarrindjeri Nation the actions of their *Kaldowinyeri* ancestors are inscribed on and across *Yarluwar-Ruwe*, providing a constant reminder of their ancestor's role in its formation. As Ngarrindjeri Elder Uncle George Trevorrow (in Department of Education 1990:50) states: "When I go to Victor Harbour I remember *Ngurunderi*. When I walk on the Bluff I think about him...I stand up on the hill and look out on The Pages and Kangaroo Island and up along the southeast to Kingston." Furthermore, Berndt et al. (1993:299) describe the presence of these ancestors as a "shadow" that lies across Ngarrindjeri *Yarluwar-Ruwe*, which acts as a reminder of the actions of *Kaldowinyeri* ancestors.

As briefly discussed in the previous chapter, variation exists between Ngarrindjeri knowledges of *Ngurunderi* contained within ‘anthropological’ texts, each emphasising the formation of different areas and features within *Yarluwar-Ruwe*. For example, Ngarrindjeri knowledges recorded by Angas (1847:96-7) provide an account of *Ngurunderi* commanding the water to rise to also form the Murray River and the Lower Lakes, in addition to his actions resulting in the formation of Backstairs Passage. Elsewhere, Berndt et al. (1993:223; also see NRA 2009:4) claim the formation of the wetlands along the Murray River are the result of excess water that travelled over the river banks when *Pondi* swished his tail to create the river bends. Lastly, an account by Tindale and Pretty (1980:43) claim the individual waterways of *Yarluwar-Ruwe* were formed as *Ngurunderi* travelled through different clan territories; however, Bell (1998:96) believes this account represents and emphasises an interest in Ngarrindjeri land tenure systems by the authors. Ngarrindjeri knowledges contained within ‘anthropological’ texts, such as accounts of the Seven Sisters, also tell of the ways in which the waterways of *Yarluwar-Ruwe* were formed (see Bell 1998:99).

Bell (1998:98-9) points out that many researchers have placed an emphasis on *Ngurunderi* as the singular, male creator of *Yarluwar-Ruwe*, marginalising the actions of other *Kaldowinyeri* ancestors, stating that: “Clearly men and women participated in the making of their worlds but, for the most part, it is men whose voices are heard” (Bell 1998:100). The Ngarrindjeri Nation (2006:12) emphasise this point by stating: “*Ngurunderi*’s story also refers to the role of ancestral women (in this case *Ngurunderi*’s two wives) in creating the Country we know today”. The role of *Ngurunderi*’s two wives is also inscribed on and across *Yarluwar-Ruwe*. For example, yaccas (*Xanthorrhoea semiplana*) located at Rumply Point represent the location where *Ngurunderi*’s wives landed their raft and are the only yaccas located on the western side of Lake Albert (Bell 1998:270,572,580-1; Berndt et al. 1993:224; Hemming et al. 1989). Furthermore, *Ngurunderi*’s wives play a key role in actions of *Ngurunderi* that result in the formation of *Yarluwar-Ruwe*. As Bell (1998:101) points out: “It is, after all, the wives who proceed *Ngurunderi* into the new lands. It is his pursuit of them that is the impulse for exploration of new lands...” Despite this, *Ngurunderi*’s wives remain nameless in all recorded accounts, whereas all the male characters in such accounts are named (Bell 1998:101).

In considering the formation and nature of Waltowa Wetland, particular features specific to this area can also be understood as the result of *Kaldowinyeri* ancestors, including *Ngurunderi*. For example, Waltowa Wetland is surrounded by a dune complex consisting of a

continuous plain of grass covered Mollineaux Sand that reach up to 20 metres in height and include Mount Misery, a feature consisting of two prominent dunes to the north that provide panoramic views of Lakes Albert and Alexandrina (Campbell 1967; De Mooy 1959; Gloster 1998; Laut et al. 1977; Linn 1988:3; Twidale et al. 1983). Ngarrindjeri knowledges refer to this feature as *Lalangangel*—meaning “side by side”—and were formed from the two huts *Ngurunderi* constructed at this location (Berndt et al. 1993:14,224,324); as Berndt et al. (1993:224) explain:

At Lalangangel [Ngurunderi] made his camp. He obtained water from the lake in his canoe and filled it with freshwater mussels, on which he lived...and sat there resting. He smelt fish cooking. His two wives were down there at Kuripang, on the shore of Lake Albert, not far from Lalangangel...When he smelt that fish cooking (which was taboo), he knew who was there, so he lifted his canoe and put it into the sky.

This feature is also where *Ngurunderi* stood to place his canoe into the sky and created the Milky Way (A. Karloan in Hemming et al. 1989:2; Bell 1998:92; Berndt et al. 1993:224; M. Rigney, Pers. Comm., 2010; Tindale 1934:9). Demonstrating the variation that exists in Ngarrindjeri knowledges within the literature, Tindale (1934:9) describes this feature as:

Two considerable hills on the right of the road from Ashville to the Waltowa Swamp Causeway on the main road to the Coorong are the two canoes of Ngurunderi...[who] left his canoes there while he went on foot through the South-East.

Contrasting with this dune complex are three highly weathered granite outcrops located south-west of Waltowa Wetland (Berndt et al. 1993:15; Mawson and Parkin 1943; Sprigg 1959; see Figure 3.1). Two granite outcrops are also located within Lake Albert adjacent to the wetland (Mawson and Parkin 1943; McCourt and Mincham 1987; see Figure 3.2). Whilst accounts in the literature regarding the formation of these specific granite features are lacking, the formation of other granite features within Ngarrindjeri *Yarluwar-Ruwe* are considered to be the result of *Kaldowinyeri* ancestors. For example, the granite outcrops adjacent to the Southern Ocean near Kingston are said to be the body of *Parampari*, a sorcerer *Ngurunderi* fought and killed at this location (Bell 1998:92; Hemming et al. 1989:41; Tindale 1934:9; Watson 2002:76). Elsewhere, a granite boulder referred to as Seal Rock near Middleton was formed as a result of *Ngurunderi* throwing a large rock on top of a seal whilst it slept on the beach. The pressure from the rock made the seal’s eyeballs stand out and are represented by the presence of two round granite boulders, whilst the sound of the sea hitting the granite boulders and forcing air through a hole at their base represent the dying breaths of this seal (Berndt et al. 1993:15,225; G. Rigney, Pers. Comm., 2012; Hemming et al.



Figure 3.1 Recording granite outcrops at Waltowa Wetand (foreground and right; third outcrop obscured by vehicle; photo C. Hartman 2012)

1989:28). Similarly, the granite boulders located on Seal Island near Victor Harbor—an island *Ngurunderi* created by throwing spears into the sea—were also once seals (Berndt et al. 1993:226). Nearby, granite boulders located on Granite Island at Victor Harbor are the result of a shelter *Ngurunderi* made for himself prior to his last encounter with his wives (see Hemming et al. 1989:4). As Berndt et al. (1993:226) note:

Since it was very hot, *Ngurunderi* picked up three giant boulders and place them at the foot of the bluff and arranged another on top of them, making a *punari* shelter. These remain on the south side of the Bluff. There he sat resting.

Several granite outcrops located within the Lower Murray are also associated with the actions of *Ngurunderi* (Berndt et al. 1993:352-3; Wilson 2017; M. Carter, Pers. Comm., 2012). In particular, a small granite outcrop located adjacent to *Pomberuk* at Murray Bridge is one of the footprints *Ngurunderi* left as he chased *Pondi* through this region (Wilson 2017; Wilson, Pers. Comm., 2009). More broadly, rock outcrops once located adjacent to Mount Misery also represent *Ngurunderi*'s footprints, but these features were subsequently quarried by colonists in the 1930s, and are no-longer visible (Berndt et al. 1993:224, 313, 434; A. Karloan in Hemming et al. 1989:2). Tindale (1934) describes the similar fate of limestone cliff features along the *Kurangk* that were also the result of *Kaldowinyeri* ancestors.

Elsewhere within the *Kurangk*, a rock outcrop was formed when *Ngurunderi* bent down to drink from a well and bumped his head creating this feature (Berndt et al. 1993:225). Lastly, Berndt et al. (1993:315) note granite outcrops also served as boundary markers between *Lakinyeri* of the Ngarrindjeri Nation, as did other rock outcrops (see Tindale 1974:29, 67).



Figure 3.2 *Granite outcrop in Lake Albert (photo K. Wiltshire 2010)*

Finally, a prominent feature within Waltowa Wetland is an area of low standing water with a slight pink colour known as the Pink Lake. Scientifically informed knowledges describe this feature as the result of high salinity levels that cause green algae (*Dunaliella salina*) to produce the red pigment beta carotene, whilst at the same time supporting populations of the pink bacteria (*Halobacterium cutirubrum*; Oren 2009). An interpretive sign privileging these scientifically informed knowledges is prominently located at a photo point on the Princes Highway overlooking this feature; however, Ngarrindjeri knowledges emphasise this feature is the result of a great battle between Ngarrindjeri Old People and an Aboriginal group from Victoria, with the Pink Lake representing the blood of the Old People (T. Trevorrow, Pers. Comm., in Change Media 2012b). In contrast to other features within Waltowa Wetland that were formed as a result of *Kaldowinyeri* ancestors, it appears the formation of this feature is associated with a historical conflict. Whilst this discussion makes a distinction between

Kaldowinyeri and historical events, it should be noted that *Kaldowinyeri* ancestors such as *Ngurunderi* are very much historical figures for the Ngarrindjeri Nation (see Bell 1998:98).

Ngarrindjeri knowledges refer to several conflicts that occurred within the region, providing a broader context to the nature of the conflict responsible for the formation of the Pink Lake. In considering this, Tindale (1974:215) notes the Ngarkat people—who occupied the sand plains to the east of Waltowa Wetland referred to as the Tatiara Desert and were considered enemies of the Ngarrindjeri Nation—were also referred to as the “Mangkarupi”, “Potaruwutj” and “Tatiara” people (see Angas 1847:plates 18,44; Bell 1998:xiv; Berndt et al. 1993:20,314-15; Tindale 1934; T. Trevorrow, Pers. Comm., 2009). In contrast, Berndt et al. (1993:314) maintain Mangkarupi, which they referred to as “Manggurupa”, was a Ngarrindjeri sub-*Lakinyeri* whose *Yarluwar-Ruwe* was associated with Waltowa Wetland including the sand plains to the east, which bordered the area occupied by a group they refer to as the Tatiara; however, Berndt et al. (1993:314) also maintain the eastern boundary of this clan was undefined. Berndt et al. (1993:315) note:

...the Manggurupa was accentuated by members of this clan speaking...with a Tatiara accent. For this reason, they were known as Manggurupa—a word which...meant ‘the way they speak’. We were also told that whenever an outsider heard a Manggurupa person speak he or she would feel fear: it sounded too much like Tatiara. This vocal connection with Tatiara was cause for interclan disagreements and...was sufficient to engender accusations of sorcery. At such times when insults were exchanged, attitudes held in relation to the Tatiara were reflected onto the Manggurupa...Only in quarrelling were such insults levelled...However, if accusations of incest were levelled, that would certainly provoke serious fighting. The reasons for this alleged Tatiara association are obscure. However, the explanation we heard was that at one time the Manggurupa intermarried with the Tatiara—and that was given some credence since their territorial boundaries were blurred in the eastern desert.

Bell (1998:210) notes inter-relations with neighbouring groups such as the Tatiara were established through marriage. In relation to this, Berndt et al. (1993:59) presents further knowledge suggesting such inter-marriage occurred:

(the) Manggurupa clan was the most important in the Yaraldi¹¹ constellation and that its headman was paramount. [Ngarrindjeri Elder Albert] Karloan, who emphasised

¹¹ Also known as Yarilde, Yarlalde, Jarildekald, Jarildikald, Jaralde, Jaralde, Jaralde (see Bell 1998:29; Tindale 1974:212). *Lakinyeri* of the Ngarrindjeri Nation who owned and occupied *Yarluwar-Ruwe* located on the northern, north-eastern and eastern shores of Lake Albert, as well as south-eastern and western shores of Lake Alexandrina extending as far as south towards Pelican Point and including Reedy Point located on the western side of Lake Alexandrina (Berndt et al. 1993:22; Radcliffe-Brown 1918:225; Tindale 1974:212). Manggurupa is sub-*Lakinyeri* of Yaraldi who owned and occupied *Yarluwar-Ruwe* located on the eastern shore of Lake Albert including Waltowa Wetland, which Berndt et al. 1993:314,325) refer to as “Walta-alingk”;

this point, was speaking of his youth—the situation in the mid to late 1860s...At the time, so we were told, this clan had the largest population of all the Yaraldi clans...However, although the Manggurupa was the dominant clan in Karloan's youth and before, there is some reason to suggest that its headmen came to power through intermarriage with the warlike Tatiara. As we have already mentioned, people were said to have been more circumspect in their dealings with Manggurupa than with other members of other clans and there was, contrary to idealized statements that were often made, even some element of fear.

Demonstrating the variation that exists in Ngarrindjeri knowledges within the literature, Berndt et al. (1993:21) also presents contradicting accounts of these inter-relations, stating:

It was said that while Yaraldi did not intermarry with the Tatiara, at one time the Tangani¹² did. Nevertheless, from genealogical records it would appear that during the last quarter of the nineteenth century intermarriage took place between these two groups, particularly between members of the Piltindjeri¹³ clan and the Tatiara.

Interestingly, Tindale (1937) also notes the existence of inter-relations between Ngarrindjeri people who occupied the *Kurangk* and the Tatiara from several “fighting songs” he recorded during a brief period spent with Ngarrindjeri Elder Clarence Long—also known as *Milerum*. According to Tindale (1937:118) these songs were “...sung either during fighting, or, more often, during the period when men are working themselves into the mood for battle”. Although, Bell (1998:170) claims these songs became “...an instructive account of more general abstract matters such as relationships to others, the land, and the nature of intrusion”.

Specifically, Tindale describes a song in which the Tatiara criticise Ngarrindjeri people occupying the *Kurangk* for refusing to participate in inter-marriage activities, which eventually “...led to a fight, in which several natives were killed” (Tindale 1937:118). In contrast, Tindale also describes another song in which the Tatiara refuse to participate in inter-marriage activities and “it was expected that the song would lead to a fight and that the marriages would then ‘come right’” (Tindale 1937:118). A third song recorded by Tindale (1937:118-20; also see Tindale 1974:35) describes the mistreatment of Ngarrindjeri women by their Tatiara husbands, resulting in conflict between Ngarrindjeri and the Tatiara that “...placed a check on marriage exchanges for two generations”. Tindale (1937:120) notes this ban on inter-marriage between Ngarrindjeri and the Tatiara was apparently lifted following an elopement involving a Ngarrindjeri women and a Tatiara man, which Clarence Long

Radcliffe-Brown (1918:227,229) refers to this area as “Waltarpularorn”. Therefore, it is likely the term Waltowa is derived from the Ngarrindjeri term for this wetland.

¹² Also known as Tanganekald, Tanganikald, Tangane (see Bell 1998:29; Tindale 1974:218) *Lakinyeri* of the Ngarrindjeri Nation who owned and occupied *Yarluwar-Ruwe* located along the *Kurangk* estuary (Bell 1998:29; Berndt et al. 1993:23; Tindale 1974:218).

¹³ Sub-*Lakinyeri* of Yaraldi who owned and occupied *Yarluwar-Ruwe* located on the south-eastern shore of Lake Alexandrina (Berndt et al. 1993:314).

recalled occurring during his youth sometime in the late nineteenth century. Prior to this, however, there is at least one other inter-marriage known to occur between Ngarrindjeri and the Tatiara; the marriage of Ngarrindjeri man James Ngunaitponi and Tatiara woman Granny Unaipon, both born in 1834 and parents to David Unaipon (Bell 1998:128).

In general, it seems disagreements over inter-marriage were a key cause of conflict between the Ngarrindjeri Nation and the Tatiara (Berndt et al. 1993:59,315; Hemming et al. 1989:24; Tindale 1937:118-20). For the most part, however, the literature regarding inter-marriage privileges a patriarchal understanding, characterising women as passive victims who were “given away” (Berndt et al. 1993:187; Radcliffe-Brown 1918:238-9) or “kidnapped” (Berndt et al. 1993:20-1,188). Even in instances where women were active participants, their agency is marginalised as demonstrated in the following example:

An elopement was planned so that the man went first and the woman followed by herself and eventually joined him. Once her absence was detected, men would follow to bring her back to her husband’s camp. If she were ‘no good’ and her husband did not want her, they would let them go so that the *abductor* could *take her* as his ‘wife’ [emphasis added] (Berndt et al. 1993:188).

Berndt et al. (1993:187) refer to instances of elopement as *muroldin*, which they translate to mean “the taking”. This is in contrast to formal marriage activities that are referred to as *tetjungun* meaning “the asking” (Berndt et al. 1993:186-7). Bell (1998:456-7) points out such depictions do not account for the agency of women in inter-marriage, including the access rights to *Ruwe* that women would acquire as a result. Despite the way they represent women’s role in inter-marriage, Berndt et al. (1993:33) contend that a woman’s “(prestige), like that of a man, was increased through marriage...”. Furthermore, Berndt et al. (1993:33) state:

Marriage ensured that a man [as well as a woman] could have his own hut and camp fire and no longer had to share with a parent or male sibling. A wife provided him [as well as his wife] with domestic security and enhanced his prestige and responsibility. Marriage was looked upon as a *co-operative* undertaking in which food resources could be pooled [emphasis added].

In describing a conflict that occurred between the Ngarrindjeri Nation and the Ngunnawal—the traditional owners of the Canberra region—Ngunnawal man Adrian Brown suspects this conflict was related to inter-marriage, stating: “Women could give you so much more opportunities...because they are the collectors. They are also the first teachers for the young boys and girls. They are really important...” (A. Brown in Thistleton 2009). In short, disagreements over inter-marriage had social, cultural and economic implications.

Despite this, it would seem there *were* instances of the kidnapping of women that resulted in conflict between the Ngarrindjeri Nation and the Tatiara, as Berndt et al. (1993:20-1) describe:

To the south-east, Narrinyeri¹⁴ enemies were the Tatiara (Tatiera), who were centred on the Bordertown area but hunted and collected food over an area the Yaraldi called desert. [Point McLeay missionary George] Taplin (in Woods ed. 1879:2) said that they were called Merkani by the Narrinyeri and that they were cannibals. We mentioned before that a large battle was reported to have taken place at Piwingang, near Tailem Bend. The reason for this, we were told, was that while some men were out hunting, a Tatiara group surprised a camp of people near the opening of the Murray into the Lake and abducted some young women. Those who escaped swam across the River and warned the hunters. As there were only a few fighting men among them in comparison with the Tatiara party, they went further down the River with those women and children who had survived and assembled a large number of warriors belonging to several language/dialectal units. They divided into small groups and set out in search of Tatiara. Reaching Piwingang they ambushed them: only a few escaped...

In placing the conflicts discussed thus far in chronological order, it is possible the ban on inter-marriage between the Ngarrindjeri Nation and the Tatiara may have preceded the above event, resulting in the instances of kidnapping and conflict that followed. As such, Berndt et al. (1993:14) note the location of a burial area within the Lower Murray associated with this conflict.

Another key cause of conflict between the Ngarrindjeri Nation and the Tatiara were accusations of sorcery (Berndt et al. 1993:252,291,315; Hemming et al. 1989:24). As Berndt et al. (1993:252) claim:

...it appears that there was a fair amount of interpersonal and intergroup fighting, and that except for the more mundane reasons for such conflict (marital upset, elopement, defying the elders or usurping another person's right to fish or take game or use a territorial space, and so forth), most had to do with sorcery accusations. [Point McLeay missionary George] Taplin was right in this respect, that sorcery exacerbated conflict, increased suspicion between individuals and reinforced fear.

Furthermore, Berndt et al. (1993:252) point out sorcery was "(a) danger that constantly threatened everyone; no one was immune to its deleterious or death-dealing effects..." There appears to be an understanding that the Tatiara in particular practiced sorcery, which resulted in a certain level of fear amongst the Ngarrindjeri Nation directed towards them (see Berndt et al. 1993:59,252,315). Berndt et al. (1993:21) claim Ngarrindjeri people who occupied

¹⁴ Alternative spelling for Ngarrindjeri; others include Narindjeri and Narinjeri (see Berndt et al. 1993:19; Radcliffe-Brown 1918; Taplin 1873, 1879; Tindale 1974:212).

Waltowa Wetland and the *Kurangk* region were particularly vulnerable to attacks from the Tatiara, which may have further contributed to this fear.

A key feature of individuals who practiced sorcery was “(the) possession of a special [kangaroo skin] bag containing a dead person’s fat...without his [sic] bag, a sorcerer was only an ordinary person” (Berndt et al. 1993:255). A person’s fat was said to be collected following their death, usually “(with) the permission of the deceased’s relatives so that it could be used to avenge [the deceased]...” (Berndt et al. 1993:257). Human fat was considered to be highly poisonous and was used to treat weaponry used in conflicts, with such weapons being strongly associated with sorcery. For example, Berndt et al. (1993:225) explain during such conflicts individuals would be on the lookout for a spear “(that) was smeared with dead person’s fat; this would usually find its way to its [victim] because of its magic quality”. In order to anoint them in this manner, it was common for spear points “(to) be put into the chest of a decomposing corpse...” (Berndt et al. 1993:262).

Whilst several types of spear were used in conflicts, barbed spears were the most common. In particular, composite spears “(with) small chips of stone or glass attached were the most feared. These were known to the early settlers as ‘death spears’ (Hemming et al. 1989:24; also see Angas 1847; Berndt et al. 1993:86; Luebbers 1984; Taplin 1879). The barbs of this spear would become embedded within its intended victim, causing a slow and painful death (M. Sumner, Pers. Comm., 2010). Indeed, ‘archaeological’ evidence supports the use of these composite spears in conflict (see McDonald et al. 2007). For example, a spear barb embedded in the knee joint of an elderly Ngarrindjeri Old Person provides evidence for the use of such spears within the region; however, in this example the knee joint had grown over the stone barb indicating this Old Person had survived his encounter with this particular spear (Pardoe 2003, 2004). In considering the broader nature of historical conflicts between the Ngarrindjeri Nation and the Tatiara including the weaponry used, there may be the potential for archaeological investigations of Waltowa Wetland to support Ngarrindjeri knowledges regarding the instance—or instances—of historical conflict responsible for the formation of the Pink Lake.

3.2 Ngarrindjeri Philosophy of *Ruwe/Ruwar*

Ngarrindjeri knowledges also emphasise the active role of *Kaldowinyeri* ancestors in the establishment of stories, meanings and laws that inform Ngarrindjeri interests, rights and

responsibilities in the ongoing management of *Yarluwar-Ruwe*. As the Ngarrindjeri Nation (2006:8-13) emphasis:

As Ngurunderi travelled throughout our Country...He gave to his people the stories, meanings and laws associated with our lands and waters of his creation...He taught us, don't be greedy, don't take any more than what you need, and share with one another. Ngurunderi also warned us that if we don't share we will be punished. Ngarrindjeri respect the gifts of Creation that Ngurunderi passed down to our Spiritual Ancestors, our Elders and to us. Ngarrindjeri must follow the Traditional Laws...Our lands and waters must be managed according to our Laws to make them healthy...The Creation ancestors taught us how to respect and understand the connections between the lands, the waters and the sky...

These stories, meanings and laws inform the interconnectedness that exists between Ngarrindjeri people, their *Yarluwar-Ruwe* and all living things, which lies at the heart of the philosophy of *Ruwe/Ruwar* (Ngarrindjeri Nation 2006:5-6). This philosophy not only “weave¹⁵” together Ngarrindjeri people, their *Yarluwar-Ruwe* and all living things (Bell 2008:25), but informs past, present and future Ngarrindjeri lifeways; as Uncle Tom and Auntie Ellen Trevorrow (in Bell 2008:11) explain, “people call them our Dreaming stories [but] they are our way of life...”

The Ngarrindjeri philosophy of *Ruwe/Ruwar* has informed the ongoing management of *Yarluwar-Ruwe* since *Kaldowinyeri*. As a result, there are a number of characteristics of the Ngarrindjeri Nation informed by this philosophy that contributed to this ongoing management. For example, the Ngarrindjeri Nation was comprised of at least¹⁶ 18 *Lakinyeri*, each consisting of an extended Ngarrindjeri family that held exclusive resource rights and responsibilities for the management of a distinct territory of *Yarluwar-Ruwe* (Bell 1998:549-54; Berndt et al. 1993:25-6; Tindale 1974:23-5; Ngarrindjeri Nation 2006:8; NLPA 2013). Given their territory specific rights and responsibilities, *Lakinyeri* families permanently occupied these areas to the extent that they have been described as very densely settled, semi-permanent villages (see Faull 1981:15; Ngarrindjeri Nation 2006:11). Surveyor General E.C.

¹⁵ Weaving is an important Ngarrindjeri cultural practice and is often used as a metaphor to describe the interconnectedness between Ngarrindjeri people, *Yarluwar-Ruwe* and all living things (see NLPA 2013:11-2).

¹⁶ There are competing accounts published regarding the number of *Lakinyeri* (see Bell 1998:208-9; Berndt et al. 1993:29; Radcliffe-Brown 1918:228-9; Tindale 1974:23-5). This may be the result of amalgamated *Lakinyeri* due to the forced movement of Ngarrindjeri people following colonialisation (Bell 1998:208; Simons 2002:19). Additionally, Tindale (1938-56:63 in Bell 1998:480) argues “that even in times before white contact, conflict and adjustment had been a factor in continuing adjustment of tribal and clan boundaries”. Today, the Ngarrindjeri Nation (2006:8) formally recognises at least 18 *Lakinyeri*, but Uncle Tom Trevorrow (Per. Comm., 2012) believes there were more. Subsequently, the NRA is seen as a unification of these *Lakinyeri* (Rita Lindsay Jnr in Bell 2008:83).

Frome (1840:4) referred to “(the) permanent nature of the huts of the natives [sic]”. Furthermore, Berndt et al. (1993:27) describe *Lakinyeri* families as:

...a residential group more or less permanently settled, with ample food supplies within easy reach. It is true that clan members did hunt and collect food at some distance from their home camps, had hunting rights in adjacent clan territories, and even had their winter and summer camps...However, such mobility does not necessarily imply a semi-nomadic existence, since their home camps were more than mere base-camps.

Similarly, Tindale (1934:9) provides another example describing the permanent nature of *Lakinyeri* lifeways:

The people were not truly nomadic...As shore-dwelling fisherman, each clan had its defined and restricted territory, further divided into family hunting grounds. Within these areas there were a relatively few main camps along the Coorong lagoon, where much of the year was spent by members of a particular clan. In addition, there were ocean beach camps, where temporary visits were made for the purpose of gathering the large *Donax* cockles. Great bagfuls of the meat of this shellfish would be carried to the main camps.

As a result of these distinct territory rights and responsibilities, each *Lakinyeri* held detailed localised knowledge and worked with other *Lakinyeri* in order to contribute to the broader management of *Yarluwar-Ruwe*. All *Lakinyeri* were interconnected through a kinship system and shared some responsibilities in order to manage *Yarluwar-Ruwe* on both a micro and macro-scale. Gammage (2011:3) argues this management strategy was used by Aboriginal people in Australia more broadly, stating:

What plants and animals flourished where related to their management...Detailed local knowledge was crucial. Each family cared for its own ground...They knew every yard intimately, and knew well the ground of neighbours and clansmen [sic], sharing larger scale management...

In addition to this *Lakinyeri* based kinship system, each *Lakinyeri* was also interconnected with a different species of animal and/or plant as part of a kinship system; as the Ngarrindjeri Nation (2006:12) explain:

Ngarrindjeri people hold cultural and spiritual connections to particular places, to particular species of animals and plants, and all elements of the environment are part of our kinship system. Particular animal and plant species are the *Ngartji* (totem or special friend) of Ngarrindjeri people, who have special responsibility to care for their *Ngartji*. To care for *Ngartji* is to care for country.

Caring for *Ngartjis* and *Yarluwar-Ruwe* went hand-in-hand to ensure all living things thrived and flourished as part of the ongoing management of *Yarluwar-Ruwe*; one could not flourish without the other (Ngarrindjeri Nation 2006:12). In relation to this, Linn (1988:5) points out

the majority of *Ngartjis* were associated with water, demonstrating the importance of maintaining healthy waters in order to maintain healthy habitats for such *Ngartjis*.

Lakinyeri members were not allowed to harm or consume their *Ngartji*, ensuring the Ngarrindjeri Nation maintained a sustainable relationship with all living things. In doing so, animals and/or plants fulfil purposes beyond a purely economic function. Specifically, *Ngartjis* are considered an extensive of one's self¹⁷ that Ngarrindjeri people communicate with and are the carriers of important messages. According to Bell (1998:310, 317), sheoaks or casuarina (*Allocasuarina verticillata*) carry messages between Ngarrindjeri doctors, the *mingka* or stone curlew (*Burhinus magnirostris*) bird foretells death, whilst the *ritjaruki* or willie wagtail brings news of country and kin. The Ngarrindjeri Nation pay particular attention to the actions of *ritjaruki*, as Bell (1998:46) explains:

Most everyone knows that the *ritjaruki*, the willie wagtail, is the messenger bird...Doreen [Kartinyeri] watches one in my garden at Clayton to be sure everything is all right. *Is he always there?* she asks me. I've seen it before...Doreen pursues the question. *What was he doing?* "Just flying between the house and the fence," I tell her. "I saw a pair." She watches for a while and relaxes. *He's happy.*

Bell (1998:310-11) provides more detail of the *ritjaruki*'s importance by stating:

...all agree one should pay attention to *ritjaruki*. When Sheila Goldsmith was engaged, the Willie wagtail would let her know when a letter was coming from her fiancé who was at Point Pearce...Victor Wilson...tells me, "If it dances at the door, someone is coming." For Neville Gollan, the Willie wagtail is one of the "main blokes". "If there's something wrong, he'll be there. It's the way he flies. He may peck on your window. That's not natural for a bird. Then you might go over to the window and try to shoo it away, but it'll go away and keep coming back and that's the ngatji relationship, that's the type of relationship".

Similarly, not all areas of *Yarluwar-Ruwe* are associated with purely economic functions, demonstrating *Yarluwar-Ruwe* is as complex in nature as the philosophy that informs its management. For example, the Ngarrindjeri Nation use a land/body metaphor to describe *Yarluwar-Ruwe* and consider it a living body. Specifically, *Yarluwar-Ruwe* is understood as a whole, integrated body with individual areas described as limbs or organs (Bell 1998:264-5; Berndt et al. 1993:13-14). Ngarrindjeri Elders Uncle Tom Trevorrow and Uncle Marshal Carter (Pers. Comm., 2011) refer to wetlands as "livers" or "kidneys"; fertile nurseries critical to the life cycle of *Yarluwar-Ruwe* that foster new life, nurture living things and filter

¹⁷ In relation to the connection that exists between the Ngarrindjeri Nation and their *ngatjis*, Ngarrindjeri Elder Uncle George Trevorrow describes this connect as "(something) that is more than a close friend. It's more than your best friend. It's something that is more closely to you"; likewise, Uncle Tom Trevorrow describes this connection as "(even) closer...than a husband and wife" (Bell 1998:205).

nutrients into the surrounding landscape (also see DEWNR 2013; DWLBC 2008; NLPA 2013:68; Hemming et al. 2016:5; K. Mason in Change Media 2013; Trevorrow and Rigney in Bjornsson 2005:22). The names of certain areas within *Yarluwar-Ruwe* also reflect this land/body metaphor; for example, the term *Kurangk* is Ngarrindjeri for “neck” or “long neck of water” (Bell 1998:265; Berndt et al. 1993:14; Meyer 1843:41). As such, “(the) health of the individual parts [of *Yarluwar-Ruwe*] still has relevance for the survival of the whole body” (Bell 1998:264). In this respect, each *Lakinyeri* was responsible for the management of a particular territorial ‘limb’ or ‘organ’ to ensure the health of the entire body of *Yarluwar-Ruwe*.

Reflecting this land/body metaphor, areas of *Yarluwar-Ruwe* are considered gendered in the same way the human body is gendered (Bell 1998:272). As Bell (1998:599) explains, “(the) Ngarrindjeri world...is a gendered world where men’s and women’s beliefs about their *ruwar* (bodies) are inscribed on their *ruwi* (land) in distinctive ways”. The most notable example of a gendered area within *Yarluwar-Ruwe* is the existence of *miminar*’s gendered knowledge associated with *Kumarangk*, which became the focus of public and media interest during the HIRC. Bell’s (1998:269-278) detailed ethnography in light of the HIRC refers to other gendered areas within *Yarluwar-Ruwe*. For example, Bell (1998:273-5) discusses islands in Salt Creek associated with *korni* gendered knowledge, as well as gendered areas within the *Kurangk* and at *Raukkan*. Whilst these areas are identified as associated with either *mininar* or *korni* gendered knowledge, Bell (Pers. Comm., 2016) suggests areas of *Yarluwar-Ruwe* could have been associated with the knowledge of both genders.

Whilst identifying the existence of gendered areas of *Yarluwar-Ruwe*, Bell’s (1998:273-5) ethnography does not detail the sensitive or restrictive content of this knowledge. Such an approach also informed Bell’s previous ethnographic research, as she explains:

This had also been my position in *Daughters of the Dreaming* in 1983. It was possible to understand the religious life of Aboriginal women without having to disclose the inner meanings of songs, symbols and stories. It is also my position on the Ngarrindjeri material. It is possible to know that certain stories exist and that they shape behaviour without being privy to the details (Bell 1998:369).

In doing so, Bell’s (1998) ethnography also reflects Ngarrindjeri cultural protocols in regards to gendered knowledge; that is, Ngarrindjeri people are, for the most part, aware of the existence of gendered areas and knowledge of the opposite sex, but are not necessarily privy to the content of that knowledge and their associated practices (Bell 1998:274,389; Kartinyeri and Anderson 2008:7). Gender divisions that exist in relation to areas and knowledge is

respected¹⁸ (see Bell 1998:403). As Ngarrindjeri Elder Uncle Neville Gollan (in Bell 1998:274) explains whilst standing at Parnka Point on the shores of the *Kurangk*:

That was an island of women's business. I know that by word of mouth from the old people. I can't elaborate on more than that, but just say that was a women's island. And, directly across that hill, there was another little place that was a men's place, for their business to attend to. And I can't elaborate on that no more because that's sacred stuff to us. We knew that at all times it was women's business. It wasn't anything to do with men. And vice versa with men's business, the women knew nothing.

Likewise, Ngarrindjeri Elder Uncle Tom Trevorrow (in Bell 1998:408) further emphasises the respect exercised towards gendered areas and knowledge:

That women's business on Kumarangk – I believe in it because I know very well that it's always been told to me that there's men's business and women's business. And women's business was to be respected, on both sides.

These cultural protocols allowed for particular gendered areas to be respected or even avoided by members of the opposite sex. The management and maintenance of gendered areas including the observations of cultural protocols associated with such, protect gendered knowledge from the opposite sex (Bell 1998:386). As a result,

both men and women hold special cultural and environmental knowledge and both men and women have always been involved, and continue to be involved, in passing down our knowledge between generations and in decision-making about Ngarrindjeri affairs, land waters and resources (Ngarrindjeri Nation 2006:12).

These gender-based divisions continue to inform Ngarrindjeri lifeways, as Bell (1998:278) describes in the following observation:

...today people travel in mixed groups: men and women, young and old, Ngarrindjeri and non-Ngarrindjeri. Still there is a grace to the ways their law is maintained. When Tom and Ellen Trevorrow and their son Bruce, Matt and Margaret Rigney, my daughter and I were on a trip down the Coorong, we visited a site opposite Mundoo Island. Tom wished to explain something to Matt. He called Matt's name softly and motioned him down the beach a little. Ellen thought Tom had called her and walked to join the two men. Her son, who had heard and seen his father's direction, moved quickly and deferentially into her path. *He said "Matt", not "mum". It's men's talk.* She immediately returned to where the rest of us stood¹⁹.

¹⁸ When gender restrictions are not respected, the disrespect associated with this action can result in strong reactions from the Ngarrindjeri Nation. In particular, during the HIRC Auntie Doreen Kartinyeri became enraged when a non-Ngarrindjeri man shared women's knowledge of *Kumarangk* with a local newspaper (Simons 2002:203). As Bell (1998:403) explains: "Both men and women react strongly to any suggestion that this line might have been crossed...It is not only Doreen Kartinyeri who becomes angry when a man speaks out of turn; other men are also dismayed".

¹⁹ During my long-term relationship with the Ngarrindjeri Nation I have also witnessed such gender-based divisions. During one occasion at Camp Coorong Ngarrindjeri Elder Uncle Neville Gollan was organising a day

More recently, Bell (2008:112) observed:

When the women were meeting, the men kept their distance. It was a matter of respect. No-one said, 'Keep out'. Rather, the women were being supported in their workshop activities by the men, but at a distance. The women were doing their part in working for the Ngarrindjeri Nation by taking the issues of caring for country, governance and economic development seriously.

In addition to gendered areas of *Yarluwar-Ruwe*, other areas had various functions, as Ngarrindjeri Elder Uncle Tom Trevorrow (in Hemming and Trevorrow 2005:243) explains:

Stories and sacred stories were developed by their Ancestral Beings and by the Elders upon certain parts of the land and waters, which became an important part of the survival of the people in relationship to their cultural and spiritual beliefs. For example, certain parts of land and waters were good places and some are bad places. Other parts of the land are the shapes of people and creatures, other parts of the land is where ceremonies were carried out and where women carried out their ceremonies according to their teachings and beliefs. Other parts of the land were where people lived and food gathering took place.

Particular areas of *Yarluwar-Ruwe* are associated with stories and laws established by *Kaldowinyeri* ancestors that emphasise the importance of observing morals such as respect and sharing, as well as the punishment associated if these morals are not observed. For example, the story of *Thukeri*²⁰—in which *Kaldowinyeri* ancestor *Ngurunderi* plays a central role—demonstrates the importance of observing such morals:

A long time ago two Ngarrindjeri men went fishing in a bay near Lake Alexandrina to catch the thukeri mami (bream fish). They set off in their bark canoe to catch the big fat thukeri. They fished and fished until their canoe was over full and they said we have plenty of thukeri we will paddle to shore before we sink. As they paddled to shore they saw a stranger coming towards them so they covered up the thukeri with their woven mats they said this man might want some of our thukeri, when they approached the shore the stranger said to them hey brothers I'm hungry have you got any fish to share, but the two Ngarrindjeri men said no we haven't got many fish we only have enough to feed our families. So the stranger began to walk away then he turned and said you have plenty of fish and because you are greedy and don't want to share you will not enjoy the thukeri fish ever again. As the stranger walked away the two Ngarrindjeri men laughed at him. When the two Ngarrindjeri men unloaded the thukeri on to the banks to scale and clean them, they saw that their nice big fat thukeri were bony and they didn't know what had happened. The two Ngarrindjeri men went home to the campsite in shame and told the Elders what had happened. The Elders were angry and said the stranger was Ngurunderi our Spirit Ancestor and because you two were greedy and would not share with him he has put a curse on our thukeri mami. Now all the Ngarrindjeri people will be punished (Ngarrindjeri Nation 2006:8).

to take some young Ngarrindjeri men around *Ruwe*, inviting my colleague Chris Wilson in my presence. Turning to me, Uncle Neville informed me I could not go as I was female and non-Ngarrindjeri.

²⁰ Bony Bream (Bell 1998:200; Ngarrindjeri Nation 2006:8); this story was also shared by Ngarrindjeri Elder Tom Trevorrow on a field trip with DEWNR staff at the location where this occurred (T. Trevorrow, Pers. Comms., 2012).

By promoting morals such as sharing, these stories and laws further ensured the Ngarrindjeri Nation maintained a sustainable relationship with *Yarluwar-Ruwe*, all living things and each other. In doing so, the Ngarrindjeri Nation (2006:28) maintain: “Our economy has always been based on the sustainable use and trade of our natural resources.” This resulted in resources that were “abundant, convenient and predictable” (Gammage 2011:87), which in turn supported a large and thriving Ngarrindjeri Nation who occupied and enjoyed *Yarluwar-Ruwe* for generations. As a result, Ngarrindjeri *Yarluwar-Ruwe* is considered to be the most densely populated region in Australia prior to colonisation (Berndt et al. 1993:18; Ngarrindjeri Nation 2006:11; Radcliffe-Brown 1918:229-231; Tindale 1974:111). Specifically, Radcliffe-Brown (1918:230) provides a conservative estimate of 3,000 to 4,000 Ngarrindjeri people occupying *Yarluwar-Ruwe* prior to the small pox epidemic, which is based on eye-witness accounts recorded by Taplin (1859:154) that claim Ngarrindjeri people occupying areas south of Lakes Alexandrina and Albert “(could) muster easily 800 warriors”. In reviewing this literature, Bell (1998:208) suggests a population of at least 4,500 Ngarrindjeri people occupying *Yarluwar-Ruwe* prior to colonisation, if not more. Lastly, Berndt et al. (1993:29) suggests a post-colonisation *Yaraldi* population of 1,140 Ngarrindjeri people, which seems consistent with population estimates for the broader Ngarrindjeri Nation. As a result of these estimates, Radcliffe-Brown (1918:230-1) argues:

Comparing these figures with what we know of other parts of Australia it appears that this district must have been one of the most densely populated of the whole continent. This is a conclusion that may be supported by considering the natural resources.

Therefore, the interconnectedness that informs the philosophy of *Ruwe/Ruwar* and the concept of *Yannarumi* ensured healthy *Yarluwar-Ruwe* and in turn a healthy Ngarrindjeri Nation.

3.3 Historical Mismanagement of *Yarluwar-Ruwe*

In order to further demonstrate the ways in which this philosophy informs the ongoing management of *Yarluwar-Ruwe*, the following discussion describes the historical mismanagement that has occurred since colonisation. As Gammage (2011:17) argues “recognising how extensive such changes have been to plants, animals and the land, is crucial to understanding how constant and purposeful...[Aboriginal] management was”. For the

most part, however, evidence of this ongoing management was overlooked by *Krinkaris*²¹ (NLPA 2013:67). In order to recognise this ongoing management, *Krinkaris* needed to recognise the sophisticated and complex nature of the Ngarrindjeri Nation. Regrettably, *Krinkaris* described the Ngarrindjeri Nation as “savages” (Angas 1847) and “a strange people” without history, religion, forethought, hope or future (Woods 1879:xxxviii). Furthermore, the Ngarrindjeri Nation was seen to passively accept the colonisation of their *Yarluwar-Ruwe* and their people (see Jenkin 1979). In reflecting on the colonisation of New South Wales, English and Gay (2005:2) point out: “This idea of passivity was mirrored by settler inability to understand that Aboriginal people and their social systems had shaped the very structure of the landscape they moved into”. Similarly, Gammage (2011:17) argues:

It might seem a small jump to think them [landscapes] man-made as in Europe. In fact the leap was so vast that almost no-one made it. Almost all thought no land in Australia private...To think otherwise required them to see Aborigines as gentry, not shiftless wanderers. That seemed preposterous.

As a result of this colonial mentality, *Yarluwar-Ruwe* was perceived to be a ‘natural’ resource waiting to be claimed, controlled and utilised, despite the existence of an ongoing system of ownership and management carried out by the Ngarrindjeri Nation. In reference to the colonisation of Ngarrindjeri *Yarluwar-Ruwe*, Linn (1988:7) accurately observes:

...the land represented different hopes for the British...who came to the area [and] viewed the land in different ways. One group wrote of its scenic nature; the other saw how it could be used in practical ways by settlers.

Furthermore, Linn (1988:13) points out, “their [colonial] perception of the land as a place for flocks and herds, to be tilled by the farmer and to yield up its fruits, was the spirit behind their explorations and descriptions”. In short, this perception commenced the abuse, mis-use and mis-management of Ngarrindjeri *Yarluwar-Ruwe*.

Prior to this mis-management, many *Krinkaris* including J.F. Bennett, John Morphett, W.H. Leigh, Alexander Buchanan and Edward Snell described *Yarluwar-Ruwe* as resembling a beautiful English gentlemen’s park, due to the treeless, perennial grassed plains that characterised the area (Gammage 2011:16,41). For example, Charles Sturt (1849:229-30) described one area of *Yarluwar-Ruwe* as:

²¹ White person, the dead or ghost; when colonialists first arrived in *Yarluwar-Ruwe*, Ngarrindjeri Old People thought they were ghosts and referred to them as such (Bell 1998:141; Trevorrow in Hemming and Trevorrow 2005:244).

(belts) of scrub on barren or sandy ground, its character is that of an open forest without the slightest undergrowth save grass...In many places the trees are so sparingly, and I had almost said judiciously distributed to reassemble the park lands attached to a gentleman's residence in England.

These plains were the result of the ongoing management by the Ngarrindjeri Nation, which included the deliberate and controlled use of fire. Gammage (2011:4) argues the use of fire allowed resources to be as predictable as agricultural based activities even in times of drought and flood. As such, some of the first *Krinkaris* to occupy *Yarluwar-Ruwe* documented Ngarrindjeri Old People's ability to control fire:

...a bush fire broke out between Nairne and Mount Barker; the natives [sic] were very active in subduing the flames, which, but for their assistance, would have destroyed a considerable quantity of crops (Sturt 1850).

Historical documents during the early colonisation of *Yarluwar-Ruwe* praise 'gentleman' station owners, who bargained with Ngarrindjeri Old People to confine or cease their management of *Yarluwar-Ruwe* through the use of controlled fire:

In order to induce the natives [sic] to be careful not to burn the grass during the dry season, several gentlemen, stock-holders owning runs around the Lakes, have offered rewards to them to extinguish all bush fires that may occur on their runs...D.McFarlane, Esq. has promised the natives [sic] of the Peninsula of the Peninsula (Lake Albert) several blankets and two fat bullocks, as soon as the rainy season sets in, when all danger of bush fires is past. The natives [sic] are now very careful not allowing bush fires to spread, knowing if they do, they will lose their reward (Sturt 1850).

Ironically, the ease at which *Krinkaris* were able to colonialise *Yarluwar-Ruwe* was the result of the ongoing management they sought to cease. As a consequence, the mis-management of *Yarluwar-Ruwe* began with the arrival of *Krinkaris* and the issues *Krinkaris* faced following colonisation was due to their disruption of this ongoing management (NLPA 2013:2). Therefore, in less than 200 years *Yarluwar-Ruwe* has suffered from destructive changes as a result of *Krinkari* disruption and mis-management.

The colonisation of *Yarluwar-Ruwe* also resulted in the clearing of native vegetation that provided resources and habitats for all living things including Ngarrindjeri people. Due to the minority of *Krinkaris* within *Yarluwar-Ruwe* during early colonisation, Ngarrindjeri Old People were employed from 1840s to assist with the clearing of this native vegetation, as well as harvesting crops, shearing, and wool washing (Jenkin 1979:127-8; Kartinyeri and Anderson 2008:19,97; Linn 1988:122; Sturt 1850; Tindale 1934; N. Gollan, Per. Comm., 2009). Aunty Doreen Kartinyeri (in Kartinyeri and Anderson 2008:7) states, however, that

Ngarrindjeri Old “...people didn’t want to cut the trees down because so much had been cleared and so much had been destroyed, but they had to do that work or they wouldn’t get paid or they’d get their rations cut”. Despite this, very few Old People were paid a wage for their work; most received “remuneration” in the form of blankets, clothing, tobacco, flour and “some instances of money”, as well as all meals being provided to them during their employment (Sturt 1850). Ngarrindjeri Old People were also employed to erect fences that separated and segregated *Yarluwar-Ruwe*, once again threatened with a suspension of rations if they refused to work (Kartinyeri and Anderson 2008:21-2). In an act of resistance, Ngarrindjeri Old People would secretly dismantle fences around Point McLeay and Teringie, using the wire to dry rabbit skins that were later sold (Kartinyeri and Anderson 2008:10,22). Despite being employed—in most cases—against their own will, Ngarrindjeri Old People made a significant contribution towards the establishment of pastoral communities that exist in *Yarluwar-Ruwe* today. As such, the pastoral history of *Yarluwar-Ruwe* is very much Ngarrindjeri history (cf. Harrison 2004).

Livestock, exotic pests and weeds were also introduced into *Yarluwar-Ruwe*, which impacted upon the soils, altered sedimentation and further depleted resources and habitats. The loss of fauna and flora also resulted in a loss of Ngarrindjeri *Ngartjis* (Ngarrindjeri Nation 2006:13). As resources became depleted and access to areas of *Yarluwar-Ruwe* restricted, Ngarrindjeri Old People began focusing their attention on sheep as a resource, leading to instances of violence towards and murder of Ngarrindjeri Old People (Linn 1988:36-7; Tindale 1934; Watson 2002:113-5). In one specific example, Ngarrindjeri Elder Margaret Mack told anthropologists Ronald and Catherine Berndt of Ngarrindjeri Old People being shot, killed and their bodies burnt in response to stealing a sheep from Tatiara Station²², which is located adjacent to Waltowa Wetland (Berndt et al. 1993:293). For the most part, however, instances of violence by *Krinkari* perpetrators are glossed over in many of the ‘official’ histories of Ngarrindjeri *Yarlurwar-Ruwe*, whereas attempts by Ngarrindjeri Old People to defend their rights and responsibilities to *Yarlurwar-Ruwe* are represented as unsolicited violence towards unexpected *Krinkaris* (Faull 1981:17). For example, the South Australian Register reported on the 17th August 1844:

²² Whilst this information was recorded in the early 1940s, the date of this event is not known (Berndt et al. 1993:293). Despite this, one of the station buildings overlooking Waltowa Wetland observed during this research has features that appear to be gun ports, potentially providing tangible evidence in support of this account.

We understand that the outstations to the eastward are much annoyed by the natives [sic] and the *utmost vigilance is unavailing* to protect the flocks. It is easy to foresee that, unless some effectual protection is given to the settlers, the often recurring *necessity for self-defence* will create in them a feeling of hostility towards the natives [sic; emphasis added] (The eastern settlers and the natives 1844:3).

One can only imagine the actions taken by *Krinkaris* in order to maintain such “unavailing vigilance” and “necessary self-defence”.

Given the ‘trials’ *Krinkaris* felt they had to endure to establish successful pastoral properties in *Yarluwar-Ruwe*, many believed they were entitled to the *Ruwe* they had stolen (Linn 1988:120). As Linn (1988:118) describes:

There is no doubt that...major pastoralists of the district fought tooth and nail to retain the land they felt they had won from the wilderness. That they were successful in this defence is evidenced by the small number of men retaining ownerships of larger pastoral holdings between 1851 and 1885...

These pastoral properties included Tatiara Station, Poltalloch Station, Wellington Lodge and Warrengie, which still remain prominent pastoral stations within *Yarlurwar-Ruwe*. In particular, Tatiara Station was established in c. 1900 on the northern margins of Waltowa Wetland, making it one of the earliest pastoral stations established in the region (National Library of Australia n.d.). Western concepts of ownership that resulted in the surveying, subdividing and selling of *Yarlurwar-Ruwe* and eventual establishment of these pastoral properties, ignored the rights and responsibilities of the Ngarrindjeri Nation that were supposed to be instated as a result of the *Letters Patent of 1836* (Berg 2010; Hemming and Rigney 2014; Ngarrindjeri Nation 2006:14; NLPA 2013:67). This document authorised the colonisation of South Australia, providing:

...that nothing in those our Letters Patent contained shall affect or be construed to affect the rights of any Aboriginal Natives [sic] of the said Province to the actual occupation or enjoyment in their own Persons or in the Persons of their Descendants of any Lands therein now actually occupied or enjoyed by such Natives.

The Ngarrindjeri Nation (2006:14) believes the provisions of this document could have been used to continue their rights and responsibilities for *Yarluwar-Ruwe* in-line with philosophy of *Ruwe/Ruwar*; unfortunately this document was ignored. As a result, *Krinkaris* who set out to establish the Province of South Australia in 1836 did not acquire *Yarluwar-Ruwe* in an honest and fair manner from the Ngarrindjeri Nation (Berg 2010:xvi). As lawyer for the Ngarrindjeri Nation Shaun Berg (2010:xvii) argues, “There is no denying that the land enjoyed and used by Aboriginal people for thousands and thousands of years was appropriated into a new system of land tenure without their consent”. Despite *Krinkari*

appropriation of *Yarluwar-Ruwe*, Ngarrindjeri people wishing to continue caring, sharing and respecting *Yarluwar-Ruwe* in-line with the philosophy of *Ruwe/Ruwar* and informed by a “non-exclusive ethic of care” that invites all to share in caring for *Yarluwar-Ruwe* (MacGill 2014), invited *Krinkaris* to share the ongoing management of *Yarluwar-Ruwe*. As Ngarrindjeri Elder Uncle Tom Trevorrow (in Hemming and Trevorrow 2005:243-4) explains:

The Elders and the people said there was enough land: we will share with these newcomers because sharing is one of our strict laws. But unfortunately this culture did not want to share, and terrible uncivilised acts of violence were carried out against the people.

As a result, the Ngarrindjeri Nation owned their *Yarluwar-Ruwe* at the beginning of 1836, but by end of that same year—metaphorically speaking—they did not. The Ngarrindjeri Nation has, however, “...always occupied the traditional lands of the Ngarrindjeri Nation and Ngarrindjeri have never ceded or sold our lands and waters²³” (Bell 2008:80; Ngarrindjeri Nation 2006:14). In short, *Yarluwar-Ruwe* was stolen from the Ngarrindjeri Nation (Ngarrindjeri Nation 2006:14). Ironically, the ‘stealing’ of some sheep by Ngarrindjeri Old People that resulted in terrible acts of violence towards the Ngarrindjeri Nation seems minor in comparison.

From the time of early colonisation sheep as well as cattle were left to roam around Ngarrindjeri *Yarluwar-Ruwe* (Sims and Muller 2004:7). From the early 1840s the South Australian Company was running cattle around the eastern shores of Lake Albert, following the establishment of Gile’s Station—a short lived sheep station located at Bonney’s Waterhole²⁴ on the western margins of Waltowa Wetland (Linn 1988:33, 39; Paton 2010:186). This waterhole was also used to replenish the large numbers of livestock that travelled through *Yarluwar-Ruwe* following the establishment of an overland route between Adelaide and the eastern states in 1844, which travelled around the eastern boundary of Waltowa Wetland and followed the coast along the *Kurangk* (Linn 1988:31). Once a ferry was established in 1848 at Wellington, a constant passage of livestock travelled along the overland route, overgrazing native vegetation, stirring up the soils and causing huge sand drifts of formerly stabilised perennial grassed plains and sand hills. By 1851, there was a

²³ Quote from ‘Proclamation of Ngarrindjeri Dominium’ presented to South Australian Governor, Marjorie Jackson-Nelson, by Ngarrindjeri Elders Uncle George Trevorrow, Uncle Matt Rigney, Uncle Tom Trevorrow and Auntie Ellen Trevorrow on December 17th 2003 (see Bell 2008:80-1; Ngarrindjeri Nation 2006:52-55).

²⁴ Also referred to as Bonney’s Wells or Giles’ Wells, the waterhole was first recorded in 1844 by artist George French Angas (1844, 1847:plate 44; Linn 1988:33; Government Land Sale 1868:2).

significant increase²⁵ in use of overland route with people on way to gold fields, further impacting *Yarluwar-Ruwe* (Linn 1988:68; Mincham in McCourt and Mincham 1987:7). As a result, sand drift became a significant problem for the township of Wellington. By 1858, drifting sand was piling up around buildings, filling up eaves and guttering and blocking doorways, eventually leading to two houses becoming completely buried in the 1880s (Lin 1988:90-91; Turning 1977:64). When rabbits (*Oryctolagus cuniculus*) appeared in Ngarrindjeri *Yarluwar-Ruwe* in the late 1860s, the sand drift situation worsened and by mid-1880s the area had become overrun by them and they have become a serious pest ever since. The presence of rabbits also allowed for weeds to spread more easily (Lin 1988:125; Mincham in McCourt and Mincham 1987:19,179).

In the 1860s the construction of a causeway between Waltowa Wetland and Lake Albert provided a more direct overland route, which in turn contributed to the establishment of the township of Meningie (Wilks 1936:1). For the most part, it appears cattle within this district were free to roam *Yarluwar-Ruwe* until the 1880s. Subsequently, a letter to the editor of the *South Australian Chronicle* in 1894 deplores the proposed leasing of Waltowa Wetland, stating:

The fact of the Government declaring the ‘commonage’ of Waltowa Swamp open to applicant for lease in last week’s Gazette has raised considerable consternation in the neighbourhood. The whole township of Meningie will be greatly affected by the loss of the commonage (Vox Populi. 1894:22).

Accordingly, the un-leased land around Waltowa Wetland was supposed to benefit small land holders and widows, but larger landowners took advantage of the scheme and ran large numbers of their own stock that significantly depleted existing resources and habitats (Vox Populi. 1894:22). Despite these objections, Waltowa Wetland was leased by April 1894 (South-Eastern Land Board 1894:3).

The waters of *Yarluwar-Ruwe* have also been significantly impacted by historical over-allocation of water, including water abstraction for irrigation, livestock and domestic use, the construction of weirs and barrages to control river and lake levels, and the draining of wetlands—all of which have further degraded resources and habitats for all living things. The impact of these activities was observed by *Krinkaris* as early as the late nineteenth century,

²⁵ In the last quarter of 1851, 3,688 passengers and 738 vehicles had crossed the ferry at Wellington. In February 1852 alone, 1,234 passengers, 1,266 horses and bullocks and 164 carriages had crossed, whilst between October and November 3,000 passengers, 361 carriages and 3,027 tons of goods crossed (Linn 1988:68).

with growing concerns over the lack of water in particular areas. In 1894 land owners were requesting more water be allowed to enter Waltowa Wetland by:

...withdrawing [a] petition for closing up culvert in crossing Waltowa Swamp, and asking [Meningie] Council to allow them to enlarge the present one, or to make a new one, the petitioners agreeing to do all work on the Council finding the material (District Councils: Meningie 1894:2).

For the most part, however, these concerns were driven by the impact of a lack of water on pastoral activities.

In addition to this, the development of the irrigation industry along the Murray River as well as construction of weirs, resulted in less freshwater flowing into Lake Alexandrina and Albert, allowing more frequent intrusions of salt water in the lakes from the southern ocean via the *Kurangk* estuary (DWLBC 2008; McCourt and Mincham 1987:178; Paton 2010:190; Sims and Muller 2004:21). To prevent these intrusions and maintain a permanent freshwater supply for stock, irrigation and domestic use, a series of five barrages were constructed between the lakes and the *Kurangk* between 1935 and 1940. Prior to their construction, eighty percent of the river water entering the Murray River travelled through the Murray Mouth; following their construction, water extraction from River Murray increased and resulted in only twenty seven percent of river water travelling through the Murray Mouth, which led to the constriction and then closure of the Murray Mouth in 1981 (McCourt and Mincham 1987:156; Paton 2010:93,96-7; Sims and Muller 2004:4). Low river flows within the last decade as a result of over-allocation and drought across MDB, resulted in only four percent of river water travelling through the Murray Mouth by the early 2000s (Paton 2010:93). As a result, a dredge that was intended only as a short-term measure has been located at the Murray Mouth since 2002 in order to keep the mouth open (Paton 2010:99). Ecologist Dr David Paton (2010:99) is critical of this measure, stating:

The Murray Mouth sand pumping program is an engineering solution for a symptom and does not address the underlying cause of the problem—the lack of environmental flow to the Mouth, let alone adequate environmental flow.

The construction of the barrages also created an artificial high water level that resulted in shoreline erosion around the lakes, most notably along the Meningie shoreline, in turn accelerating sedimentation and deterioration in water quality (McCourt and Mincham 1987:12,156; Paton 2010:185,190-1). Ngarrindjeri occupation areas that once existed around the Lakes, and in some cases on sandbanks located within the Lakes (see Berndt et al.

1993:14-15,314), became submerged²⁶. Low laying wetlands around the lakes also became inundated, which lead to the installation of culverts in some wetlands in order to manipulate water levels in isolation from the lakes (McCourt and Mincham 1987:156; K. Mason in Change Media 2013). More recently, drought conditions within the MDB saw water levels within Lakes Alexandrina and Albert drop by two metres. As a result these wetlands became completely disconnected from the lakes (A. Frears in Change Media 2013). Elsewhere, many wetlands near the southern end of the *Kurangk* and south-east of *Yarluwar-Ruwe* were drained through a series of channels constructed between 1944 and 1972, in order to reduce surface flooding that restricted overland routes (Paton 2010:100-1). The draining of these wetlands restricted freshwater flows into the southern end of the *Kurangk*, which together with the low percentage of river water travelling through the Murray Mouth, resulted in salinity levels within the southern *Kurangk* becoming four times more saline than the southern ocean by 2007 (Paton 2010:93). The State Government of South Australia now plans to divert freshwater back into these wetlands to reduce salinity levels within the southern *Kurangk* (DEWNR 2014; T. Hartman, Pers. Comm., 2013).

Lastly, the colonisation of *Yarluwar-Ruwe* also brought attempts at cultural genocide, including the dispossession of the Ngarrindjeri Nation, oppression of Ngarrindjeri culture, language and lifeways, the separation of families and the stealing of Ngarrindjeri children. As a result, Ngarrindjeri culture became submerged and, for the most part, hidden and out of sight from the broader non-Ngarrindjeri community, but certainly not ‘extinct’ (Bell 1998:399). Given the segregation that was promoted between Ngarrindjeri Old People and broader non-Ngarrindjeri community²⁷, the continuation of Ngarrindjeri culture, language and lifeways and the continued management of *Yarluwar-Ruwe* was rarely witnessed nor recognised by the broader non-Ngarrindjeri community.

Ngarrindjeri lifeways continued to be informed by stories and laws established by *Kaldowinyeri* ancestors, including continuing to observe morals such as the importance of sharing. For example, the distribution of rations at Point McLeay Mission was based on a first-come, first-serve basis (Kartinyeri and Anderson 2008:9,125); however, Aunty Doreen Kartinyeri explains: “That went totally against our cultural practice of sharing everything equally and caused divisions amongst our people that weren’t there before” (Kartinyeri and

²⁶ Remanents of such sandbanks and previously inundated camping areas were observed as a result of drought induced low water levels (see Wiltshire 2009a, 2011c).

²⁷ The location of Point McLeay Mission was chosen due to its distance from the overland route and townships (Linn 1988:45).

Anderson 2008:20). Government rations were usually never enough for Ngarrindjeri Old People to live on. When Auntie Doreen Kartinyeri was doing research on her family tree in the South Australian State Records, she found many children at Point McLeay had passed away in infancy due to malnutrition, which she attributed this to a lack of rations. Consequently, if a child died of malnutrition, the State Government remove their siblings (Kartinyeri and Anderson 2008:124). As a result, Ngarrindjeri people continued to fish and hunt game such as ducks and kangaroos, as well as gather foods such as turtle eggs to sustain their daily lifeways (E. Trevorrow in Bell 2008:6; Kartinyeri and Anderson 2008:9). Once again, these activities continued to be informed by long-standing morals such as sharing to ensure all living things continued to thrive and flourish for future generations (Ngarrindjeri Nation 2006:16). As Auntie Doreen Kartinyeri (in Kartinyeri and Anderson 2008:11) explains: “Today they’ve got restrictions on how big your catch can be, but Aboriginal people did that anyway because they knew they’d be none there the next year when you came back”.

The sustainable use of resources also extended to the collection of rushes (*Cyperus gymnocaulos*) for weaving, as outlined in the recent Ngarrindjeri initiated publication, *Ngarrindjeri Lakun, Ngarrindjeri Weaving*:

The Ngarrindjeri apply their traditional land management techniques of not collecting all the rushes from any one point, only the mature, longest rushes are collected. While collecting, the pickers have a practice of giving back to Ruwe/Ruwar to ensure there will be rushes for future generations. The weavers do this by spreading the seeds from the flowering tips and by leaving some of the young plants growing at the tips of the rushes behind; this is the Ngarrindjeri way of sustaining Ruwe/Ruwar (NLPA 2013).

Auntie Ellen Trevorrow (in Bell 1998:70; 2008:7) emphasises this strategy by stating: “(I) just move around in a cycle. I pick and move and let the other lot grow. They grow very quickly. Later I return when the young ones have come up again. You can see where I have been”.

The purposeful and sustainable management of *Yarluwar-Ruwe* also allows for the sharing of knowledge between generations of Ngarrindjeri people. This is particularly the case in relation to weaving, which is considered “(a) time when stories are shared and teaching/learning happens” (NLPA 2013:29). The sharing of knowledge between generations goes hand-in-hand with the sustainable management of *Yarluwar-Ruwe*:

The tradition of handing down knowledge is embedded within the Cultural foundation of the Ngarrindjeri; children are included in the collection of rushes and taught the weaving techniques at a very young age...Passing this knowledge forward

to the young ones coming through is important ~ in learning the Lakun [weaving] one needs to know the traditional weaving techniques, the knowledge of collection points and the processes of drying and preparing the rushes for weaving (NLPA 2013:19).

Further to this point, Ngarrindjeri Elder Aunty Doreen Kartinyeri (in Bell 1998:65) reflects upon undertaking these activities from a young age: “Rushes were plentiful and we learned how to pick them as kids. I knew how to prepare them before I got to sit down and weave them”.

This form of knowledge exchange has continued and was even encourage by missionaries, who viewed weaving as a ‘respectable’ activity for Ngarrindjeri *mininar* (Bell 1998:77,86; Hemming et al. 1989:21). Many of the baskets made by Ngarrindjeri *mininar* during the early 1900s were sold to river traders and tourists, who travelled to Point McLeay from Milang by paddle steamer (Faull 1981:99; Jenkin 1979:214,228; NLPA 2013:13). On the other hand, Ngarrindjeri men were encouraged to undertake more manual labour such as harvesting crops, shearing and wool washing (Jenkin 1979:178; Kartinyeri and Anderson 2008:19,97; Linn 1988:122; NLPA 2013:13). In spite of these imposed gender-based roles on Ngarrindjeri Old People, it was Ngarrindjeri Elder Uncle Clarence Long who demonstrated to South Australian anthropologist Norman Tindale the *techniques* of weaving, which were recorded in a one-on-one context (D. Kartinyeri in Bell 1998:68). As a result, Tindale never witnessed the continued knowledge exchange or “sociality” (Bell 1998:83) associated with the practice of weaving. Similarly, despite discussing the use of basketry, anthropologists Ronald and Catherine Berndt paid little attention to the sociality or technique of weaving. As they state: “...time and *interest* did not permit us to record the various techniques of net basket and mat work [emphasis added]” (Berndt et al. 1993:98). Ronald Berndt did, however, ask Ngarrindjeri Elder Margaret ‘Pinkie’ Mack to make him a coffin basket; this leads anthropologist Diane Bell (1998:83) to ask:

...did anyone sit with her while she was making that coffin basket for Ronald Berndt (Berndt et al. 1993:241,274)?...Did the authors of the authoritative texts ever collect and prepare rushes with Pinkie Mack? Did they record the stories that are shared at such times?

The continued sharing of knowledge between generations of Ngarrindjeri people, especially around the activity of weaving, is not recognised nor discussed within such ‘anthropological’ texts. Furthermore, it seems no Ngarrindjeri *miminar* were approached to discuss how activities such as weaving maintain the interconnectedness between Ngarrindjeri people, their

Yarluwar-Ruwe and all living things in-line with the philosophy of *Ruwe/Ruwar*. As Bell (1998:83) points out:

The written record may be silent on the sociality of basket making, but Ngarrindjeri conversations begun over baskets shape the Ngarrindjeri world...the sociality of the activity (the aspect that first drew me to weaving), is creating intimate contexts for story-telling.

More recently, Bell (2014) has further articulated this point by stating:

Stories, told as women weave, reveal the hidden truths of their relationship to their country, families and sacred beliefs. This knowledge is inaccessible to those who privilege written texts and dismiss oral traditions.

Activities such as weaving provide a context for the sharing of knowledge between generations, which informs and maintains Ngarrindjeri culture, lifeways and identity. In turn, *Yarluwar-Ruwe* provides the broader context for these activities. As such, the health of *Yarluwar-Ruwe* goes hand-in-hand with the health of Ngarrindjeri culture, identity and lifeways and in turn the health of the Ngarrindjeri Nation. The destructive changes and mis-management of *Yarluwar-Ruwe* as outlined above has resulted in depleted resources, which in turn impacts upon Ngarrindjeri culture, identity and lifeways. For example, Ngarrindjeri Elder Aunty Ellen Trevorrow must travel up to 100 km in order to collect rushes that were once available locally within the *Kurangk* and around the Lakes (E. Trevorrow in Bell 1998:70; E. Trevorrow in Change Media 2013; E. Trevorrow, Pers. Comm., 2011; T. Trevorrow in Change Media 2013; T. Trevorrow and M. Rigney in Bjornsson 2005:22); however, collecting rushes in this location actively contributes to the sustainable management of *Yarluwar-Ruwe*, by allowing both areas to thrive and flourish; as Aunty Ellen Trevorrow (in Change Media 2013) explains:

...so at the moment we travel all the way to Strathalbyn to collect these rushes. We are collecting this lot and letting that lot grow back home. And by picking these rushes we are helping them to grow...we flick them [the seeds] back into the ground. We also give them a shake so you get the seeds back into the soil here. So it's very important to keep that going.

Despite the destructive changes and mis-management that have impacted upon the health of *Yarluwar-Ruwe*, the Ngarrindjeri Nation has continued to occupy and manage *Yarluwar-Ruwe* in-line with the philosophy of *Ruwe/Ruwar*. This continued management has been varied, dynamic and complex. As Ngarrindjeri *miminar* (in Bell 2008:13) explains: "There are places with long uninterrupted histories of Ngarrindjeri care, places where we can fish on the Coorong, the ocean. Places like Bonney Reserve, *Warnung* (Hack's Point), *Raukkan*.

Places where we collect rushes”. The continued sharing of knowledge since *Kaldowinyeri* is, in many respects, an invisible method of maintaining Ngarrindjeri culture, identity and lifeways as well as ensuring the ongoing management of *Yarluwar-Ruwe* (Bell 1998:77; V. Brodie in Bell 1998:86). As Bell (2008:2) explains: “Knowing the stories, passing the stories and being a story-teller are ways that Ngarrindjeri care for country”.

Since the 1980s *Camp Coorong Race Relations Centre* has provided a context in which some of this knowledge is shared between generations of Ngarrindjeri people as well as the broader non-Ngarrindjeri community (see Hemming 1993; McGill 2014). In particular, Ngarrindjeri Elders Uncle Tom and Auntie Ellen Trevorrow (in Bell 2008:11) detail the knowledge they share in this context and its importance: “We teach our Ngarrindjeri basket-weaving techniques. We tell our stories relating to the land, waters, trees, plants, birds and animals...they are our way of life, our survival teaching stories.” Today, new contexts are being used to share some of this knowledge between generations of Ngarrindjeri people as well as the broader non-Ngarrindjeri community, including Ngarrindjeri initiated and collaborative publications (Bell 1998, 2008, 2014; Ngarrindjeri Nation 2006; NLPA 2013), film documentaries (Change Media 2009; 2010; 2011; 2012a, 2013; 2014) and one-act plays (see Change Media 2014). These contexts allow the Ngarrindjeri Nation to reach a wider audience beyond the confines of *Yarluwar-Ruwe*, in order to promote their philosophy of *Ruwe/Ruwar*.

In many places, however, the ongoing management of *Yarluwar-Ruwe* has been limited as a result of the development of pastoral properties that resulted in a physical segregation between Ngarrindjeri people and their *Yarluwar-Ruwe*. Despite this, Ngarrindjeri concern for *Yarluwar-Ruwe* in its entirety as a whole, integrated and interconnected body, and not just the sum of its parts, remains. As Gammage (2011:139) articulates: “Some places might not have been touched by years, but not for a moment did carers forget them”. This continued concern for *Yaluwar-Ruwe* informed the effort by Ngarrindjeri leaders to protect *Kumarangk* from development, which resulted in the HIRC. In criticising the outcomes of the HIRC, Auntie Doreen Kartinyeri (in Bell 2008:18) points out: “It seems that it is easier to construct the women as liars than to come to terms their passionate commitment to care for their country”.

Whilst the HIRC created a shift in the ways the Ngarrindjeri Nation approach efforts to protect *Yarluwar-Ruwe* from development, concern for *Yarluwar-Ruwe* in its entirety as a whole, integrated and interconnected body remains the same. As Ngarrindjeri leader Tim

Hartman (in Change Media 2013) explains: “Everything’s connected. The lands, the waters, the plants, the animals, our relationship with our country, our responsibilities for caring for our *Ngartjis*. All of these things have to be managed collectively.” Today, this concern for *Yarluwar-Ruwe* has been articulated with the publication of the Ngarrindjeri Nation’s management plan, *Yarluwar-Ruwe Plan: Caring for Ngarrindjeri Sea Country and Culture* (Ngarrindjeri Nation 2006), as well as the establishment of the NRA and the NYR program in order to Speak as Country and fulfil Ngarrindjeri rights and responsibilities in-line with the philosophy of *Ruwe-Ruwar*. The Ngarrindjeri Nation recognise, however, that *Yarluwar-Ruwe* is now a shared landscape and Ngarrindjeri people must share their *Yarluwar-Ruwe* with *Krinkaris* (Ngarrindjeri Nation 2006:21). As a result, the Ngarrindjeri Nation’s management strategy seeks to develop collaborative partnerships with government, industry partners and researchers in order to work together to address historical mis-management and manage *Yarluwar-Ruwe* collectively (see Ngarrindjeri Nation 2006; McGill 2014). As Ngarrindjeri Elder Uncle Tom Trevorow outlines in the closing scenes of the recent documentary, *Flow: Life Giving Lands and Waters* (Change Media 2013):

What we’ve got to do is find that management plan of finding a balance of Indigenous science and knowledge combined with Western science and caring for country, and caring for our lands and waters, and caring for our birds, our animals, our plants and caring for each other. Now, if we can find that balance, then we’ve got a management plan that will lead us through the next generations.

In short, Ngarrindjeri *Yarluwar-Ruwe* *is, was* and always *will be* a managed landscape (Ngarrindjeri Nation 2006:11; cf. Bell 1998, 2014).

3.4 The Historical and Contemporary Nature of Waltowa Wetland

As a result of historical mismanagement, the contemporary nature of Waltowa Wetland is highly altered. Waltowa Wetland is classified as a littoral wetland and a back-basin due to its discrete areas of standing water of varying depths that should fluctuate seasonally and its relatively narrow connection to Lake Albert. This connection is, however, restricted by a culvert that has been in place since late nineteenth century, reducing the inflows of freshwater Waltowa Wetland receives from the Lower Lakes and Lower Murray system (District Councils: Meningie 1894:2; Jensen et al. 1996; Pressy 1986). In the early 1980s the blockage of this culvert resulted in a rapid deterioration of conditions within Waltowa Wetland (DEWNR 2013; Jensen 1999). In 1999, a single regulated culvert was installed allowing water flow in and out of Waltowa Wetland to be artificially controlled by a sluice gate. In 2001, this culvert was closed due to drought induced water restrictions and as a result

Waltowa Wetland remained dry for almost a decade with rainwater the only source of water. This provided only a minimal water source as the majority of rainwater was absorbed by the surrounding sand dunes that contain a high content of accumulated clays that prevent surface drainage (Bjornsson 2005; Noye 1967:1; Twidale et al. 1983). Prior to regulation of the MDB system, inflows into Waltowa Wetland would have been semi-permanent, variable and relative to the highly variable lake levels, as a result of precipitation, the variable water table and groundwater that flowed into the Lower Lakes and surrounding wetland areas (Gloster 1998:36; Jensen 1999). Obviously, the macro regulation of water flows within the MDB and the micro regulation as a result of the culvert both contribute to Waltowa Wetland's contemporary yet altered nature.

A combination of historical mismanagement including water flow regulation and severe drought conditions have resulted in the presence of high salinity levels within the wetland, further reducing much of the native vegetation and associated fauna that once existed within the wetland and surrounding landscape. Detailed historical descriptions of native vegetation and faunal species within Waltowa Wetland are lacking, with most historical literature describing the resource potential of *Yarluwar-Ruwe*. In some cases, such descriptions simply refer to areas of *Yarluwar-Ruwe* as 'good-country' (see Linn 1988:8-13). For example, whilst the following early description of the north, east and southern shores of Lake Albert by Surveyor General E.C. Frome does detail the presence of some native vegetation, Waltowa Wetland is referred to simply as a 'swamp':

The rising ground at the back of these flats, through sandy, yet affords excellent back runs for cattle and the hills are well timbered with banksia, casuarina and some of the largest pines I have seen in the colony. Along the eastern and southern shores of Lake Albert the same character of country continues; the soil, however, appears to be still better and the flats more extensive, particularly 15 miles from the entrance where we crossed a swamp formerly a deep inlet from the Lakes (Frome 1840:4).

Furthermore, historical climate conditions were only recorded in the advent of extreme climate conditions or events such as floods or droughts, or whether it was a "splendid season" or a bad year for pastoralists (Gell 2007:25; Linn 1988:124-5). As a result, there are very few detailed written accounts describing the nature of *Yarluwar-Ruwe* before the 1960s; by this time the MDB had been heavily regulated and much of the native vegetation had been cleared by pastoral activities and the region's environmental conditions had already begun to deteriorate (Mincham in McCourt and Mincham 1987; Trevorrow and Rigney in Bjornsson 2005). For example, a waterhole located on the north-eastern margins of Waltowa Wetland

and once used for pastoral purposes, dried up in the 1960s indicating the deterioration of the ground-water table during this period (B. McClure, Pers. Comm., 2010). Therefore, knowledge regarding the nature of areas such as Waltowa Wetland prior to the 1960s relies heavily on knowledge provided by the Ngarrindjeri Nation (see Bell 1998; Berndt et al. 1993; Ngarrindjeri Nation 2006; Trevorrow and Rigney in Bjornsson 2005) and other long-term residents of the region (see Leta Padman 1986; Mincham²⁸ in McCourt and Mincham 1987). Given the Ngarrindjeri Nation's ongoing connection and management of *Yarluwar-Ruwe* in line with their philosophy of *Ruwe/Ruwar*, Ngarrindjeri knowledges are considered a very long 'dataset' used to understanding the impacts of historical mismanagement (Hemming et al. 2007). Generations of Ngarrindjeri people have witnessed long and short-term changes, as demonstrated by rising of sea levels documented in Ngarrindjeri knowledges that recall the formation of *Yarluwar-Ruwe*.

In the absence of detailed written accounts, illustrations by George French Angas (1844, 1847; see Figures 3.3 to 3.5) also provide meticulously detailed depictions of *Yarluwar-Ruwe* including identifiable species of flora and fauna (Bell 1998:433; Tregenza 1980:13). In contrast to the descriptions of surveyors he accompanied during his travels through south-eastern South Australia, including the eastern shore of Lake Albert, Angas focused on illustrating the nature of areas like Waltowa Wetland as he encountered them (Linn 1988:7-10). Despite the potential ethnocentric and stylised composition of his depictions, his illustrations are considered an authentic aid to better understand the nature of *Yarluwar-Ruwe* prior to colonisation (Andrews 2006; also see Gammage 2011:18-19).

The contemporary nature of Waltowa Wetland is also characterised by a basic vegetation structure that remains intact despite Waltowa Wetland being considered as 'degraded'. The wetland corridor is largely vegetated by saline tolerant succulents such as samphire (*Salicornia australis*), whilst shrubby samphire (*Halosarcia pergranulata*) is the most dominant vegetation within this corridor (DEWNR 2013). The undulating high topography surrounding Waltowa Wetland would have contrasted with vegetation within wetland corridor; however, much of this native vegetation has been cleared and the understorey replaced with non-native couch grass (*Elymus repens*; see Figure 3.6). African boxthorns (*Lycium ferocissimum*) are also prominent in low lying sand flats adjacent to the wetland (Bjornsson 2005; SKM 2004).

²⁸ Based on accounts written in 1966 by L.H. Mincham (1885-1980).



Figure 3.3 *Yacca (foreground), dropping sheoak or casuarina (background) and dingo (centre), eastern shore of Lake Albert (Angas 1847:plate 44)*



Figure 3.4 *Yacca (right foreground), dropping sheoak or casuarina (background) and banksia (right), near Bonney's Waterhole, Waltowa Wetland (Angas 1844)*

In addition to a variety of native vegetation, the nature of Waltowa Wetland once supported a variety of native fauna including birds, fish, frogs, tortoises and macro invertebrates; however, recent studies indicate there has been a steady decline in many of the native fauna due to the degradation of the wetland in recent decades (Bjornsson 2005; Gosbell 2004). Ngarrindjeri Elders Uncle Tom Trevorrow and Uncle Matt Rigney (in Bjornsson 2005:22) recall collecting swan eggs in Waltowa Wetland until the 1960s, when it appears the area started to deteriorate resulting in depletion of flora and fauna as well as impacting upon Ngarrindjeri lifeways associated with this wetland. Likewise, tadpoles that used to be present within the wetland have also disappeared, indicating a decline in frog populations (B. McClure, Pers. Comm., 2010).

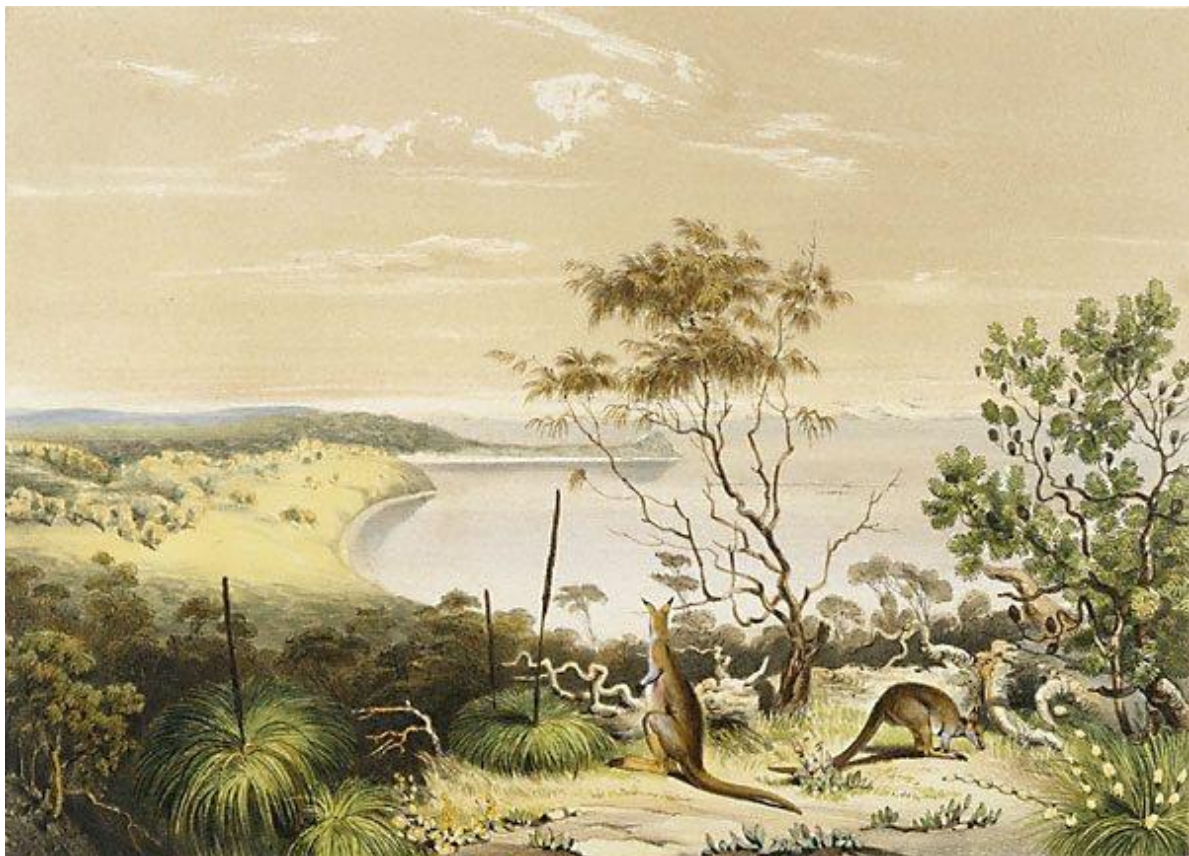


Figure 3.5 Yacca (left), dropping sheoak or casuarina (centre), banksia (right), pigface (right foreground), brush-kangaroo (centre) and Toolache wallaby (right), Kurangk near Lake Albert (Angas 1847:plate 9)

In addition to this, the Ngarrindjeri Nation consider Waltowa Wetland a “nursery” for various species of marine fauna such as long-necked tortoises (*Chelodina longicollis*), yabbies (*Cheerax destructor*), catfish (*Tandanus tandanus*) and golden perch (*Macquaria ambigua*), which are no-longer common within the wetland (DEWNR 2013; Trevorrow and Rigney in

Bjornsson 2005:22; also see NRA 2009:4). As the water level rose in the winter months, small fish such as the Murray hardy head (*Craterocephalus fluviatilis*), southern pygmy perch (*Nannoperca australis*), yarra pigmy perch (*Nannoperca obscura*), southern purple-spotted gudgeon (*Mogurnda adspersa*) and blue spat (*Spratelloides robustus*) would have migrated downstream into Waltowa Wetland through the narrow connection to Lake Albert (Luebbers 1981:18). The installation of a culvert in the late nineteenth century regulating this connection would have impacted this movement of fish as well as inflows of freshwater (Bjornsson 2005). More recent baseline surveys of existing fish species within the Lower Lakes do not include Waltowa Wetland due to a lack of water (SKM 2004).



Figure 3.6 Couch grass (foreground) Kurangk near Lake Albert in recent times
(photo K. Wiltshire 2005)

In contrast, the undulating open woodland surrounding the wetland would have provided habitat for now extinct Toolache Wallaby (*Macropus Greyi*; Figure 3.5), the brush or bush kangaroo (*Halmaturus Greyii*; see Figure 3.5), eastern curlew (*Numenius madagascariensis*),

mallee fowl²⁹ (*Leipoa Ocellata*) and bustard (*Ardeotis australis*), who inhabited the area in their thousands (Angas 1847:64,70; Hacket in Leta Padman 1986:112; Mincham in McCourt and Mincham 1987:155). The introduction of the fox (*Vulpes vulpes*) in 1888 was, however, responsible for the eventual demise of ground-nesting birds and numerous marsupials (Aitken 1983; McCourt and Mincham 1987). In addition to this, the introduction of rabbits (*Oryctolagus cuniculus*) in the same period as well as the clearing of open woodlands for pastoral purposes drastically altered native vegetation, which in turn also contributed to the further demise of native vegetation. Lastly, dingo or wild dog (*Canis lupus dingo*) were also present in the area having been domesticated by Ngarrindjeri Old People (see Figure 3.3), but have been extinct in the region since the 1930s (Aitken 1983).

An ecological character description of Ngarrindjeri *Yarluwar-Ruwe* undertaken in response to recent drought conditions with the view to develop a management plan, concluded the region had been in decline for at least 20 to 30 years prior to the listing of the region as Wetland of International Importance³⁰, if not longer (Phillips and Muller 2006:i). A localised ecological description undertaken for Waltowa Wetland also revealed similar conclusions (see Bjornsson 2005). These studies estimate the region's decline commenced in the 1960s, a conclusion which is strongly supported by the Ngarrindjeri Nation and other long-term residents of the region. Long before recent drought conditions, however, both the Ngarrindjeri Nation and other long-term residents had raised concerns about the deteriorating health of *Yarluwar-Ruwe* (England 1993; Mincham in McCourt and Mincham 1987; Trevorrow and Rigney in Bjornsson 2005; T. Hartman, Pers. Comm., 2013).

3.5 The Politics of Waltowa Wetland

In response to the combination of historical mismanagement, drought conditions and increased salinity within the MDB of recent years, the South Australian State Government have implemented regionalised NRM regimes including a program of ecological monitoring, ground-water testing and revegetation to help restore native vegetation and associated fauna. Within this program, Waltowa Wetland has been identified as a priority area for restoration and protection, due to its international, national, basin and local importance (DEWHA 2010; Jensen et al. 1996; Thompson 1986). Ground-water monitoring in 2006, 2011, 2012 and 2013 demonstrated ground-water tables and salinity levels with the wetland responded positively to

²⁹ Also referred to as a native hen, pheasant and lowan.

³⁰ In 1985 the Lower Lakes and Coorong was listed as a Wetland of International Importance under the Ramsar Convention on Wetlands due to the importance of region to migratory birds (DEWNR 2013).

an increase in freshwater flows. At the same time, ecological monitoring within the wetland also observed an increase in water birds due to a rise in invertebrate numbers, which were also the result of increased freshwater flows (DEWNR 2013). As a result, DEWNR (2013) has proposed to either increase the size of the culvert or increase their number in order to improve freshwater inflows between Lake Albert and Waltowa Wetland, allowing for improved freshwater flows that they predict will improve groundwater tables, reduce salinity, improved diversity native vegetation and improve the diversity and abundance of invertebrates, water birds and frogs. In order to further assist Waltowa Wetland's restoration and protection, a program of revegetation has established 13,000 native plants in low-lying areas surrounding the wetland. In addition to this, a pastoral management plan has also been developed and implemented with surrounding landholders, in order to fence the wetland to exclude stock and further assist in this restoration and protection program (DEWNR 2013).

For the most part, these NRM regimes produce scientifically informed knowledges of nature that are privileged in understanding and management of Waltowa Wetland. The privileging of scientifically informed knowledges of nature within political and public understandings, narratives and debates is referred to by Latour (2004) as “political ecology” or the “politics of nature”, which he critiques in his post-modern philosophy *Politics of Nature: How to Bring the Sciences into Democracy*. Latour (2004:3) argues the objectivity afforded to scientific knowledge lies at the core of this “politics of nature”, allowing scientists to speak for nature and scientifically authenticate political policies for its management. In reference to the increasing NRM regimes and programs within the region, Latour (2004:66) refers to issues such as drought “(as) matters of concerns, as [seemingly] new entities that provoke perplexity...in those who gather around them, and argue over them”. As such, “matters of concern” such as drought usually accompany a sense of crisis, provoking a response that becomes a driving force in addressing such issues regardless of whether these issues are new or pre-existing. In order to address these concerns, “matters of facts” are produced in order to better understand, address and manage these concerns through the assembling of ‘facts’ or ‘data’ (Latour 2003:235). These “matters of facts” are informed by a modernist nature-culture dichotomy, which construct Waltowa Wetland as a natural, passive object of study separate from culture and/or people; a dichotomy that runs counter to the Ngarrindjeri philosophy of *Ruwe/Ruwar*. The connection between “matters of concern” and “matters of fact” is usually mediated by politics (François 2011:166). Latour (2004) argues “matters of concern” bring together an assemblage of nature, science and politics. Therefore, “matters of concern” in the

form of recent drought conditions in Ngarrindjeri *Yarluwar-Ruwe* have resulted in an assemblage of heterogeneous actants, producing a State Government (‘politics’) program of ecological monitoring and ground-water testing (‘science’) that have constructed “matter of facts” about Waltowa Wetland (‘nature’).

In contrast to these scientifically informed knowledges, Ngarrindjeri knowledges consider Waltowa Wetland and wetlands more broadly as nurseries for all living things (DEWNR 2013; Trevorrow and Rigney in Bjornsson 2005:22). In-line with the philosophy of *Ruwe/Ruwar*, Waltowa Wetland has always been cared for and managed by generations of Ngarrindjeri people; its long-term health vital to ensuring the long-term health of Ngarrindjeri people. The historical mis-management and degradation of Waltowa Wetland has been a long-term and ongoing concern for the Ngarrindjeri Nation. For the most part, however, Ngarrindjeri concerns for Waltowa Wetland are framed by the economic exploitation of resources, such as the collection of native rushes (*Cyperus gymnocaulos*) for weaving as well as the collection of swan and turtle eggs as a food source (see Bjornsson 2005:22). The “sociality” (Bell 1998:83) and continued knowledge exchange between generations of Ngarrindjeri people that these activities and Waltowa Wetland provide—including the ways in which these activities maintain Ngarrindjeri culture, identity and the interconnectedness between Ngarrindjeri people, *Yarluwar-Ruwe* and all living things in-line with *Ruwe/Ruwar*—is rarely emphasised. Furthermore, the past-orientated nature in which these activities are described not only marginalises Ngarrindjeri’s ongoing rights, responsibilities and interests in their *Yarluwar-Ruwe*, but also marginalises contemporary Ngarrindjeri existence (cf. Watson 2002:3). Therefore, the privileging of scientifically informed knowledges and the narratives that persist regarding Ngarrindjeri concerns for Waltowa Wetland act to produce a dual marginalisation—or double dispossession—for contemporary Ngarrindjeri rights, responsibilities and interests in the ongoing management of Waltowa Wetland.

The marginalisation of Ngarrindjeri rights, responsibilities and interests is a driving force in the development of the NCCHP from which this research emerges. As previously noted, the NCCHP was established in an effort to further address the marginalisation of Ngarrindjeri rights and responsibilities, by promoting the Ngarrindjeri philosophy of *Ruwe/Ruwar* in long-term management planning within the region. The NCCHP has received several round of funding through the Federal Government’s *Indigenous Heritage Program* (IHP) to assist the program’s implementation and capacity to undertake case study based research. During its

original inception in 2006, the NCCHP identified Waltowa Wetland as one of four priority case study areas for management and research (see Hemming 2006); however, the actants necessary to undertake case study based research assembled unsuccessfully until the development of this PhD research.

3.6 Summary

Overall, this chapter provides an alternative account of Waltowa Wetland. Specifically, this chapter presents the active role of Ngarrindjeri *Kaldowinyeri* ancestors in the formation of Waltowa Wetland. This chapter also describes the characteristics that inform the Ngarrindjeri philosophy of *Ruwe/Ruwar* and the ways in which this philosophy has contributed to ongoing Ngarrindjeri connection to and management of *Yarluwar-Ruwe*. In contrast, this chapter presents the recent historical mismanagement of *Yarluwar-Ruwe* and the ways in which the Ngarrindjeri Nation continue their connection and management despite the ongoing impacts of colonisation. Lastly, this chapter describes the contemporary nature and politics of Waltowa Wetland, including the ways in which scientifically informed knowledges continue to be privileged in response to recent drought conditions.

Chapter 4 – The Politics of Archaeology:

Opening the Black Box of Previous Archaeological Practice

Different networks sustain different pasts. Pasts that are very much solid, real and have effects and are no less ‘real’ for being composed.
(Webmoor 2012:14)

Previous archaeological practices within Ngarrindjeri *Yarluwar-Ruwe* have produced privileged knowledges that construct an understanding of Ngarrindjeri lifeways from a Western perspective. With reference to the distinct historical, political, social and economic connections that influence the production of these knowledges, this chapter seeks to demonstrate the preliminary and sometimes problematic nature of knowledges that derive from previous archaeological practice within the region. Specifically, knowledges resulting from archaeological investigations along the Murray River (Hale and Tindale 1930; Mulvaney 1960; Mulvaney et al. 1964), the *Kurangk* estuary (Luebbers 1981, 1982) and Lake Alexandrina (Luebbers 1986-1987; also see Wiltshire 2006c) are the focus of this chapter. In doing so, this chapter sets the scene to consider how archaeological knowledges presented herein come to influence archaeological investigations at Waltowa Wetland.

4.1 Hunters, Collectors and Stone Age Cave Men³¹

Prior to the development of professional archaeological practice within Australia, non-professional ‘amateurs’ started collecting and studying stone artefacts in the late nineteenth century; an activity considered a respectful and gentlemanly past time that was an extension of the collection and study of flora, fauna, minerals or any other natural history curiosities (Griffiths 1998:16-7). Griffiths (1998:67) defines ‘amateurs’ as individuals who “(were) not formally trained in anthropology or archaeology and found their chief employment in other fields”. Despite this, amateurs considered themselves an authority on stone artefacts. In order to further discuss the form and function of stone artefacts, amateurs formed scholarly societies, held regular meetings and actively published in journals associated with their societies, such as *Transactions of the Royal Society of South Australia* and *Records of the South Australian Museum* (Du Cros 2002:16,19). These publications often focused on the form and implied function of stone artefacts, reinforcing the assumption that stone artefacts without any form were useless and as a result were of little interest to amateurs. Furthermore,

³¹ The term ‘cave men’ refers to the prominence of male researchers undertaking rock-shelter or cave based archaeological investigations with a distinct focus on stone artefacts.

the relationship between stone artefacts and the 'site' they were removed from or the people who had created them was deemed less important (Griffiths 1998:74,77). Stone artefacts were often discussed more than the Aboriginal people who had created them, with most amateurs showing little interest in Aboriginal people or their culture (Colley 2002:1; Griffiths 1998:56).

A lack of interest in Aboriginal people or culture was informed by evolutionary theories that were prevalent at the time, which relegated Aboriginal people to an inferior, 'primitive' position in the evolutionary scale. Due to their perceived 'primitive' nature, amateurs believed Aboriginal people to be homogeneous through space and time and their occupation of Australia to be recent. This belief seemed to be confirmed by the stone artefacts they studied, which did not demonstrate the significant typological variation of established European typologies. Where typological variation in stone artefacts was present, amateurs believed this reflected availability of suitable raw material or local environmental factors (Griffiths 1998:72,77-8). For this reason, many amateurs assumed archaeological investigations of Aboriginal history to be pointless, as ample information could be gleaned from studying surface assemblages of stone artefacts (Mulvaney 1960:36). Australia was seen as "(an) archaeological backwater with a short and undistinguished history" (Horton 1991:157). As R.W. Pulleine (1928:305) argued following his study of Tasmanian stone artefacts:

...there is a uniformity of culture only modified by the availability of different materials for manufacture...It is to be feared that excavation would be in vain, as everything points to the conclusion that they were an unchanging people, living in an unchanging environment (Pulleine 1928:305).

By their very nature, amateur interpretation of stone artefacts "defined and confined" (Griffiths 1998:55) Aboriginal people to a 'primitive' position. As a result, Aboriginal people were believed to be the 'missing link' in evolutionary theories and became the target of scientific study. Living Aboriginal people were subjected to impersonal study by physical anthropologists who measured their size and stature. Once deceased Aboriginal people were considered 'specimens', their bodies 'collected' for science from hospitals, asylums and jails, subjected to dissection and sent to overseas cultural, medical and educational institutions such as museums, universities and medical schools. Aboriginal burial grounds were also systematically plundered, resulting in the exhumation of ancestral remains for the same purpose (Fforde 2004:59; Griffiths 1996:28-9; Hemming and Wilson 2010:187). For example, in 1911 Edward Stirling removed 136 Ngarrindjeri Old People from their resting

place at Swanport, which had been disturbed during the construction of levy banks along the Murray River (Stirling 1911). Stirling (1911:9) referred to this removal as a “scientific expedition”, emphasising its ‘systematic’ manner and sanctioning the ‘scientific’ nature of these activities in order to distinguish them from grave-robbing. Stirling was, however, the Director of the South Australian Museum, a Professor of Physiology at the University of Adelaide and Dean of the Adelaide Medical School, with a keen interest in biological sciences, evolutionary theories and studying the supposed ‘racial origins’ of Aboriginal people (Anderson 2002:196; Horton 1991:80; Stirling 1911:4). Therefore, it is safe to assume Stirling’s interest in ‘collecting’ Ngarrindjeri Old People from Swanport was at least partially driven by the same interests of grave-robbers that proceeded and succeeded him despite his academic credentials. As a consequence, Aboriginal people found themselves being “hunted and collected” (cf. Griffiths 1998) in countless acts of grave-robbing and body-snatching, in order to fulfil an extensive international market for Aboriginal body parts and ancestral remains that existed during the late nineteenth and early twentieth century (Fforde 2004:1-2).

Ngaut Ngaut (Devon Downs)

Norman B. Tindale and Hebert Hale undertook Australia’s first systematic excavations in 1929 at *Ngaut Ngaut*, a rock shelter located within the Lower Murray. Whilst this excavation has been described as the “opening chapter” (Smith 2000) of professional archaeology in Australia due to its systematic methods and use of stratigraphy, Horton (1991:153) maintains that “in a sense it was, but in a very real sense it simply marks a continuation of earlier work”. For example, Hale and Tindale (1930) sought to distinguish their research from that of ‘amateurs’; however, neither Hale nor Tindale had professional training as archaeologists and could themselves also be considered amateurs (cf. Griffiths 1998:67). In spite of this, Tindale became interested in archaeological investigations via anthropology, having previously carried out an excavation on a shell midden in Groote Eylandt in 1922 where he had begun anthropological field-work in the previous year (Horton 1991:157; Smith 2000:151).

Hale and Tindale’s (1930) interest in the area was initially sparked by the discovery of an Old Person embedded in solidified sand-stone, located on *Tartanga* island east of *Ngaut Ngaut*. This discovery likely occurred due to the focus on the Lower Murray by amateurs affiliated with the newly formed Anthropological Society of South Australia and the South Australian Museum—both of whom Tindale was associated with. Hale and Tindale (1930) were hoping to determine the age of Aboriginal occupation in Australia by linking this Old Person to known geological chronologies. Given *Ngaut Ngaut* was located only a kilometre or so

downstream from *Tartanga*, Hale and Tindale (1930:147) thought “(it) was considered desirable...to also investigate the stratification of the debris in the shelter”, as a means to obtain further contextual information. Smith (2000:152) claims the excavation of *Ngaut Ngaut* was merely an “after-thought” to the investigations carried out at *Tartanga*. During excavation, however, it became apparent that neither area could be linked to known geological chronologies that would allow the age of the Old Person to be established. Therefore, their investigations shifted to focus upon changes over time that could potentially be observed within Old People’s belongings recovered during their excavations at *Ngaut Ngaut* (Hale and Tindale 1930:152; Smith 2000:155). This focus was in stark contrast to dominant perceptions of Aboriginal people at the time and was likely driven by Tindale’s attempt to place understandings of European prehistory into an Australian context (Horton 1991:xvii).

Hale and Tindale (1930) published their interpretation of the *Ngaut Ngaut* and *Tartanga* archaeological investigations shortly following their excavations. In doing so, Hale and Tindale’s (1930) interpretation used major stratigraphic changes to separate excavation units within the six metre deep rock shelter deposit, which allowed the Old People’s belongings removed during excavation to be ordered chronologically. Despite retaining all identifiable bone and diagnostic shell pieces for analysis, Hale and Tindale’s (1930) analysis mostly focused on interpreting the presence of stone artefact ‘types’ within the deposit; that is, stone artefacts with a specific form and implied function (Hiscock 2007:199-200). As a result, Hale and Tindale (1930) demonstrate these stone artefact types were concentrated within distinct stratigraphic units, developing a typology for their distribution throughout the rock shelter deposit.

Stone artefacts first appear at *Ngaut Ngaut* at approximately 6,000 BP, and are present in excavation units dated to 3,000 BP, with noticeable differences between the distributions of stone artefacts throughout the rock shelter deposit. For example, excavation units four and six demonstrate a significant increase in the total number of stone artefacts, but numbers decline rapidly through excavation units one, two and three (see Table 4.1). A lack of “definite stone artefacts”—which Hale and Tindale (1930) defined as unifacial points, adze flakes, slugs, and cores—in these recent excavation units is described as evidence for a “degenerating” or “degenerated” stone artefact culture (Hale and Tindale 1930:204). In doing so, Hale and Tindale (1930:204) argue this “degenerated” stone artefact culture is the result of an

emphasis on wood and bone artefacts; this is in spite of the absence of wood or bone artefacts in recent excavation units, which is also supported by a recent re-analysis (see Hutchinson 2012). Furthermore, there is a significant decrease in the overall number of stone artefacts within recent excavation units, which would likely affect the amount of “definite stone artefacts” represented (see Table 4.1). Hale and Tindale (1930:203) also note a lack of local raw materials suitable for stone artefact manufacture. Given this lack of raw materials, “definite stone artefacts”—which represent the end product of stone artefact manufacture processes—were likely highly prized and not discarded at a significant rate. Lastly, a decrease in stone artefacts may also be due to a change in the use of a rock shelter, rather than being reflective of a change in the stone artefact use more broadly.

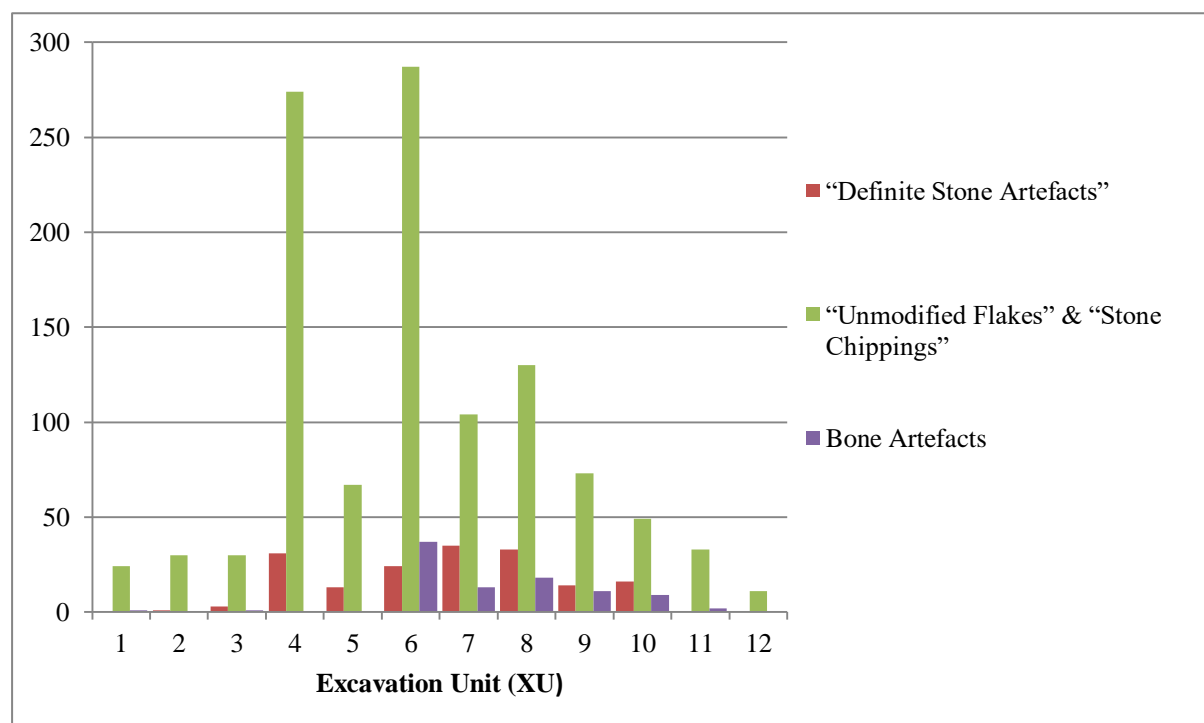


Table 4.1. *Stone and bone artefacts removed from Ngaut Ngaut (after Hale and Tindale 1930)*

In focusing on the stone artefact ‘types’, it would seem the “captivating agency” (cf. Harrison 2006) that made these stone artefacts attractive to amateurs also appealed to Hale and Tindale. As a result, the typology they developed can be seen as an extension or “artefact” (Griffiths 1998:77) of previous amateur collecting. In fact, Holdaway and Stern (2004:287) claim Tindale was the “intellectual heir” of Walter Howchin, an amateur who produced one of SA’s first typologically based stone artefact classificatory systems (see Howchin 1934). Thus, despite claims excavations at *Ngaut Ngaut* fostered the dawn of ‘professional’

archaeology in Australia (see Horton 1991:153; Smith 2000), Hale and Tindale's (1930) interpretation simply placed *their* typology within a stratigraphic context, adding a temporal dimension missing from previous hypotheses. Despite their close association with amateur collecting, the findings from Hale and Tindale's (1930) research were either ignored or discredited by amateurs. Tindale was thought to be too theoretical for the likes of amateurs, who subjected him to bullying and isolation from their activities (Griffiths 1998:79-80).

Whilst Hale and Tindale's (1930) publication demonstrated changes in typologies through time, they *did not* interpret these changes as demonstrating cultural change over time despite popular misconception (see Colley 2002:2; Horton 1991:153; Ulm 2013:183; Wood 1993:7). Instead, these changes were interpreted by Hale and Tindale (1930) as the product of a succession of *different* cultures over time, which Tindale (1957) later termed a "cultural succession model". These cultures were referred to as "Pre-Pirrian", "Pirrian", "Mudukian" and "Murundian" (see Figure 4.1). "Pirrian" was characterised by the presence a single pirri point, whereas "Mudukian" was characterised by the presence of a single bone point referred to as a "Muduk", which Hale and Tindale (1930) believed to be a fishing gorge. In contrast, "Murundian"—which Tindale believed was the Aboriginal culture that existed at contact—was defined based on Eyre's (1845) ethnographic observations, both of which lacking apparent evidence of stone artefact use (Mulvaney and Kamminga 1999:11,40). Tindale (1957) later refined this "cultural succession model" and established a chronology for *Ngaut Ngaut* based on the Old People's belongings recovered and known geological ages, arguing "Modern Cultures" Murundian, Mudukian and Pirrian were up to 5,000 years old, whilst "Older Pre-Pirrian Cultures" Tartanga and Kartan were between 6,000 to 10,000 years old; "Kartan" was added to Tindale's cultural succession model following research on Kangaroo Island (see Tindale 1937, 1957, 1968). This chronology was later supported by radiocarbon dates obtained for *Ngaut Ngaut* (Broecker et al. 1956; see Table 4.2).

The nature of this cultural succession model was likely informed by dominant misconceptions regarding the 'primitiveness' of Aboriginal people and their inability to change culturally. For example, Tindale believed Aboriginal culture was susceptible to immigration of other cultures and Aboriginal people were destined to become 'extinct' in the face of Western culture (Watson 2002:8); an understanding that not only influenced the development of his cultural successive model, but also his anthropological work with Ngarrindjeri Elders. Tindale (1937:107) referred to members of the Ngarrindjeri Nation as

“(the) former inhabitants of the whole extent of the South-East of South Australia [whom] have vanished and are scarcely remembered in the land where they once roamed”. In reference to this, Bell (1998:454-5) notes: “Tindale and the Berndts, writing in the 1930s and 1940s, were working in an anthropological climate where ‘real people’ lived in the north and the ‘remnants’ in the south”. Consequently, Tindale “(held) strong views on the authenticity...of information from ‘mixed-blood Aborigines’” (Watson 2002:8). As a result, Tindale’s anthropological work was predominantly undertaken with Ngarrindjeri Elder *Milerum*, whom he referred to as “(one) of the few surviving natives of the South-East of South Australia...” (Tindale 1937:107).

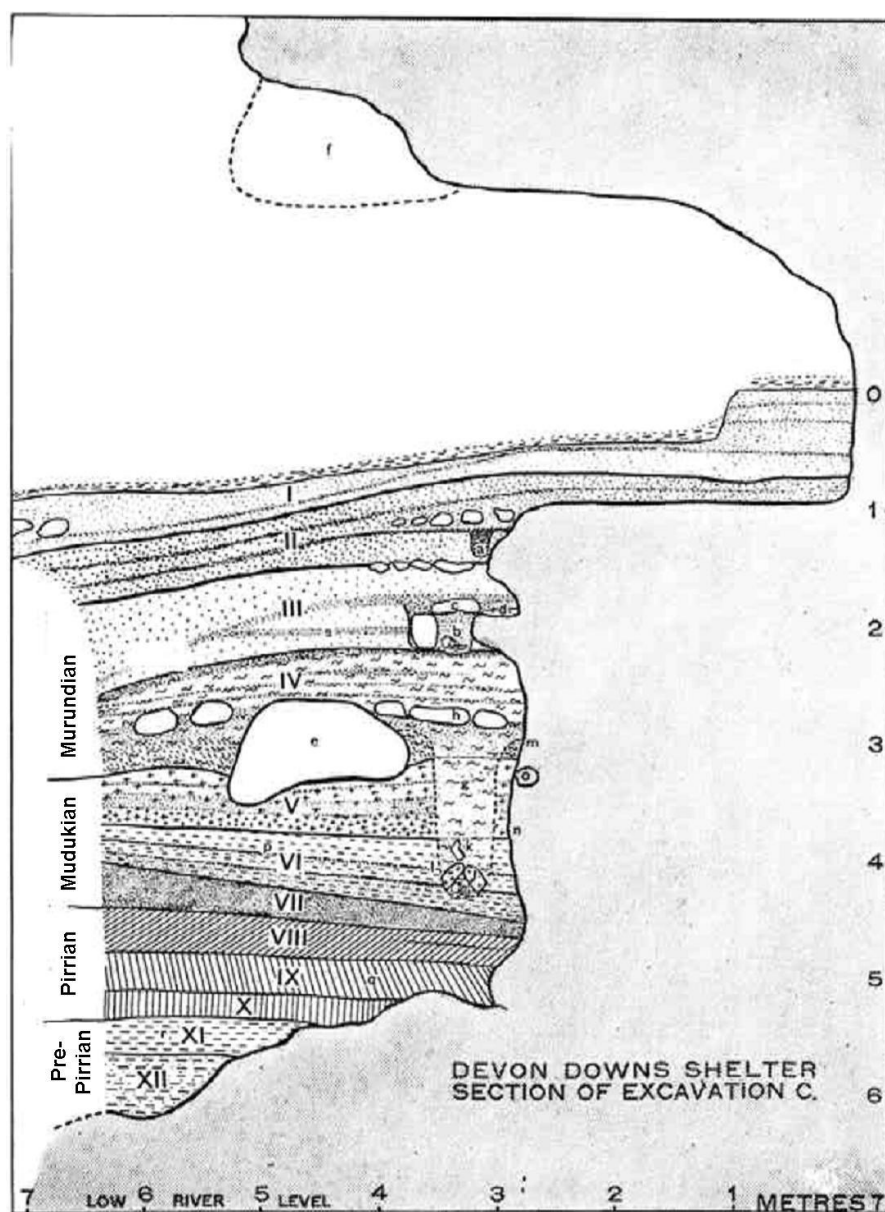


Figure 4.1 Stratigraphic context of cultural phases at Ngaut Ngaut rock shelter (after Hale and Tindale 1930)

Cultural Phases	Excavation Units (XU)	Radiocarbon Dates
Murundian	1-4	2980 ± 90 BP
Mudukian	5-7	3460 ± 100 BP
Pirrian	8-10	4250 ± 180 BP 5180 ± 100 BP
Tartangan	11	6020 ± 150 BP
Kartan	12	11,500 BP

Table 4.2. *Tindale’s cultural phases vs. radiocarbon dates (after Tindale 1968)*

Horton (1991:153) argues that Tindale’s cultural succession model “(was) [also] presumably the result of equating this site with sites in Europe, where cultures did indeed come and go”. This cultural succession approach:

...led to a great overemphasis on the differences between the artefacts and fauna of each layer. Minor variations assumed major significance and the names of a number of spurious cultures *entered the literature* [emphasis added] (Horton 1991:153).

Tindale (in Smith 2000:156) claims his cultural succession model was a convenient analytical division. Lastly, Smith (2000:158) argues this cultural succession model may even be the result of “(widespread) systematic artefact collecting...and some inspired field archaeology, rather than the Devon Downs sequence”.

Following Hale and Tindale’s (1930) initial investigations, Mike Smith (1977, 1978, 1982) analysed and documented distinct changes in faunal materials from the *Ngaut Ngaut* rock shelter, demonstrating the amount of the terrestrial fauna consumed at *Ngaut Ngaut*—which includes emu egg—reduced about 3,000 BP. In contrast, the gastroliths of freshwater crustaceans become more densely concentrated within excavation unit three and increase within excavation units one and two, suggesting an increased consumption of this resource after 3,000 BP. Given that emus lay their eggs in winter or early spring and crayfish are available in autumn, the decline in emu egg and increase in crayfish suggest a change to a predominantly autumn occupation after 3,000 BP, which is supported by ethnographic observations (Eyre 1845:252-4, 303; Frankel 1991:62; Smith 1977:75). Likewise, Smith (1977, 1982) also demonstrates an increase in shellfish within excavation units one and two,

which was also noted during the original excavation (Hale and Tindale 1930:213). Smith (1977:67, 76) suggests this increase in shellfish may be connected to an increased presence of *miminar* at the rock shelter, which is supported by the burials of at least four children at the rock shelter and ethnographic observations that indicate *miminar* often stayed within close proximity to their deceased child (Angas 1847:75; Eyre 1845:344, 346-7; Meyer 1879:198; Smith 1977:18-19, 23-24; Wyatt 1879:165).

In addition to faunal analysis, Smith (1977) also undertook a re-analysis of the *Ngaut Ngaut* stone artefacts; however, due to time constraints the stone artefacts were given no more than a “cursory treatment” (Smith 1977:3). Overall, Smith’s (1977:174) analysis concluded a general lack of food consumed at the *Ngaut Ngaut* rock shelter, suggesting a more ephemeral use of the rock shelter over the last 5,000 years by a small population of fewer than 25 people rather than prolonged periods of occupation. As a result, Smith (1982:113) concludes the Old People’s belongings removed from *Ngaut Ngaut* may not accurately reflect Aboriginal lifeways within region, advocating against using the results from *Ngaut Ngaut* to develop regional models.

More recently, Bland (2012; Bland et al. 2012) undertook a technological analysis of stone artefacts from *Ngaut Ngaut*, contrasting with the typological emphasis of previous investigations. A large percentage of broken flakes with feather termination were noted throughout the rock shelter deposit, which Bland (2012:109; Bland et al. 2012:58) suggests demonstrates control of knapping skills through time. The percentage of stone artefacts with retouch also indicates an increase in stone knapping over time (Bland 2012: 100-1, 113; Bland et al. 2012:61-2). In short, Bland’s (2012) research demonstrates a continuity of stone artefact manufacture, challenging the notion of a “degenerating” stone artefact culture within the region (Hale and Tindale 1930:204).

Tungawa (Fromm’s Landing)

Following on from Hale and Tindale’s (1930) investigations, John Mulvaney (1960; Mulvaney et al. 1964) conducted archaeological excavations between 1956 and 1963 of two rock shelters at *Tungawa*, located a few kilometres downstream from *Ngaut Ngaut*. Mulvaney’s interest in carrying out archaeological investigations at *Tungawa* had been sparked by Hale and Tindale’s (1930) research, which Mulvaney (1960:65; 2011:95) believed had gone unrecognised in terms of better understanding Australia’s Aboriginal history. Thus, Mulvaney (2011:95) believed *Tungawa* would be an ideal place to conduct his first

archaeological excavation in Australia due to its comparative potential with *Ngaut Ngaut*. By employing ‘scientific’ and ‘systematic’ archaeological methods adopted from emerging American literature, Mulvaney (1964, 1971)—like his predecessor Tindale—sought to distinguish and distance these investigations from those of amateur collectors. The introduction of radiocarbon dating shortly following these investigations further enforced the assumption that archaeological practice was and is a scientific endeavour (Colley 2002:5). By excavating *Tungawa* Mulvaney also aimed to document changes in Aboriginal culture and challenge misconceptions held by amateurs that Aboriginal occupation of Australia was relatively recent. For Mulvaney (2011:98), *Tungawa* was:

(an) opportunity to demonstrate to doubters that stratigraphy was the key objective to archaeology; that it was unscientific to collect and hoard stone tools from eroded surface sites; [and] that Aboriginal culture and economy was not static but that it changed through time...

In contrast, amateur collectors welcomed these archaeological investigations, as they believed it would once and for all discredit Tindale’s (1957; Hale and Tindale 1930) research results (Griffiths 1998:91). For Mulvaney, it was amateurs—not Aboriginal people—who were the key stakeholders in his archaeological investigations at *Tungawa* (Griffiths 1998:90).

Shelter 2 was the first of two rock shelters excavated between 1956 and 1958. In interpreting observed changes within the rock shelter deposit, Mulvaney (1960) focused on the distribution of distinct stone artefact ‘types’ or typologies—which he refers to simply as “artefacts” and defines as adze-stones, adze-slugs, micro-adzes, scrapers, microscrapers, points, micropoints, flakes with retouch and miscellaneous artefacts that have been “delicately trimmed” with “minute retouch” (Mulvaney 1960:67)—that were interpreted as reflecting cultural change over time. In support of Hale and Tindale’s (1930) hypothesis, Mulvaney (1960:54) argued there was a “degeneration” of stone artefact manufacturing techniques similar to that observed at *Ngaut Ngaut*. Mulvaney (1960:74) based his argument on the form and presumed function of these stone artefact, stating: “Little in the upper levels compares with the pirris [points] and microliths of earlier strata, which are *equal to those of the best cabinet collections made on surface sites* [emphasis added].” Thus, despite seeking to distinguish these archaeological investigations from those of amateur collectors, this statement, together with Mulvaney’s (1960) focus on typologies, demonstrates the ongoing influence of amateurs on ‘professional’ archaeological practice during this period.

In supporting Hale and Tindale’s (1930) hypothesis, Mulvaney (1960:74-75) also argues the “degeneration” of stone artefacts was accompanied by an emphasis on wood-working and a preference for wood tools, as indicated by the high number of adzes in recent layers; however, this interpretation is problematic for a number of reasons. Firstly, the presence of adzes in various excavation units indicates wood working throughout the history of Shelter 2 rather than simply confined to recent excavation layers (see Table 4.5). Similarly, the quantity of “waste fragments” also indicates evidence for stone artefact manufacture throughout the history of the rock shelter, challenging Hale and Tindale’s (1930) and Mulvaney’s (1960) claim of a “degenerating” stone artefact culture (see Table 4.3). In addition to this, there is a decline in bone artefacts in recent excavation units, despite both Eyre (1845) and Angas (1879) noting their use within the region during historic times (see Table 4.4). Lastly, the increase in wood tools in recent excavations units may be due to preservation factors rather than reflective of cultural change (see Table 4.4).

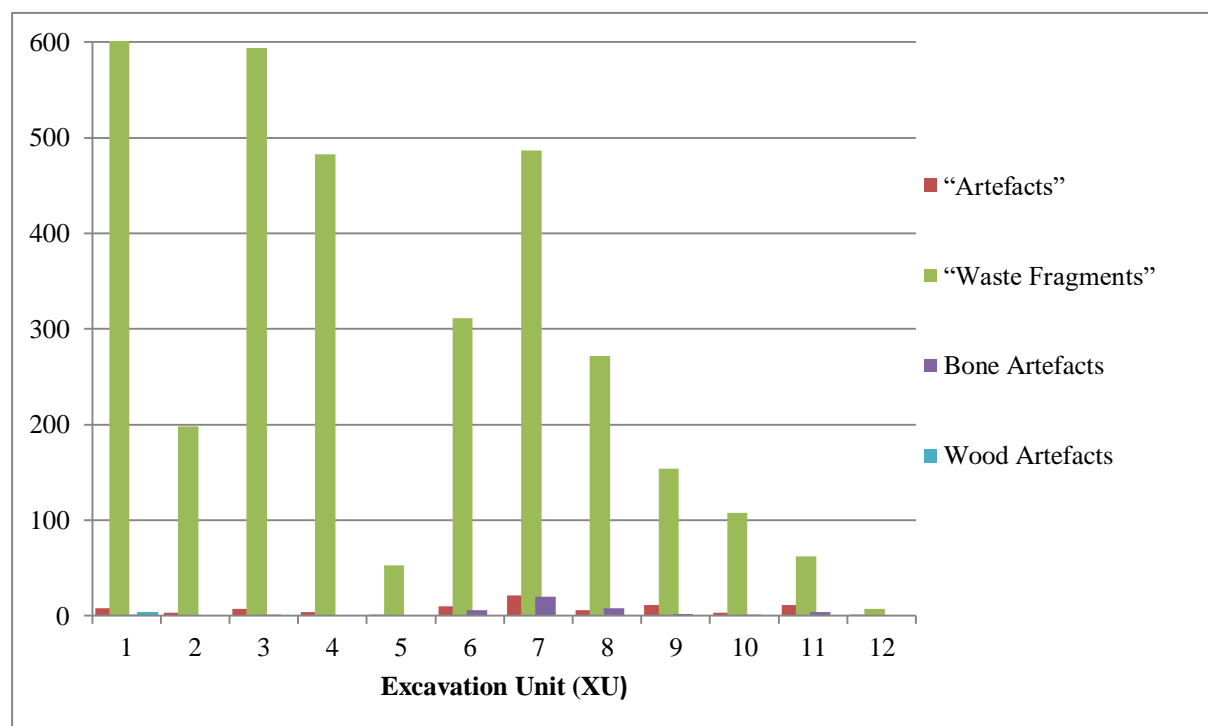


Table 4.3. Stone, bone and wood artefacts removed from Shelter 2, Tungawa (after Mulvaney 1960)

Later reanalysis of these stone artefacts by Roberts (1998:112) also concludes there is evidence of continued stone artefact manufacture within the upper excavation units, further challenging Hale and Tindale’s (1930) and Mulvaney’s (1960) “degeneration” hypothesis. Roberts (1998:100) demonstrates a majority of stone artefacts within these units are

comprised of the products of stone artefact manufacture, including flakes, broken flakes and flake pieces.

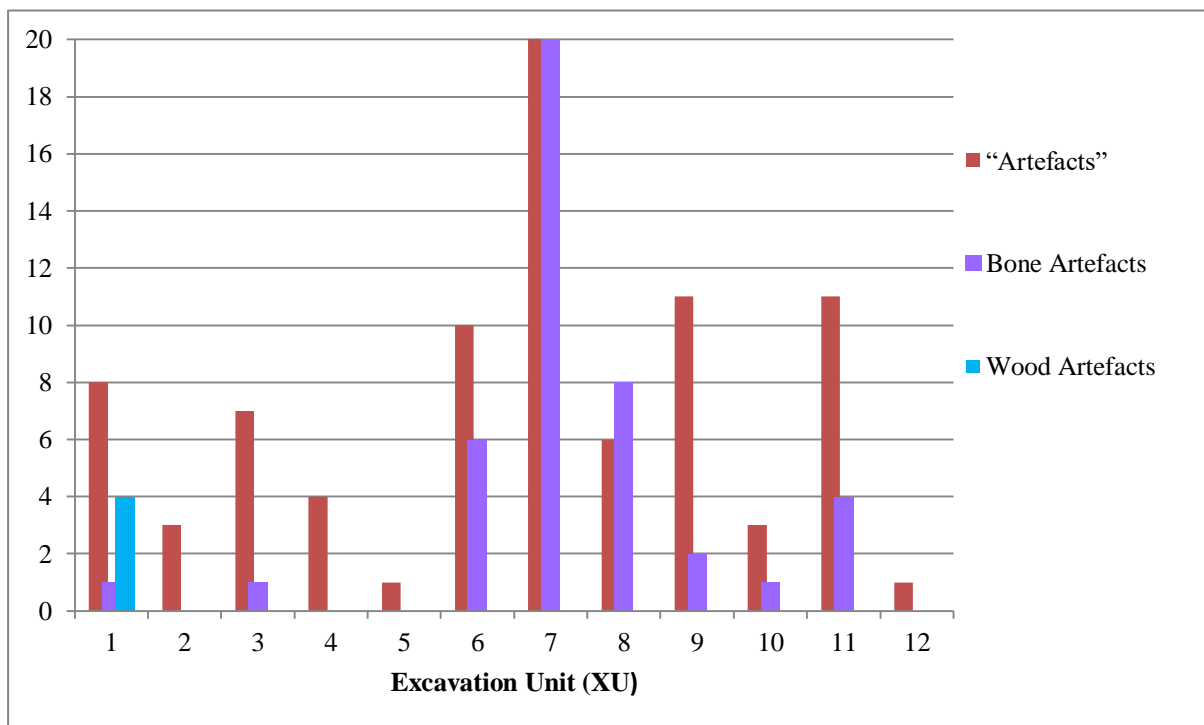


Table 4.4. Stone 'types', bone and wood artefacts removed from Shelter 2, Tungawa (after Mulvaney 1960)

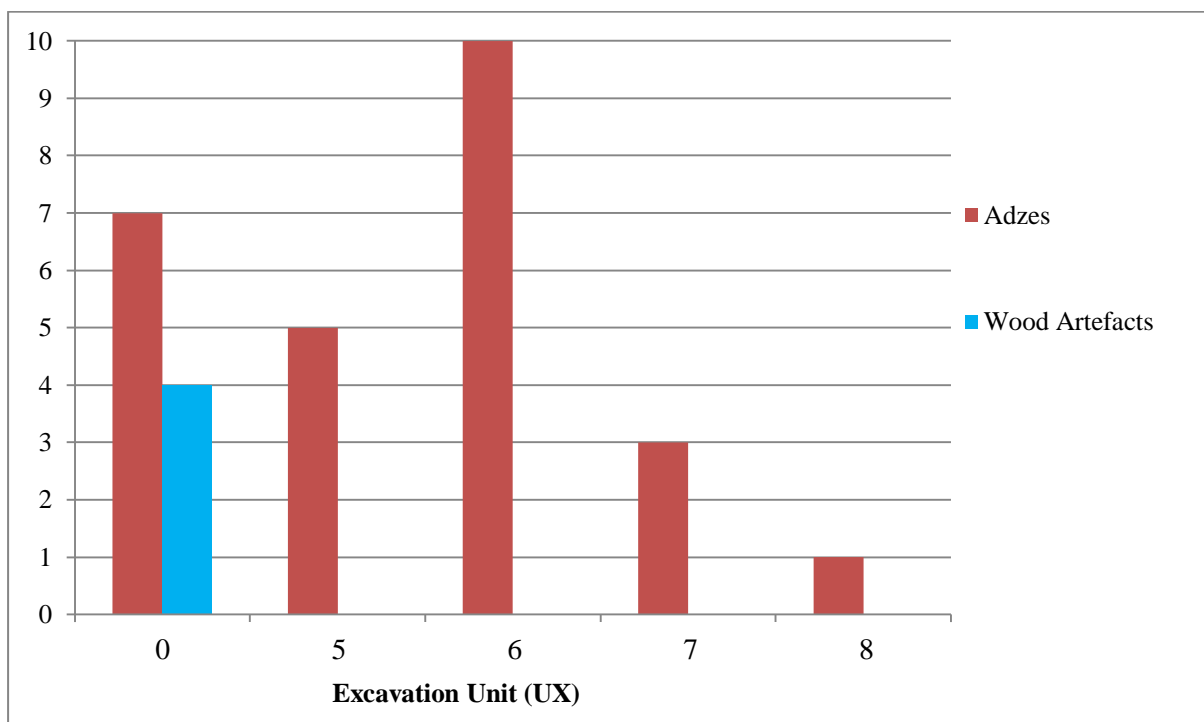


Table 4.5. A comparison of adzes and wood artefacts removed from Shelter 2 Tungawa (after Mulvaney 1960)

Following archaeological investigations at Shelter 2, Shelter 6 at *Tungawa* was excavated between 1960 and 1963. This shelter was not occupied for as long as Shelter 2 (see Table 4.6) and fewer stone artefacts were recovered, with only 18 “definitely classifiable retouched stone implements”—which Mulvaney et al. (1964:487-490) defines as either adzes, geometric microliths, scrapers and nondescript scrapers or used pieces—recorded from a total of 1,500 stone artefacts (Mulvaney et al. 1964:490; see Table 4.7). As a result, Mulvaney et al. (1964:490) concluded stone artefacts from Shelter 6 could not be compared to Shelter 2 in order to determine a stone artefact chronology.

Shelter 2 Depth Below Surface	Shelter 2 Radiocarbon Dates	Shelter 6 Depth Below Surface	Shelter 6 Radiocarbon Dates
1.83m (XU 2)	1290 ± 80	1.37m (XU 8)	1000 ± 91
2.44m (XU 3)	1806 ± 85	2.13m (XU 11)	1220 ± 94
2.74m (XU 4)	3240 ± 80 BP	2.74m (XU 16)	1500 ± 90
4.57m (XU 10)	4850 ± 100 BP		

Table 4.6. Radiocarbon dates for Shelter 2 and Shelter 6, *Tungawa*
(after Mulvaney et al. 1964)

Elsewhere, Tindale (1968:624-5) argued the differences between rock shelters encounter by Mulvaney (1960; Mulvaney et al. 1964) could indicate evidence for *korni* and *mimini* areas, suggesting explanations might be “forthcoming” following consultation with Aboriginal People. Tindale maintained “(if) we study living peoples we are in a better position to assess archaeology of an area” (Tindale 1968:624). As a result, Tindale (1968:625) believed, “cooking fires and the gathering places for women are at a little distance from places where men tend to congregate”. Accordingly, *Milerum* shared with Tindale (1968) that *miminar* were forbidden to handle sharpened stone artefacts for cutting purposes so not to cause injury to someone in the heat of a fight. Bell (Pers. Comm., 2016) suggests, however, such an account could reflect *korni* gendered knowledge regarding the use of stone artefacts, with *mimini* gendered knowledge not being recorded due to the biases of mostly male researchers recording such knowledge. Despite this, Tindale (1968:625) concludes that observable Old People’s belongings associated with *miminar* places would be quite different to those associated primarily with *korni*. In-line with Tindale’s (1968) argument, evidence of *miminar*

within Shelter 6 seems likely with the presence of two infant burials, one of whom was likely carried around for a period prior to burial due the absence of several bones and no evidence of post-interment interference (Mulvaney et al. 1964:492; also see Eyre 1845:344; Angas 1847:75; Meyer 1879:198; Wyatt 1879:165). As previously discussed, ethnographic observations indicate *miminar* often stayed within close proximity to their deceased child (Angas 1847:75; Eyre 1845:344, 346-7; Meyer 1879:198; Smith 1977:18-19, 23-24; Wyatt 1879:165).

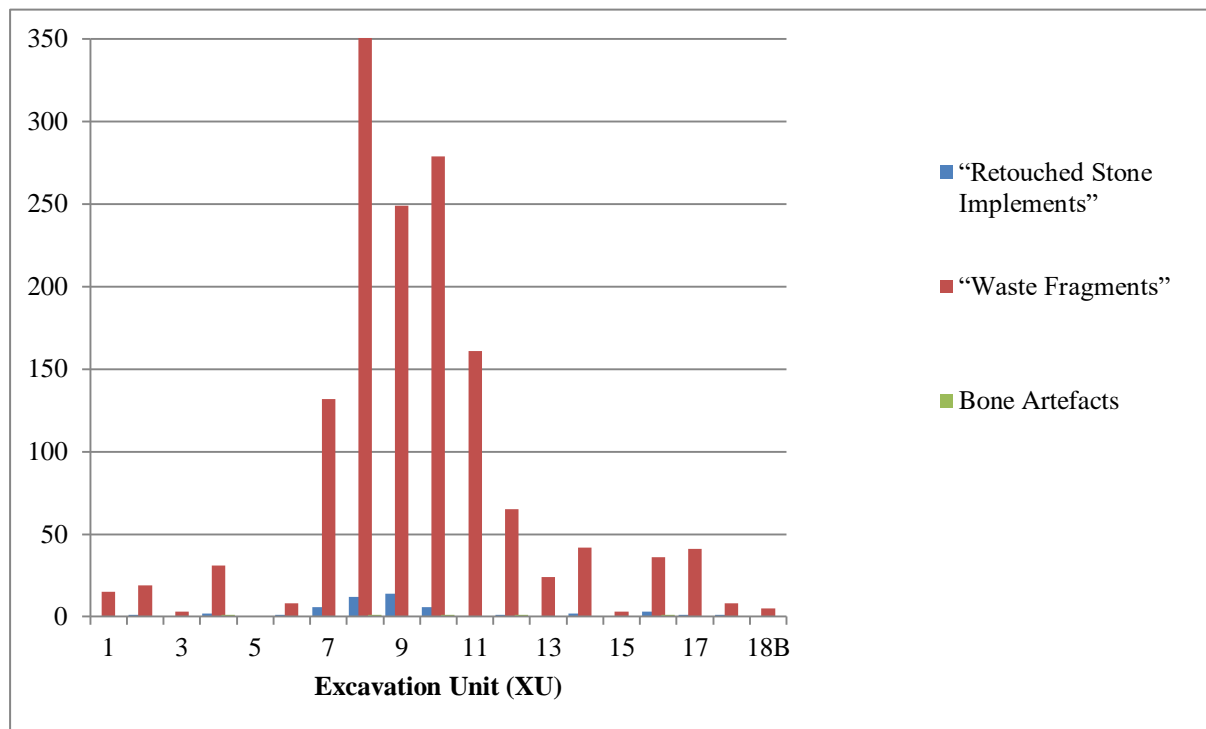


Table 4.7. Stone and bone artefacts removed from Shelter 6, Tungawa (after Mulvaney et al. 1964)

On the other hand, Mulvaney et al. (1964: 491) claimed the results from Shelter 6 were comparable with results from Hale and Tindale’s (1930) investigations at *Ngaut Ngaut*, due to the comparative lack of stone artefacts in the upper excavation units of both rock shelters. Mulvaney et al. (1964:492), however, rejected Tindale’s (1957; Hale and Tindale 1930) cultural succession model, suggesting changes in stone artefacts could be explained as a result of environmental or cultural *adaptation* rather than cultural *succession*. Mulvaney (1960) claimed Tindale’s cultural succession model failed to recognise the possibility for diversity between different ‘site types’ or environmental contexts. Despite this, both Hale and Tindale (1930) and Mulvaney (1960) analysed their respective assemblages focusing on then accepted typologies, which resulted in Mulvaney (1960) “essentially...using the same

techniques [as Tindale] to arrive at different conclusions” (Roberts 1998:78). In the end, however, Mulvaney (1960:73-74) contends observed distribution patterns at *Tungawa* could be accidental due to the relatively scarce nature of Old People’s belongings, concluding archaeological investigations:

...recovered some interesting evidence, but it is tantalizingly meagre...The time is not ripe for attempts at cultural and chronological synthesis of Australian prehistory...these discoveries only relate to the Lower Murray valley and should not be correlated at present with other areas (Mulvaney 1960:80).

Subsequent radiocarbon dating of Shelter 2 also suggests the accumulation of sediments within the rock shelter was not constant and occupation was ephemeral during the last 5,000 years (Mulvaney et al. 1964:501). Thus, the materials from *Tungawa*—as well as *Ngaut Ngaut*—do not accurately reflect Aboriginal lifeways within the broader region; however, this has not discouraged the acceptance, use and circulation of these knowledges, ultimately reinforcing misrepresentations of Ngarrindjeri lifeways.

4.2 Much More than Stones, Bones and Rock Shelters

During the 1960s and 1970s Australia entered a ‘golden age’ of archaeological practice, with the establishment of university departments, well-financed research and new dating techniques (Colley 2002:4; Du Cros 2002:22; Griffiths 1998:92). During this period archaeological research took a ‘stones and bones’ approach that concentrated on excavation of Pleistocene rock shelters and burial areas, driven by questions of occupational antiquity, palaeoenvironmental conditions and causes of cultural change (Colley 2002:15; Moser 1995:163; Mulvaney and Kamminga 1999:15-6). In doing so, this research ‘rebelled’ against dominant misconceptions regarding the unchanging nature of Aboriginal culture (Hiscock 2008:102). Archaeological research within this period tended to paint Aboriginal culture with a broad brush, using archaeological knowledge from a single or handful of sites to hypothesise large-scale and long-term understandings for the whole continent, informed by the assumption that Aboriginal culture in Pleistocene Australia was relatively uniform (Colley 2002:5; Hiscock 2008:102). Notable research carried out within this period included excavations of Old People’s places and burials at Lake Mungo that were dated to 36,000 BP; radiocarbon dates that captured the public’s interest, which in turn encouraged continued government support for archaeological research within Australia (Colley 2002:6).

Despite the flourishing academic and economic context in which this research emerged, very few archaeological investigations were carried out within Ngarrindjeri *Yarluwar-Ruwe* during

this period; Roonka Flat cemetery was the exception. Located downstream from *Tungawa*, Roonka was first uncovered in 1956 and was subject to continuous erosion and souveniring, until 1968 when the South Australian Museum's newly appointed and only Curator of Archaeology, Graeme Pretty, commenced archaeological investigations in order to 'protect' the cemetery (Walshe 2009:259). Between 1968 and 1973 several seasons of intense archaeological investigation uncovered 234 Old People and their belongings, including necklaces, head ornaments, evidence for clothing, vegetable mats, stone artefacts, ochre and faunal remains. Pretty (1977) focused upon analysing these belongings in order to better understand the social complexity of Aboriginal people within the Lower Murray, believing the study of stone artefacts alone to be fruitless (Walshe 2009:294-297).

During the 1970s and 1980s a handful of researchers were undertaking economically focused archaeological investigation on Holocene coastal middens that contrasted with this previous research. Notable archaeological investigations included Bowdler's (1970, 1976) research at Bass Point, who used ethno-historical accounts to interpret changes within midden deposits and emphasise the role of women following the introduction of the fishhook. Likewise, research by Lourandos (1977, 1983, 1985) also used ethno-historical evidence to help interpret changes during the late Holocene in south-western Victoria more broadly. Lourandos proposed that internal social pressures resulting in an intensification of resource production explained observed changes within the archaeological record, contrasting with previously posited explanations for cultural change based on external factors such as environmental change and population growth (Flood 1995:237). In doing so, this emerging research took the focus away from a preoccupation with large-scale and long-term understandings of Aboriginal culture and instead towards localised understandings of cultural change within the last few thousand years (Lourandos and Ross 1994:59).

Kurangk (Coorong)

Within the context of this emerging research, in the early 1980s archaeologist Roger Luebbers (1981, 1982) carried out archaeological investigations along the *Kurangk*: a long, brackish to hyper-saline estuary located between the mainland and a narrow sand dune peninsula. These investigations were carried out for the South Australian Department for Environment and Planning (DEP), with the view to develop management strategies for Old People's places located within the Coorong National Park. During the surveys Luebbers (1981, 1982) recorded the location, size and content of various middens, with a representative sample of these investigated further through archaeological excavation. In combining

pedestrian surveys with excavation, Luebbers was able to place the results of excavations within a broader landscape context, an aspect lacking from previous archaeological investigations within the region (cf. Moser 1995:163). Luebbers (1981, 1982b) developed regional models for Ngarrindjeri lifeways through the excavation and comparative analysis of *several* Old People's places, which built upon previous models developed during his doctoral research within lower south eastern SA (see Luebbers 1978). The archaeological knowledges produced from the excavation of Old People's places also informed the development management strategies for their protection; as Luebbers (in Wiltshire 2006c:84) explains:

...the aim was to provide Ngarrindjeri people with technical data about the cultural heritage in a prime area of their country so they can identify and participate in a discussion about what is significant.

As a result of these archaeological investigations, Luebbers (1982b:4) considered Old People's places within the Coorong National Park to “(reflect) a detailed record of a remarkable cultural development on a scale *unparalleled* in temperate Australia [emphasis added]”. In placing the *Kurangk* within a broader context, Luebbers (1982b:4-5) goes on to state:

Although similar adaptations have been reported for wetlands in Victoria and New South Wales, the archaeological record in the Coorong contains, by far, *the largest, most extensive* cultural deposits yet attributed to the prehistoric past in the region...This report concludes as a result that Aboriginal sites in the Coorong offer an exceptional example of the dynamic character of Aboriginal cultures and its achievements in a fertile environment. For these reasons it is imperative the future plans of management for the Coorong National Park implement effective heritage conservation programs designed to provide long-term protection for sites of significance [emphasis added].

Unfortunately, limited actions have been taken to implement such long-term protection (Hartman et al. 2015).

In terms of regional models, Luebbers (1981) interpreted changes within midden deposits to identify three phases of occupation, which he later revised to four (Luebbers 1982). These phases of occupation include: the “Early Settlement Phase” dating between 6,000 and 4,500 BP, the “Initial Coastal Settlement Phase” dating between 4,500 and 2,000 BP, the “Intensive Settlement Phase” dating between 2,000 BP and 1840s, and the “Refugee Phase” dating between the 1840s and the 1940s.

During the “Early Settlement Phase” Luebbers (1981:32, 45) argues occupation within the *Kurangk* area is mostly focused on inland wetland areas rather than the *Kurangk* estuary, as suggested by the presence of two small middens comprised of estuarine fauna and dated

between 5,500 and 4,500 BP. Within this phase, sporadic, small scale summertime occupation was limited to the estuary side of the peninsula, which during this period would have been a chain of islands only accessible by canoes or rafts (Luebbers 1981:32).

The “Initial Coastal Settlement Phase” suggests the mainland joined the peninsula at the southern end of the *Kurangk* early in this phase, giving people greater access to marine resources from the Southern Ocean. During this phase large shell middens appear that indicate increased occupation and an increase in marine resource exploitation, including marine shellfish that eventually led to increased occupation along the *Kurangk*.

A shift from estuary to marine resources, increased rates of marine resources consumption and increased occupation is represented in the “Intensive Settlement Phase” by the sudden appearance of very large middens and mounds, recurrent use of sites as well as decrease in the mean length of marine shellfish suggesting a winter occupation (Luebbers 1982b:89). Luebbers (1982b:62) cites evidence in the form of initial occupation of larger shell middens within this period at Hell’s Gate and Salt Creek to support this hypothesis. These Old People’s places are located at spaced intervals along the coast also suggesting the development of *Lakinyeri* based territories and an increased permanency in occupation (Luebbers 1982a:5, 1982b:82).

Whilst the landscape specific change occurring within the *Kurangk* area may have influenced an increase in occupation, Luebbers (1982:91) maintains the increase in midden size and the appearance of mounds during the “Intensive Settlement Phase” is not adequately explained by landscape change alone (Luebbers 1982:91). Whilst population increase is inferred by the increase in midden size, it is not substantiated by the study of Old People’s belongings; as Luebbers (1982:84) explains:

...there are structural relationships in subsistence economies, such as the duration of site visitation (sedentism), exploitation strategies, and stability in local ecology which also influence accumulation patterns in cultural deposits...[as] these are interdependent variables in the settlement growth equation, quantitative analysis alone is unable to distinguish population pressure as the sole cause to intensification...The proposition that population growth is behind intensification is therefore speculative.

For this reason, Luebbers worked with members of the Lower Murray Aboriginal Heritage Committee at Murray Bridge, Ngarrindjeri Heritage Committee at Meningie and Raukkan Community Council to record contemporary Ngarrindjeri knowledges, to better understand Ngarrindjeri people’s complex relationship with their *Yarluwar-Ruwe* (Bell 1998:450;

Luebbers 1982a:5, 1982b:4; Wiltshire 2006c:67, 81-82). As a result, Luebbers was the first archaeologist to involve members of the Ngarrindjeri Nation in archaeological investigations within the region, reflecting the broader social and political landscape of archaeological practice during this period; however, this connection may also be credited to the influence of Norman Tindale, who had encouraged Luebbers to undertake his doctoral research within lower south eastern SA and had himself worked with respected Ngarrindjeri Elder *Milerum*. As a result of this relationship, the final “Refugee Phase” suggested by Luebbers (1982:4) is derived from a combination of written and contemporary Ngarrindjeri knowledges, as well as the presence of historical artefacts within middens. Luebbers (1982a:5, 1982b:34) cites historical artefacts associated with a hut depression in the upper excavation units of the Hells Gate midden, demonstrating the continuity of Ngarrindjeri lifeways along the *Kurangk*.

On the other hand, the occurrence of stone artefacts is relatively rare along the peninsula, with only one late Holocene stone artefact scatter among hundreds of Old People’s places recorded during these investigations. With a clear absence of ‘small tool tradition’ backed artefacts within late Holocene Old People’s places, Luebbers (1982:91) believes there is no association between stone artefacts and late-Holocene intensification of the *Kurangk*. Luebbers (1982:90) suggests this may be relative to a lack of suitable raw material for stone artefact manufacture and/or a lack of suitable timber along the *Kurangk* for the manufacture of wooden tools, thus negating the need for robust stone artefacts required for woodworking. Luebbers (1982:93) does, however, indicate widespread exchange networks developed within “Intensive Settlement Phase” suggest Ngarrindjeri Old People within the *Kurangk* *did* have the means to obtain the raw materials necessary for stone artefact manufacture despite their scarcity.

In spite of the high quality and comprehensiveness of these archaeological investigations, Luebbers (1982b:4) points out results were insufficient to describe the features of the “Initial Coastal Settlement Phase”, referring to the dates associated with this phase as “tentative” (Luebbers 1982a:5). Furthermore, the “Early Settlement Phase” had poor site visibility, preservation and was based on a single radiocarbon date (Luebbers 1982:3). Thus, Luebbers’ (1982b:91, 94) considers these archaeological investigations as preliminary in nature, recommending “a program of continuing survey, research and assessment should be undertaken to fully identify significant elements of the heritage in the [Coorong National] Park” (Luebbers 1982b:5).

More recently, the analysis of Old People's belongings excavated from middens located within the northern *Kurangk* both contrast with and slightly refine Luebbers (1981, 1982) "Intensive Settlement Phase". St George's (2009:87-89) analysis claims Ngarrindjeri lifeways over the last 2,500 years comprised predominately short-term, ephemeral occupation during summer months, contrasting with an increased permanency in occupation including winter occupation suggested by Luebbers (1982b:82, 89). St George (2009:93) also claims the "Intensive Settlement Phase" might have commenced approximately 500 years earlier than previously suggested (St George 2009:93). Despite these disparities, St George (2009:87-89, 91) notes a primary focus on marine resources such as shellfish, whilst also noting minimal quantities of stone artefacts were present with the middens analysed. In doing so, St George (2009:91) argues stone artefacts were not necessary for the procuring and cooking of shellfish, which may explain their scarcity within the *Kurangk*.

Lake Alexandrina

Following archaeological investigations along the *Kurangk*, archaeologist Roger Luebbers (1986-1987, 2014) carried out further investigations along the eastern shore of Lake Alexandrina for DEP. Similar to Luebbers' (1981, 1982) previous research, these archaeological investigations—referred to as the *Lower Murray Lakes Archaeological Study* (LMLAS)—sought "to identify, assess and study archaeological sites on Lake Alexandrina" (DEP 1986:1). The LMLAS undertook extensive archaeological investigations over a 12 month period in order to develop protective management strategies; a unique approach to heritage protection, as Luebbers (in Wiltshire 2006c:67) highlights:

Research is not commonly associated with cultural resource management and I was given quite a bit of freedom as so far as we had a budget to incorporate a research design, so I could not only say where the material was but give some indication of its antiquity and likely significance to reconstructions of land use and prehistoric life in that area...the Department was very much supportive of research...once we know what the patterns are and the principal characteristics of the area, it's possible then to set out priorities and techniques for heritage management so they can be protected and we can identify which should be protected first and the significance of the materials that are being protected...

The LMLAS recorded 41 lake shore shell mounds—the most obvious examples of Ngarrindjeri lifeways along Lake Alexandrina (September Luebbers 1986:2); six large wetland middens were also recorded, but identification of these was hampered by poor site visibility due to recent pastoral grasses (Luebbers 2015:6). Whilst Luebbers had planned to only excavate one small shell mound in order "(to) determine mound composition, internal

organisation and the antiquity of deposition” (Luebbers Oct. 1986:2), in total two mounds and two wetland middens were excavated with the view to build upon regional models developed for the adjacent *Kurangk* area. Following these excavations, Luebbers (January 1987:6) noted:

The major difference between the two site types ... is the high percentage of a diverse range of fauna in the swampside sites. These reflect intensive exploitation of floodplain habitat, e.g. Swamp resources, as well as minor focus on the open woodland that is associated with the sandhills. The site economies on the lake shore on the other hand, evolved as a more socialised use of the mudflats and reed fields in the larger permanent lake... An analysis of food refuse from both site types will be performed to define this strategy more clearly.

Specifically, there was a greater variety of terrestrial fauna including wombat and kangaroo within the wetland middens, whilst the shell mounds consisted mostly of freshwater mussel with small quantities of turtle, frog, fish, crusteans, various bird species and hearth stones also present (Luebbers February 1987:2; 2015:5-6). Once again, the presence of stone artefacts is rare; however, broken chert and calcrete blades *are* present within the shell mounds, which Luebbers (2015:5) argues are likely spear barbs that indicate wood working activities including the repair of spears were carried out on these mounds.

As a result of these excavations, Luebbers (2015:5) maintains Ngarrindjeri Old People “(lived) on shell mounds amongst the reed beds where they launched rafts and bark canoes into the lake in search of mussels, fish, birds, plants and other aquatic foods”. In addition to this, Luebbers (2015:3,5) suggests these mounds were occupied by family groups of Ngarrindjeri people who likely erected huts on their peaks, similar to that noted at Hells Gate midden along the *Kurangk* (see Luebbers 1982a:5, 1982b:34). An absence of European artefacts associated with these shell mounds leads Luebbers (2015:8) to conclude Ngarrindjeri occupation of these Old People’s places was abandoned prior to European colonisation, which may be connected to a recent shift in place function; namely, the shift from an occupation area to a cemetery. Specifically, Luebbers (2015:6; also see Luebbers July-August 1986:2) argues many of these shell mounds acted as cemeteries, with larger mounds containing up to 20 Old People as indicated by their exposure due to rabbit burrowing. During the excavations of one of the shell mounds, a burial containing two Old People was present within recent excavation units. As a result of their presence, Luebbers (2015:8) states:

The observation that mounds contain relatively large number of graves at the more recent depositional units is unparalleled in regional burial patterns for mounds. The

most plausible explanations for this proliferation are that it represents the evolution of land use strategies in which mounds are increasingly used as cemeteries in the last few centuries of habitation or instead that it is the consequence of sudden and possibly catastrophic mortality from a single cause, such as smallpox.

Ngarrindjeri Elder Uncle George Trevorrow—who was a member of NHC during the LMLAS—also drew similar conclusions:

I suppose in particular a study of those Old People would have been really important because I think a lot of those burial grounds around that are associated with the, what do you call it? Small pox or something?...So it would have been interesting to see how those people died (G Trevorrow in Wiltshire 2006c:84-85).

Burials with multiple Old People were also disturbed within the wetland middens, indicating both locations were being utilised as cemeteries (Luebbers in Wiltshire 2006c:80). Due to the disturbance of these Ngarrindjeri Old People, focus of archaeological investigations shifted away from the analysis of shell mound and wetland midden materials to the excavation, analysis and subsequent reburial of these Old People; as Hemming (1999:3) explains:

Due to the primary importance of treating human remains discovered during excavations with the appropriate respect, it became necessary for Dr Luebbers to focus his research on this aspect of the LMLAS...

This analysis was also hampered by a lack of financial support in comparison to the financial freedoms associated with previous archaeological investigations in SA (Luebbers in Wiltshire 2006c:75-76; Wiltshire 2006c:82-83); a situation that reflected economic trends more broadly, as Colley (2002:40) explains:

Since the 1980s successive governments have been increasingly reluctant to spend taxpayers' money on [archaeological] research which, rightly or wrongly, is perceived to have little direct financial benefit to society.

In addition to a lack of financial support, previously available facilities required to undertake analysis of the shell mound and midden materials were also lacking (Luebbers in Wiltshire 2006c:75-76). As a result, the analysis of shell mound and midden materials and the final report remained unfinished for almost three decades. Despite this, Luebbers has continued to pursue the analysis of these Old People belongings in lieu of any financial support and has in his retirement recently completed a draft report at his own cost (see Luebbers 2014).

Archaeological investigations as a means to develop management strategies for heritage protection effectively ceased following the LMLAS; an approach now deemed too costly for a money and time poor State Government, which rely on short-term archaeological surveys as a predominant means to assess Ngarrindjeri interests in *Yarluwar-Ruwe* (Hemming 2006;

Hemming and Rigney 2010). At the same time, State Government agencies provide little-to-no support for those wishing to conduct archaeological investigations, indicating an indifference to archaeological research as a tool for heritage protection and a detachment with those who conduct such research (Wiltshire 2006c:83-84). In short, knowledges from limited archaeological investigations within *Yarluwar-Ruwe* continue to be privileged in the “politics” (cf. Latour 2004) of archaeology.

4.4 Summary

Overall, this chapter discusses previous archaeological practice within the region, focusing on archaeological investigations undertaken along the Murray River, the Kurangk estuary and Lake Alexandrina. In doing so, this chapter has made reference to the distinct historical, political, social and economic connections that influenced these investigations, including the activities of amateur collectors; activities usually isolated from historical accounts of archaeological practice as a means to distance these activities from ‘professional’ archaeological practice. Such a distinction, however, denies the historical connections that have and continue to inform archaeological practice within the region, including subsequent archaeological investigations at Waltowa Wetland.

Chapter 5 – Disassembling Archaeological Practice

This chapter presents an auto-ethnography describing the reality of archaeological investigations at Waltowa Wetland. It commences with a brief biography that problematises my development as an archaeologist as neither pre-determined nor self-evident, but as a product or “effect” (Law 2011:5) of my connection with others. Secondly, it describes the development of my connection with the Ngarrindjeri Nation³² (NN). In doing so, this chapter outlines the ways in which my connection with the NN is maintained and strengthened over time, in turn contributing to the reality of archaeological investigations at Waltowa Wetland. The third, final and most extensive section of this chapter follows the process of archaeological investigations at Waltowa Wetland as they unfold, describing the surveys, detailed recording, report writing and negotiations that occurred in light of potential excavation. In short, this chapter describes the successful and unsuccessful connections that contribute to the production of archaeological knowledges.

5.1 My Personal Biography

... archaeologists, like facts, need to be established...
(Van Reybrouck and Jacobs 2006:42)

There is no denying that my childhood growing up in England in the 1980s was privileged. As a *Krinkari*, my family never faced institutionalised discrimination or oppression. My parents did, however, consider our family working class (I. and C. Wiltshire, Pers. Comm., 2015). My parents drove a second hand car, owned second hand furniture and a majority of our clothes were either second-hand or handmade. My parents grew their own vegetables and we seldom went out to dinner—a luxury my family could not afford. On our birthdays my brothers and I would receive hand-made instead of store brought gifts, whilst at Christmas our parents rarely brought gifts for one another to ensure my brothers and I had gifts to open come Christmas morning. There were times when our family had no money in the bank, very little food in the cupboard and lived week-to-week. In order to compensate for this lack of income, my mechanic father would buy cheap, second-hand cars, fix them up and re-sell them for a profit every few months. Despite this, I feel privileged to have had a childhood

³² When I refer to Ngarrindjeri Nation, I refer to a complex assemblage of Ngarrindjeri Elders, leaders, colleagues and individuals as well as Ngarrindjeri organisations.

where my family did have a car, I did have clothes on our back, we did have food to eat, and most of us did receive gifts on special occasions.

During my early childhood I was exposed to humanitarian efforts, aid relief, and charity on an international scale due to the media driven, public consciousness that emerged in England in the 1980s. In particular, the famine in Ethiopia captured the attention of the broader public and charitable responses were widely supported. Despite my family's working class status we also participated in these charitable responses, which included: purchasing the Band Aid song *Do They Know It's Christmas?*; the Live Aid concert that my family watched and my dad recorded in its entirety on five VHS box set; and Comic Relief telethons and their annual Red Nose Day I participated in at school; and despite how contrived it sounds on reflection, this media driven consciousness also resulted in the 'think of all those starving children in Africa' lecture, which was a common threat used to get my brothers and I to eat our dinner. In the late 1980s the fall of the Berlin Wall and the symbol of unity it represented also received considerable media coverage. These events focused on underprivileged or oppressed people residing outside of England and I remained ignorant to institutionalised discrimination of oppressed people of other cultural, economic, educational, sexual and ability status residing in my own backyard.

When my family immigrated to Adelaide, Australia in 1990 I knew little of the country we would call home; my main reference points were *Neighbours*, *Home and Away*, *Crocodile Dundee* and Kylie Minogue music videos—mostly *Krinkari* representations of Australian society, with the exception of Yolngu actor David Gulpilil in *Crocodile Dundee*. In primary and high school I was privileged to have *Krinkari* friends and as a result I never struggled to fit in (cf. McIntosh 1989:2). Whilst some of my friends had diverse cultural backgrounds including Greek, Aboriginal, Arabic, Persian and Yugoslavian, our cultural diversity was never discussed; we seemed to be more concerned with boys, *Girlfriend* and *Dolly* magazine, celebrities such as Jonathan Brandis and Leonardo DiCaprio, clothes and make-up. Once again, I was ignorant to the institutionalised discrimination that continued to normalise my *Krinkari* privilege and oppress those around me including my friends³³.

Following high school I decided to go to university at the age of 21 and faced little-to-no obstacles in gaining entry; a privileged opportunity I had access to through no virtue of my

³³ Since graduating from high school, one of my friends has publicly spoken about the challenges she faced as an Aboriginal woman with the South Australian public school system (see Graham 2003).

own (cf. McIntosh 1989:3). On commencing my Bachelor of Archaeology degree at Flinders University (FU), most of my fellow students were *Krinkari* and I once again did not face any struggles to fit in (cf. McIntosh 1988:2). The degree itself provided an opportunity to study science, maritime, historical or Aboriginal focused subjects, in order to develop specialised knowledge in one of these areas. Given I had studied math, physics and chemistry in high school, I selected science based subjects believing the content would be familiar and I would excel academically. To my disappointment I struggled academically. Simultaneously, I had little interest in studying subjects relating to Aboriginal people, culture and history. On reflection this lack of interest most likely stemmed from ignorance, as I had little to no knowledge of Aboriginal people in Australia and no memory of being taught Aboriginal culture or history in high school. My *Krinkari* privilege allowed me to “(be) oblivious to anything outside of the dominant cultural forms” (McIntosh 1989:4) including knowledge of Aboriginal people, culture and history.

During the second year of my degree I enrolled in an ethno-archaeology field school run by Flinders University Department of Archaeology lecturers Claire Smith and Sally May (see Figure 5.1). Despite the short-term nature of this field school, it was a significant influence on my education and development as an archaeologist. Claire and Sally were both passionate advocates for ethical and collaborative research with the Aboriginal communities. The field school provided my first opportunity to experience working closely with members of the Barunga and Gunbalanya Aboriginal communities; an experience I reveled in. On my return to Adelaide I became incredibly focused on my university studies, motivated by an aspiration to pursue collaborative research with an Aboriginal community, as well as a desire to learn more about Aboriginal people, culture and history. I enrolled in Aboriginal based subjects offered through the Department of Archaeology, Australian Studies Department and Yunggorendi First Nations Centre³⁴. I began to learn with great enthusiasm and disbelief of the historical and contemporary social issues faced by Aboriginal people in Australian society. I quickly developed a new understanding of Australian history, contemporary society and my privileged place within it, whilst simultaneously developing a sense of injustice at the institutionalised discrimination and oppression Aboriginal people continue to experience. My *Krinkari* privilege had allowed me to be ignorant to this discrimination and oppression. In order to “push back” (cf. McKenzie 2014) against my privilege, I began to engage with Indigenous and post-colonial critiques of Australian history and contemporary society with a

³⁴ Now the Office of Indigenous Strategy and Engagement.

particular focus on critiques of archaeological practice. During this time the book *Indigenous Archaeologies: Decolonizing Theory and Practice* (Smith and Wobst 2005b) was particularly influential in furthering my development as an archaeologist, by advocating the importance of collaborative approaches to archaeological practice in order to privilege Indigenous understandings and interests.



Figure 5.1 Ethno-archaeological field school, Injalak Hill, Gunbalanya
(photo courtesy of S. May 2004)

With this in mind, I sought an honours project I could undertake in collaboration with an Aboriginal community, where the understandings and interests of that community would be privileged. In order to pursue such an honours project, I approach archaeologist Lynley Wallis (LW), who immediately suggests the ‘Lower Murray Lakes Archaeological Study’ (LMLAS) as a case study for such a collaborative project and hands me some reports to familiar myself with this case study (see Luebbers 1986-1987). According to LW, the NN are currently negotiating the repatriation of materials excavated during this project and want to know why the project remained unfinished. Before I leave her office, LW suggests I should accompany her and Steve Hemming (SH) during their next meeting with the NN to discuss this potential honours project.

5.2 Connection with the Ngarrindjeri Nation

If one wishes to learn, then one must be present, quiet and respectful.
(Bell 1998:384)

My connection with members of the NN starts to develop in late 2005 on an initial visit to *Camp Coorong Race Relations and Education Centre*³⁵ (CC), with potential honours supervisors SH and LW and fellow potential honours student, Diana Baric. After a two hour journey, our vehicle pulls right off the Princes Highway onto a dirt track and into the parking area of CC. We park the car in a spot closest to the CC's main building; a parking spot I will come to frequent often. A Ngarrindjeri flag flies proudly above us. CC itself is comprised of a cluster of red brick and cream weatherboard buildings including: a main entrance area with an office space tucked away behind a high, wooden counter; meeting rooms located at northern and southern ends of the main building; an adjoining museum with a separate, solemn keeping place at the most northern end; and a large kitchen and dining area separate from the main building by an open area of blush coloured pavers, steel cement and patches of green grass; and three self-contained, weatherboard cabins located on a slight crest, overlooking CC from the east. These buildings comprise the nucleus of my experiences at CC.

From the moment we step into the main reception area at CC we encounter a constant hum of noise; the sounds of school children playing outside and a phone that constantly rings. This area of CC is a busy hub of activity. The walls of this main building are collaged with posters for various events and familiar, prominent figures such as Debra Mailman stare back at me. In front of us is an office space tucked away behind a high, wooden counter, where Uncle Matt Rigney stands engrossed in a document. Instead of carrying out formal introductions SH makes his way behind the desk and stands next to Uncle Matt, waving miscellaneous documents around and purposely proceeding to annoy him with a childlike enthusiasm. Finally, Uncle Matt reacts with a barrage of expletives. For a moment I am unsure about this reaction. Then SH smiles and chuckles; this is part of their rapport.

Suddenly, the sound of children outside becomes louder as someone enters the main building through a sliding door. Uncle Neville Gollan walks up to our group and stares at LW, Diana

³⁵ CC is located 10km south-east of the township of Meningie. CC provides a space for Ngarrindjeri Elders and leaders to share Ngarrindjeri culture, knowledge and history, in order to improve connections with the wider non-Aboriginal community (Hemming 1993:37). Ngarrindjeri organisations such as the NLPA and NHC also operate from CC.

and I with anticipation. SH follows through with a formal introduction. Uncle Neville is warm and welcoming, but insists on giving us all a ‘squeeze’; turns out he is quite the ladies’ man. I subsequently develop a soft spot for Uncle Neville and always seek him out on my future visits to CC (see Figure 5.2). Uncle Neville returns outside to supervise the group of young school children that are staying at CC and the sound of their activity becomes louder for a few seconds as he exits the building. Uncle Matt’s son, Grant, is also introduced but his interest in us is brief as he proceeds to tell SH about some letters CC has received from a recent school group. One letter in particular recalls how much fun they had at CC, but states “I wish Uncle Neville would not wet us with the hose”. Grant lets out a loud, infectious laugh. It seems in this setting there is an air of mischief and humour that exists between these long-term acquaintances. Finally Diana and I make our way down a dark hallway and are introduced by SH to Uncle Tom Trevorrow. Uncle Tom is sitting in a small room staring at a computer screen reading one of the many emails he receives daily; he looks over his glasses at us and seems to greet us with some a quiet reservation. He is a humble man who will later become a much loved mentor.



Figure 5.2 Uncle Neville Gollan and I, Camp Coorong (photo K Wiltshire 2005)

This visit provides an opportunity to be introduced to Ngarrindjeri Elders and individuals in order to start forming the necessary connections to undertake a collaborative honours project.

Our potential honours projects are not discussed in any depth during this initial visit. Over a series of regular visits to CC as well as the *Coorong Wilderness Lodge*³⁶ (CWL), rapport begins to form with a small group of Ngarrindjeri Elders and individuals including Uncle George Trevorrow, who asks LW, fellow archaeologist Alice Gorman (AG), Diana and I to analyse a collection of stone artefacts recently repatriated back to the NN. We pour the artefacts out of their fruit box container and onto a table in front of us. LW and AG proceed to sort the collection, placing to one side those items that are not deemed to be stone artefacts. I attempt to assist, but become perplexed; I am unable to determine the differences between those items that are artefacts and those that are not. How is it, as a third year archaeology student, I am unable to recognise a stone artefact, an essential skill in my future career as an archaeologist? As the sorting continues, I turn to fellow student Diana and repeatedly ask, “*Why don’t I know how to do this?*” Whilst I have gained a significant amount of knowledge during my degree, it soon becomes obvious that I still have much to learn. Once the stone artefacts are sorted we begin to photograph the collection, but the knowledge I lack to undertake this essential archaeological activity weighs heavy on my mind and my confidence.

Following several visits to CC, I am provided the opportunity to discuss the potential honours project during a general meeting attended by several Ngarrindjeri Elders, including Uncle George, Uncle Tom, Uncle Victor Wilson and Uncle Marshall Carter. Diana and I nervously sit in the cool and dimly lit meeting room, observing the meeting as it progresses and wait for our turn to speak; our honours projects are last on the agenda. When the time comes to discuss our projects, I am nervous but emphasise my desire to undertake a project in collaboration with the NN in order to privilege Ngarrindjeri understandings and interests. I suggest the LMLAS could be used as a basis for such a project, which would address Ngarrindjeri interests and concerns regarding its unfinished nature. Responding to my suggestions, Ngarrindjeri Elders agree any project undertaken in collaboration should address the interests of the NN; however, Ngarrindjeri Elders also emphasise such a project should focus on the ways in which previous archaeological research has impacted the NN. In essence, Ngarrindjeri Elders were suggesting that archaeology and archaeologists should be the focus of this potential project.

Following this meeting the specific focus of the honours project proceeds to develop over the course of several visits to CC and ongoing discussions with Ngarrindjeri Elders, resulting in a

³⁶ The CWL is located 25km south-east of Meningie on *Warnung* overlooking the *Kurangk* estuary. Similar to CC, the CWL also provides cross-cultural educational activities.

focus on the history of Aboriginal heritage legislation in SA and contemporary outcomes of this history for the NN. In doing so, the project will use the LMLAS as a case study to illustrate these outcomes. This focus also allows for the production of a detailed historical account of the LMLAS, incorporating a specific request by Ngarrindjeri Elders. As a result, a combination of literature review and recorded discussions with Ngarrindjeri Elders is used in order to gather the knowledge required to undertake this project.

Given this use of recorded discussions, ethics approval from the Flinders University Social and Behavioural Research Ethics Committee (SBREC) is required for the honours project to adhere to research guidelines set out by the University. The terminology of the ethics application is, however, in contrast to the project's collaborative nature. Specifically, Ngarrindjeri people are referred to as 'human subjects' or 'participants'; terminology that is oppressive, marginalising, dehumanising and offensive to Indigenous people (L.T. Smith 1999:20). As it stood, the terminology of the application left little room to recognise or describe the collaborative nature of the honours project. In response, the content of the application is workshopped at length in collaboration with SH, LW and fellow archaeology student Chris Wilson (CW) in order to challenge its terminology and emphasise the project's collaborative nature. This includes replacing particular terms in order to allow for a more homogeneous terminology, including 'contributor' instead of 'participant', 'discussion' instead of 'semi-structured interview' and 'knowledge' instead of 'data'. These terms are also incorporated within the final draft of the thesis to ensure the terminology—in addition to the methodology—is framed by a collaborative approach. Overall, the laborious and lengthy process of submitting an ethics application becomes a practical exercise in attempting to apply a collaborative approach through all stages of research.

Over the course of the honours project, I visit CC and CWL regularly to continue ongoing discussions with Ngarrindjeri Elders and ensure the collaborative nature of the project is maintained. During these visits I often travel with LW, SH and CW on the 150km road trip to CC, taking in the surrounding landscape. On our approach to Meningie we pass the Pink Lake; a prominent feature within the surrounding landscape that captures both my attention and my curiosity. On arrival to CC I am often left to entertain myself whilst my colleagues pursued their own meeting agendas. I am invited to join classes where I learn to basket weave and make feather flowers with Aunties Ellen, Rita and Alice. My regular visits to the CWL also provide an opportunity for my first bush walk on *Ruwe* with Gordon 'Gordie' Rigney to learn Ngarrindjeri knowledges of plant use (see Figure 5.3), as well as my first kayak across

the *Kurangk*, and my first experience gathering cockles from the Southern Ocean using the “cockle dance” (see Bell 2008:15).



Figure 5.3 Bush walk with Gordon Rigney, Coorong Wilderness Lodge
(photo K. Wiltshire 2005)

These regular visits provide an opportunity to develop a connection with the NN unconfined by the scope of the honours project, resulting in “(the) emergence of a positive working relationship and friendship that extends beyond the mere process of research” (Wiltshire 2006c:5). These regular visits also provide an opportunity to be mentored and (re)educated by Ngarrindjeri Elders in the appropriate ways to conduct oneself when working collaboratively with the NN. This includes observing and learning to respect Ngarrindjeri cultural protocols including knowledge boundaries, as outlined in my honours thesis:

...this study recognises that there is no one coherent Ngarrindjeri view and there are differences of opinions between young and old, *ko:rni* and *mi:mini*. Additionally, the time of day, the location of the *kungun* and *yunnan*, and the position held by the researcher within the Ngarrindjeri community ultimately influenced and determined the kind of *kungun* and *yunnan* that was produced (Wiltshire 2006c:20).

The collaborative nature of the honours project also allows for practical lessons in respecting such protocols. For example, during the course of the honours project I spend periods writing my thesis at the CWL, which is often frequented by numerous tourists. On one such occasion I am rightfully criticised by Gordie for relaying knowledge to a tourist he had previously shared with me; a criticism that provided pause for reflection.

As a result of this and similar interactions, I learnt to respect the knowledges and interests of the NN including pre-existing work, family and/or community commitments that precede my own interests and that relating to the honours project. I soon realise my honours project is not a central concern for the NN. In order to respect these pre-existing responsibilities, obligations and commitments, I ensure the methods used to undertake this honours project adopts a level of flexibility, as outlined within my honours thesis:

An important aspect of this research acknowledges that Ngarrindjeri Elders and individuals have several political agendas to deal with, and various existing commitments including, community, work and family. Thus, discussion schedules were organised to be incorporated within and around this busy schedule (Wiltshire 2006c:21).

For example, rather than schedule a specific time to undertake recorded discussions with Ngarrindjeri Elders Uncle Tom and Uncle George Trevorow, I instead spent two weeks writing my thesis at CC and the CWL in order to be present until they are available. This period coincides with the NN's first reburial of repatriated Old People (see Figure 5.4; Hemming and Wilson 2010). Whilst in hindsight this was not the most ideal time to try and undertake recorded discussions, as the NN were especially busy with the associated responsibilities of this event, being present for an extended amount of time provide opportunities to contribute to Ngarrindjeri interests beyond the scope of the honours project. As my honours thesis describes:

...being in the community for several days at a time...made it possible to build up rapport with Ngarrindjeri community members and participate in Ngarrindjeri activities and events. Such activities included helping Ngarrindjeri *mi:minis* prepare ceremonial boxes for the community's first reburial of Ngarrindjeri Old People, and basket weaving sessions with Auntie Ellen Trevorow. In this respect, time spent waiting...was not 'wasted' and simply being in the community was seen as proactive and positive (Wiltshire 2006c:21-2).

Over the course of the honours project I continue to engage with Indigenous and post-colonial critiques of research and archaeological practice. L.T. Smith's (1999) *Decolonizing Methodologies: Research and Indigenous Peoples* is particularly influential in developing an understanding of privileged *Krinkari* research practices from a critical Indigenous

perspective. Other literature influential at this time includes broader Indigenous and non-Indigenous critiques of research and archaeological practice, including literature by Attwood and Arnold (1992), Byrne (1996), Griffiths (1998), McNiven and Russell (2005) and L.J. Smith (1999, 2000a, 2000b, 2001, 2004). Literature relating specifically to the NN by SH (Hemming 1995, 2006, 2007; Hemming and Trevorrow 2005; Hemming et al. 1989), Uncle Tom Trevorrow (Trevorrow and Hemming 2006), and CW (Wilson 2005) is also influential in my continued development as an archaeologist. In many ways, however, this literature does not prepare me for the practical lessons I receive from the NN over the course of the project, which further contribute to my development as an archaeologist. Subsequently, the influence of the project's collaborative nature on my development as an archaeologist forms the basis of the appropriately titled article, "Changes in mindset: the development of a collaborative research methodology" (Wiltshire 2011).



Figure 5.4 *Ceremonial boxes being smoked in signal fire by Clyde and Grant Rigney during reburial ceremony (photo courtesy of T. Massey 2006)*

Following the completion of this honours project I seek to maintain the connection I have developed with NN for several reasons. Firstly, maintaining this connection allows for the fulfilment of an ethical responsibility I have developed in response to critiques from Ngarrindjeri Elders. Over the course of the honours project Ngarrindjeri Elders often

criticised the short-term nature of other research projects, emphasising the importance of establishing long-term, collaborative relationships with researchers in order to privilege Ngarrindjeri understandings and interests (see T. Trevorrow in Wiltshire 2006c:64; G. Trevorrow in Wiltshire 2006c:91). Secondly, maintaining this connection would allow for further development of my knowledge of Ngarrindjeri culture and history. Lastly, maintaining this connection would allow for the friendships I had developed over the course of the honours project to continue to be nurtured. In short, I become passionately committed to maintaining a long-term connection with NN due to a combination of ethical and personal actants.

Undertaking a PhD project seems like the next logical step in order to maintain this connection, which becomes a driving force in order to establish such a project. I actively pursued a PhD project that is a continuation of the honours project by proposing to analyse materials excavated during the LMLAS, to allow these materials to be repatriated and the study to be finalised. In doing so, this PhD project would also address the criticisms of Ngarrindjeri Elders regarding the unfinished nature of this case study (see Wiltshire 2006c:97). Despite my best intentions and efforts, however, undertaking this PhD project is not as straight forward as my honours project seemed to be. For example, in the initial stages I again approach LW as a potential supervisor; however, this time she is resistant to providing supervision, advising me to develop my archaeological skills prior to undertaking a PhD project. Whilst this lack of supervision support leaves a sense of disappointment and my confidence takes another blow, not pursuing a PhD project with the NN seems to contradict the ethical responsibility I have developed over the course of my honours project. Maintaining my connection with NN takes precedence and, at the suggestion of a colleague Mirani Litster, I contact archaeologist Bruno David to gauge his interest as a potential supervisor for the PhD project. Bruno is enthusiastic to my proposal and encourages me to apply for the PhD program at Monash University, which I am subsequently accepted into; unfortunately, my application for a scholarship is unsuccessful but I am still determined to pursue this project in order to fulfil my ethical responsibilities. I enrol in the PhD program but continue to reside in SA due to the financial constraints of not obtaining a scholarship. Despite these setbacks, the enthusiasm of my new supervisors to support the PhD project brings a sense of excitement and a boost to my confidence.

Residing in SA allows me to continue to visit CC and CWL regularly in order to maintain and further develop my connection with the NN, forming rapport with a wider group of

Ngarrindjeri Elders and individuals as a result. Maintaining and developing this connection also provides the opportunity to develop my archaeological skills by undertaking various archaeological surveys for Ngarrindjeri organisations (Wiltshire 2009d, 2010a, 2010b, 2010c, 2010f, 2010g, 2010h; Wiltshire and Wilson 2008a), a rescue excavation (Luebbers 2015), as well as the development and delivery of heritage training in collaboration with Ngarrindjeri Elders (Wiltshire et al. 2007-2011). Furthermore, connections with FU based colleagues SH, LW and CW are maintained, providing further opportunities to participate in other archaeologically based projects undertaken with the NN, including working with students and Ngarrindjeri cultural rangers during the Long Point field school (Flinders University n.d.; St George 2009) and assisting colleague CW with archaeological investigations at *Murrundi* for his PhD (Wilson 2008, 2009a, 2009b, 2017). As a result of these existing connections, I am also approached to draft funding applications and associated reports in collaboration with Ngarrindjeri organisations and FU colleagues (see Wiltshire 2009b, 2009c, 2010d, 2010e; Wiltshire and Wilson 2008b; Wiltshire and Hemming 2009, 2010, 2011). This includes drafting several funding applications and associated reports for the Ngarrindjeri Caring for Country Heritage Program (NCCHP). Ironically, maintaining this connection with the NN provides numerous opportunities to gain experience and develop my skills as an archaeologist; experience and skills that are situated outside the scope and—in many cases—are gained concurrent to undertaking archaeological investigations associated with my PhD project.

As the PhD project starts to unfold, problems begin to emerge; Roger Luebbers is committed to pursuing the analysis of the LMLAS materials—a commitment I fail to recognise. The analysis of these materials—which were to create the basis for my PhD project—can no longer be included. Finding an alternative focus for the PhD Project seems insurmountable as I near the end of my first year of candidature. As a result, subsequently withdraw from the PhD program. Despite this setback I continue to maintain my connection with the NN by visiting CC and CWL regularly. It is during one of these regularly visits to CC that Uncle Tom pulls me aside to mention there are unutilised funds from one of the previous funding applications we had drafted. Specifically, there are funds for archaeological surveys around the Lower Lakes as part of the ‘Lakes Alexandrina and Albert Site Identification Project’, a case study associated with my now defunct PhD project. Given the obsolete nature of my PhD project, Uncle Tom and I discuss alternative areas around the Lakes to undertake surveys.

We make our way into the main, well-lit meeting room at CC and find a space amongst the documents that spread and spill across a large, meeting table to roll out a map. The map illustrates all the registered midden and shell mound sites located around the Lakes Alexandrina and Albert, which has been obtained from Aboriginal Affairs and Reconciliation Division (AARD) as part of my now unsuccessful PhD project. Uncle Tom places his fists on the table and looks over his glasses at the map. Following a few seconds of contemplation, Uncle Tom asks me whether the dots on the map represent all the sites recorded around the Lower Lakes; I nod in response. Uncle Tom contemplates the map for a few more seconds and then points to an area where there are no dots. This area is selected to undertake archaeological surveys; the area selected is Waltowa Wetland.

5.3 Archaeological Life³⁷ at Waltowa Wetland

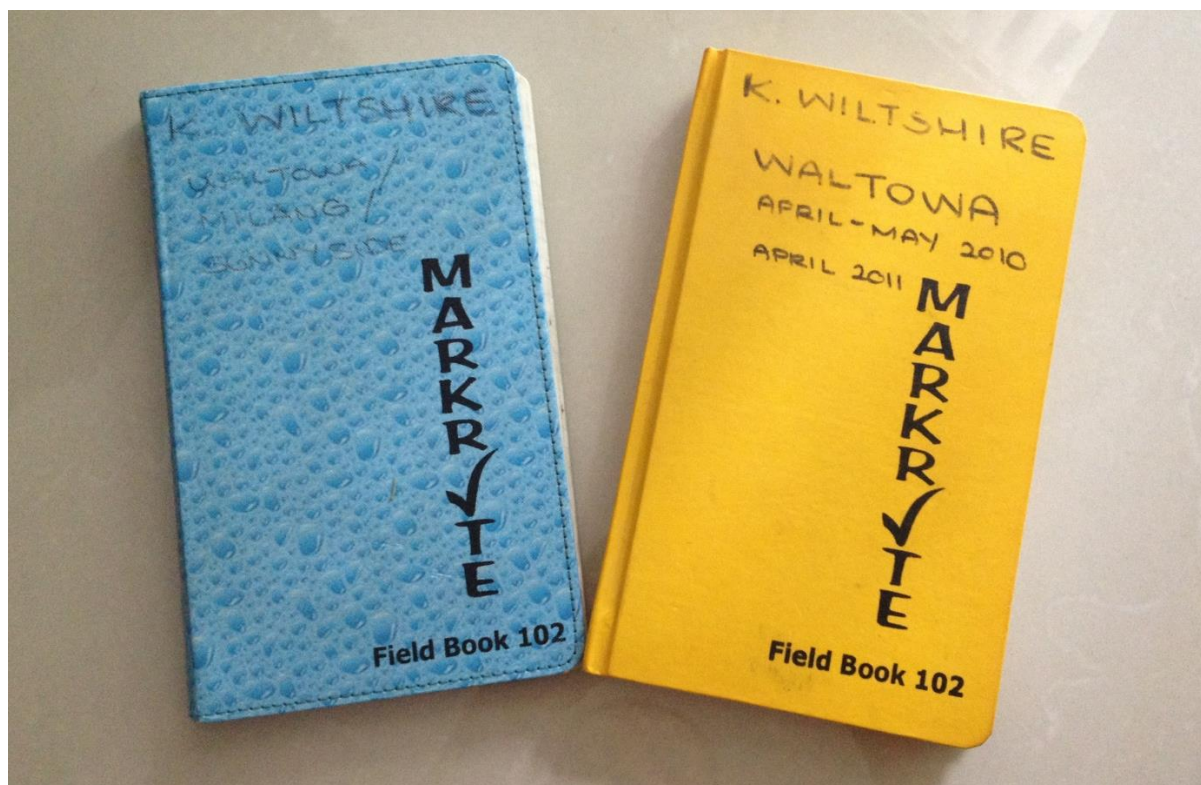
Our anthropological observer is thus confronted with a strange tribe who spend the greatest part of their day coding, marking, altering, correcting, reading, and writing.
(Latour and Woolgar 1986:49)

Assembling Archaeological Surveys

Following Uncle Tom's decision to focus archaeological surveys on Waltowa Wetland, I commence organising the archaeological surveys, which includes obtaining the equipment necessary to identify and record any Old People's places and belongings. The equipment is an essential to the archaeological surveys and my ability as an archaeologist to undertake them; without such equipment I cannot undertake the surveys and successfully fulfil my role as an archaeologist. I do not, however, possess nor have access to the necessary equipment in order to undertake these surveys, as I am no-longer a student at Flinders or Monash University and I am unable to borrow any Departmental equipment; I exist in limbo. Expressing this dilemma, SH suggests existing IHP funds can be used to purchase a small amount of basic equipment in order to undertake the surveys, which will become the property of and be stored at CC. As a result, I set out to compile a list of equipment necessary to undertake the archaeological surveys and obtain quotes in order to purchase this equipment. The list of equipment compiled is based on my previous archaeological survey experiences and includes: a notebook, Global Positioning System (GPS), compass, camera, range pole, compass and walkie-talkies. Amongst these items is a Markright© brand notebook; a piece of

³⁷ This title and the auto-ethnography more broadly draws upon Latour and Woolgar's (1986) *Laboratory Life: The Construction of Scientific Facts*.

equipment I have observed archaeological colleagues use and one I deem essential to fulfil my role as an archaeologist (see Figure 5.5).



*Figure 5.5 An essential archaeological artefact: a Markrite© notebook
(photo K Wiltshire 2016)*

In addition to organising the equipment necessary to undertake the archaeological surveys at Waltowa Wetland, I hire a 4WD, book accommodation at CC, obtain a list of station owners, organise archaeology students to assist with the archaeological surveys and purchase food for its duration. The decision to hire a 4WD vehicle is based on my previous archaeological survey experience within region and prior knowledge of *Yarluwar-Ruwe*. Consequently, hiring a 4WD involves: obtaining a quote from Budget; driving to CC to present this quote to Uncle Tom and Aunty Ellen in order to obtain a cheque; once obtained, depositing this cheque into my bank account and waiting for the funds to clear; once cleared, returning to Budget to book the 4WD. Conversely, booking the accommodation at CC is a much simpler process, which involves speaking to Aunty Ellen in person to determine whether any of the cabins are available during the proposed survey period. As part of this process we head into the office space tucked away behind a high, wooden counter. Aunty Ellen consults documents in a ring bound folder and a large yearly calendar that hangs on the wall above to determine whether any of the cabins will be available. Aunty Ellen writes my name on a

document enclosed within the ring bound folder and on the calendar; and just like that, the accommodation is booked.

In order to obtain a list of station owners I speak to Luke Trevorrow, who informs me of an environmental report on Waltowa Wetland that lists them (see Bjornsson 2005). It takes a couple of visits to CC before I obtain this report. Luke also mentions that his partner's uncle is the owner of a property in the southern region of Waltowa Wetland. I proceed to contact the station owners via the phone to arrange a time to meet with them and discuss the surveys. Not every phone call is successful; I leave messages on answering machines and letter drop some station owners as a last resort. During this process I am conscious of the mixture of fear and racism that many station owners harbour towards the Ngarrindjeri Nation and their interests. I have often witnessed the cautious and sometimes disdainful nature that emerges in station owners in response to the prospect of Old People's places and belongings being located on their property. Many station owners believe they are at risk of losing their property under the *Native Title Act 1993* if such places and/or belongings are located, which is no doubt a result of the media induced fear mongering that emerged following the High Court of Australia's *Mabo vs. Queensland (No 2)* verdict; an event that occurred in the same period as the HIRC. As a result of this observed fear and racism I am careful with the language I use in my communication and interaction with station owners, emphasising the term "archaeological" rather than "Aboriginal" as a means to dispel any upfront fears or suspicions that might result in being denied further communications with them or access to their property. Obviously, this conscious choice in language treads a fine line that uses my privileged position as a *Krinkari* in order to establish dialogue with station owners to subsequently gain access to their property. Once a connection has been established, however, I am in a better position to dispel any myths, fears and racism station owners may harbour, providing an opportunity to produce an act of translation that will (hopefully) change their perspective. Whilst I would not go as far to say this is an act of reconciliation, my privileged position does allow me to act as a facilitator in order to pursue Ngarrindjeri interests.

Despite my approach, this process of contacting station owners is still anxiety-inducing; I am conscious of their potential hostility and being denied access to their property, resulting in my inability to undertake the surveys and fulfil my role as an archaeologist. Fortunately, two station owners agree to meet with me and discuss the prospect of archaeological surveys on their respective properties. Firstly, I arrange to meet N.B. and G.M. Biddle on their property

to discuss undertaking an archaeological survey. N.B. Biddle is the relation of Luke's partner and this common connection seems helpful in arranging this meeting. I meet the Biddles in the driveway of their station and discuss what I intend to do and hope to achieve in undertaking these surveys, which will concentrate on the southern boundary of Waltowa Wetland. N.B. Biddle seems unconvinced the survey will locate any Old People's places or belongings. Despite this, G.M. Biddle asks if there is a risk of losing their station if I do locate any Old People's places or belongings. I explain to the Biddles that Native Title can only be applied to Crown Land and there is no risk of losing their property. I also inform them that if—for example—a burial is located during the surveys, the NN would be keen to work with any property owners to ensure such an area is protected. In my communications with the Biddles I try to be as transparent as possible and willingly offer to forward a copy of the final survey report to them. The Biddles agree to the survey. Before I leave, N.B. Biddle drives me out to the paddock to show me the area where I wish to undertake the survey. The area is a mixture of muddy terrain and pastoral grasses. On seeing this area I begin to question the likelihood that any Old People's places or belongings will be located and confidence in my ability as an archaeologist begins to slip away.

Organising archaeological students to assist with the surveys is a relatively simple process, which involves sending an email to a departmental mailing list seeking volunteers; several students respond and I set about contacting those students I believe are most suitable to assist with the surveys based on their previous experience. Yet as this is the first time co-ordinating my own archaeological surveys, I am concerned my lack of experience may somehow result in unsuccessfully fulfilling my role as an archaeologist. In response to this lack in confidence, I review numerous books, chapters and journal articles in order to better prepare myself for these surveys. Specifically, I review all the site cards and archaeological reports for Lake Albert, which I obtained from AARD in the process of undertaking the previous, unsuccessful PhD project. In doing so, I believe these resources will allow for a better understanding of Old People's places and belongings that will be present at Waltowa Wetland. I also review more general written resources relating to archaeological survey and make notes from these, which I record in the front of my Markrite© notebook so these notes are at hand during the surveys. In short, I hope becoming familiar with these resources will increase my knowledge and in turn my confidence to fulfil my role as an archaeologist.

In preparation for the surveys, I collect the 4WD and pack it with all the necessary equipment, food and other supplies required for the duration of the surveys. On the way to

CC I collect one volunteer from their house. Tensions start to emerge when this volunteer insists on bringing a large quantity of food for us to consume during the surveys. I have already advised them all the food for the surveys has been organised; the food is not needed and we have little room for it in the 4WD. I become frustrated but realise this volunteer is trying to be helpful. As a result, we make room in the 4WD for some of the extra food, but I also insist on leaving some behind. We collect a second volunteer from the airport and continue on our way to CC. We arrive at CC after dark—much later than anticipated—unpack the vehicle and settle into the cabin for the night.

The next morning I aim to be at the Biddle's property by 8:30am in order to allow plenty of time to undertake the surveys. We have breakfast and pack the 4WD with the necessary equipment, food and other supplies we will require for that day. Despite my meticulous planning and preparation, the surveys do not unfold in a predictable fashion. One of my volunteers is slow, which disrupts my planning and results in further feelings of frustration; yet they seem oblivious. We arrive at the Biddle property and drive to south-western corner of the paddock to commence the survey; it is now 11am. Running late leaves me feeling anxious. I step out the vehicle, grab my Markrite© notebook from my backpack and proceed to record the necessary observations in order to commence the survey: title, date, time, participants, GPS co-ordinates and draw a mud map (see Figure 5.6). It is a dreary day and I put on my raincoat, followed by a hi-vis vest and my backpack. We enter the paddock and I direct the volunteers to walk in transects in order to adopt a systematic survey method. We are carrying out the survey using the same systematic method I have used in my previous experience and have read about in the numerous resources I reviewed; but despite all my planning and preparation I am soon plagued by a lack of confidence in my ability as an archaeologist when I fail to located any Old People's places or belongings. I feel as though I have no idea what I am doing.

With the weight of my perceived incompetency weighing heavily on my mind, feelings of despondency start to wash over me and I silently say to myself "I wish Roger [Luebbers] was here"; despite not coming to an agreement over the use of materials in the previous PhD project, Roger is the archaeologist most knowledgeable about the region; he would know what to do and where to look in order to locate Old People's places. Shortly following this statement, my phone rings; it's Roger! I answered my phone and Roger enquires whether I am currently surveying in a field next to the Princes Highway. As an odd coincidence, Roger is driving past on a trip from Melbourne to Adelaide and has spotted me—no doubt because

of the high-vis vest I insist on wearing as a result of having to wear one religiously in my previous role as a consultant archaeologist. Roger's phone call is a serendipitous coincidence that boosts my confidence to keep persevering with the survey. In the end, we spend one day carrying out an archaeological survey on the Biddle property, but no Old People's places or belongings are to be found.

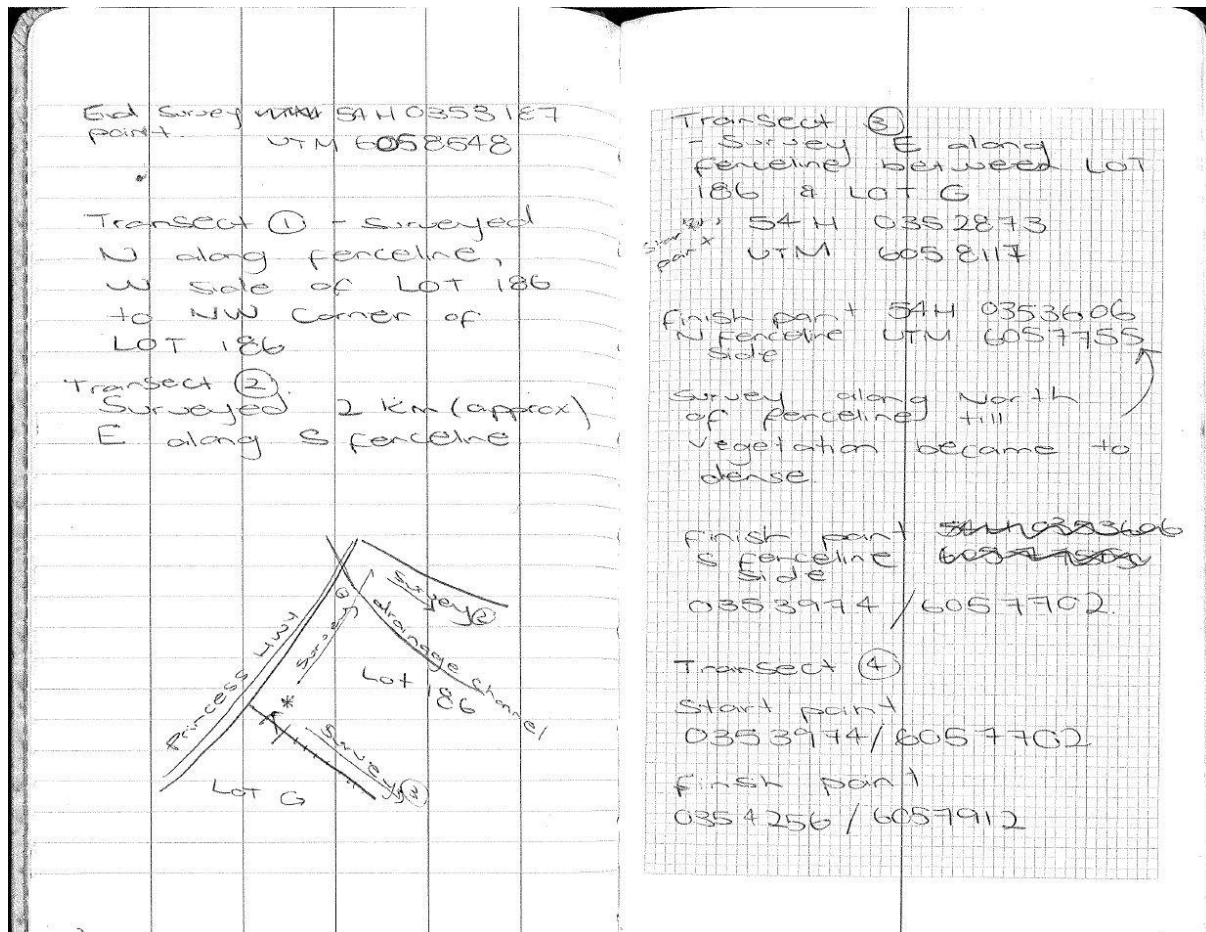


Figure 5.6 Archaeological survey 'data' (Wiltshire 2009f)

The following day we proceed to Tatiara Station (TS). I have spoken to the property owner, Barry, over the phone prior to this visit and I offer to meet him beforehand, but he is busy and insists I come out on the day of the survey instead. I arrange to meet him out the front of the main station property. Once through the front gate of TS, we drive up a long, bumpy limestone track with the hopes it will lead us to where I have arranged to meet Barry. Further up the track I can see a dense gathering of gum trees and what appears to be a large house nestled within. As I continue to drive along the track and through the trees, a grand station house emerges (see Figure 5.7); Barry and his brother are standing out the front. I park the vehicle in a dirt col-de-sac and step out of the vehicle to introduce myself. There is some

general chit chat between Barry, his brother and I, before Barry asks: “*You just want to look around for the day, then?*” I explain to Barry I have set aside a week to survey his property and record some of the Old People’s places and belongings I anticipate we will encounter. He seems surprised but is more than happy for me to spend that amount of time surveying his station. *Suddenly* a large chocolate Labrador appears out of nowhere and bounds around, his whole body wiggling violently with excitement. Barry seems embarrassed by the dog’s behaviour but I am delighted. Barry provides an introduction: “*This is Monty, short for Sir Montague*”. I squeal with delight at the fabulous name. Monty eventually calms a little and plonks his heavy backside on my feet while I scratch his neck. I subsequently develop a soft spot for Monty and always say hello to him whenever I visit TS (see Figure 5.8).



Figure 5.7 *The station house at Tatiara Station (photo K Wiltshire 2010)*

Following our initial discussion with Barry we drive to the area where I wish to commence the surveys. Barry’s easing going nature and the prospect of finding a suitable location to undertake a new PhD project are both at the forefront of my mind. Since the failure of the previous PhD project, I had consciously been on the lookout for a suitable location to undertake a new PhD project. Establishing a positive, successful connection with a station owner of a suitable location would contribute to the successful assembling of a new PhD project, where access to this location would not be inhibited by the fear and racism

internalised by many station owners. As we continue to drive back down the limestone track, the Pink Lake can be seen out the window to my left. Suddenly I realise the sand dunes that border the Pink Lake are located on TS and I now have the opportunity to look around the landscape that caught my attention during those many vehicle trips through Meningie. As we reach the first survey area, a sense of excitement starts to wash over me. This sense of excitement is, however, soon replaced by the approaching drizzle that attracts mosquitos in their thousands. Mosquito repellent is a useless barrier against these swarms and I resort to adopting extreme sartorial choices to avoid their rathe (see Figure 5.9).

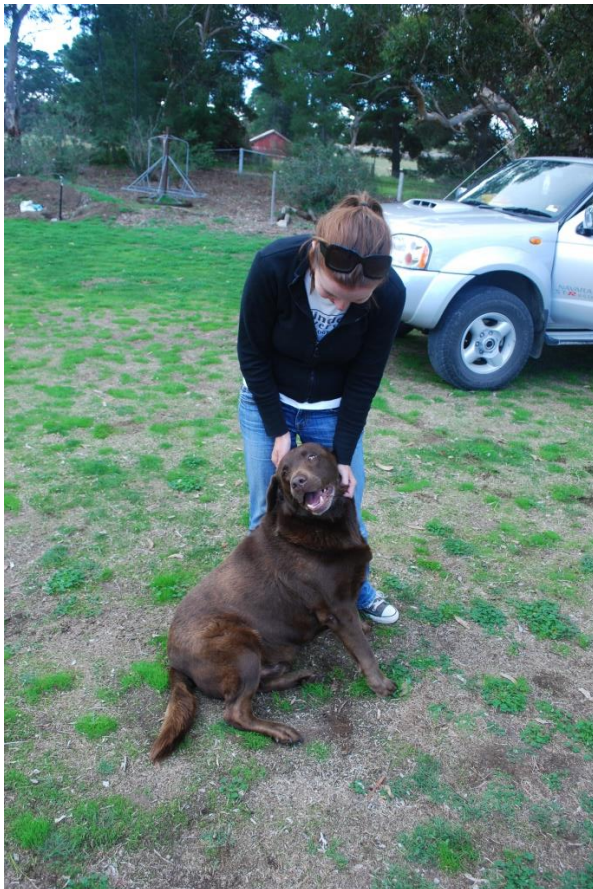


Figure 5.8 (above left) Sir Montague the chocolate Labrador (photo K. Wiltshire 2010)



Figure 5.9 (above right) Extreme sartorial choices (photo K. Wiltshire 2009)

Over these first few days more tensions unfold with one of the volunteers: we continue to run behind schedule most mornings due to their unorganised nature, which disrupts my meticulous planning and leaves me feeling further frustrated. These tensions, however, do not result in failing to undertake these archaeological surveys. On the contrary, the volunteers and I record on average three Old People's places a day. Despite this, a change of volunteers mid-way through the surveys allows for the tensions of the first week start to shift and

disappear. The new volunteers are on time, follow direction and overall do not disrupt my meticulous planning. To my relief the remainder of the archaeological surveys runs smoothly and without incident.

Interlude – Ngarrindjeri-Krinkari Connection

The connection between Ngarrindjeri people and Krinkaris is influenced by a long history of hostility that bubbles away under the surface; a hostility that remains mostly silent. At times, however, this hostility “percolates” (cf. Olivier 2011) to the surface, with noticeable and dramatic effect. At its worst, this hostility has resulted in violence towards Ngarrindjeri people; a violence that continues to remain invisible within the settler Australian landscape. But perhaps the presence of potential gun ports (see Figure 5.34) at Tatiara Station help give a physicality to this long history of hostility; a history that is remembered by Ngarrindjeri Elders such as Margaret Mack, who recalled Ngarrindjeri people being shot at this place (Berndt et al. 1993:293). A place where a history of hostility endures and exists alongside a so-called pastoral history; a place where Ngarrindjeri men worked as shearers (see Figure 5.10), handling and shearing the very sheep that were once central to this hostility between Ngarrindjeri people and Krinkaris.

During the process of undertaking archaeological surveys, I see this long history of hostility percolate in different forms. I see its presence in the anxieties I experience in undertaking these archaeological surveys, as well as the reactions of Ngarrindjeri people.

Barry is not like other station owners and his easy going nature puts me at ease, but only momentarily. My anxieties remain and I continue to be cautious of my interactions with Barry, concerned he will turn around at any moment and not allow me to complete the archaeological surveys. But there is never any hostility and Barry is always warm, welcoming and most importantly, genuinely interested in the archaeological surveys; he visits us regularly during the archaeological surveys, riding his quad fearlessly over, in and out of the dunes to meet us. During one of his visits Barry asks if we are finding anything of interest, in which I replied: “Yes, we are finding a lot of really interesting artefacts”. “I always thought there was stuff out here”, Barry replies; “I just assumed [Ngarrindjeri] people didn’t know it was here or they weren’t interested”. Later in the day I relay this conversation to Uncle Tom, who gives me a knowing grin and replies: “Well, if we had asked to take a look around, we would have probably been met with a gun...” And in that moment this long history of hostility comes to the surface, influencing Uncle Tom’s reaction to Barry’s seemingly innocent comment; a reaction that is imbued with caution. Previous hostilities experienced by Uncle Tom form part of this long history of hostility and influence his ongoing interactions with most station owners. But they also have a ripple effect, informing the anxieties I in turn experience during the archaeological surveys.



Half-Castes Make Good Shearers

Mr. Norman R. Taylor, who has just returned from Tatiara Station, where he was woolclassing, has sent me the following information: Tatiara Station has had for the past 25 years at shearing time a full board of half-caste shearers and shed hands.

This year six shearers (machine), picker-up, woolpresser, shearing expert, and shearers' cook were all half-castes from Point McLeay Mission Station.

There were 6,000 sheep shorn in two weeks and three days, half of which was merinos and the balance cross-breeds. The clip totalled 150 bales.

The work done by this team of half-castes was very creditable indeed, wrote Mr. Taylor, and could scarcely be excelled by a team composed of an equal number of white workers.

SPLENDID JOB

This reminds me that some months ago, when I was at Balcanoona Station, about 80 miles north-east of Copley, I saw a team of pure-blood aborigines crutching the station sheep and making a splendid job of it.

This, perhaps, would not have been so noticeable if the sheep had not been extremely daggy. Much of the adhesion was so hard that it was impossible to take off with the machines. When the crutchers struck these hard patches as they often did, they laid down their hand pieces, picked up a pair of blade shears, and proceeded as carefully as possible to separate the hard clumps from the skin of the sheep without cutting the skin.

The whole procedure was an exhibition of patience, care, and skill.

The manager of Balcanoona (Mr. Harold Hele) told me that for years practically all the station work had been done by aborigines. I saw during my stay there a lot of the work done by them, such as fencing, dam sinking, and other station work, and the work in every instance was quite creditably done.

Figure 5.10 Newspaper article featuring Ngarrindjeri korni shearing at Tatiara Station (Half-castes make good shearers 1938:28)

Disassembling the Survey

The surveys on TS commence at 8:45am in a grass-covered paddock located near the station's front gate; I plan to survey the main paddocks of TS west to east. These paddocks—which are higher than most of the surrounding topography—overlook Waltowa Wetland and I park the 4WD at their edge next to a limestone track (see Figure 5.11). Once again I step out of the vehicle, grab my Markrite© notebook from my backpack and proceed to record the necessary observations in order to commence the survey: title, date, time, participants, GPS co-ordinates and ground visibility. Despite the extent of these paddocks, I insist we walk in transects in an attempt to survey them in their entirety; I am concerned I may miss or fail to record any Old People's places or belongings present.



Figure 5.11 Waltowa Wetland facing south from survey area (photo K. Wiltshire 2009)

Following the critique of archaeological terminology such as “sites” and “artefacts” in my honours thesis—arguing such terms not only objectify and dehumanise Ngarrindjeri people and their heritage (see Wiltshire 2006c:13), but also fail to encompass the complexity of Ngarrindjeri lifeways—I actively avoid using these terms in my practice as an archaeologist. Instead, terms such as “Ngarrindjeri heritage” and/or “cultural materials” are regularly used; however, using such terms may be just as problematic. For the most part, my use of these

terms has simply replaced archaeological terms such as “sites” and “artefacts”. In other words, I am effectively giving these terms a “new guise” (cf. Giddings 2006:200).

My understanding of what constitutes these Old People’s places and belongings is based on the various resources I have read as well as my previous experience as an archaeologist, which has mostly consisted of recording midden ‘sites’ that are common within Ngarrindjeri *Yarluwar-Ruwe* (see Wilson 2008, 2009a, 2009b; Wiltshire 2009d; Wiltshire and Wilson 2008a). As a result I commence archaeological surveys at Waltowa Wetland with the understanding that middens are the Old People’s places most common within the region. Yet after spending most of the day surveying these paddocks, there appears to be a dearth of these familiar features. In fact, there is a lack of Old People’s places, period. I am concerned about the lack of Old People’s places encountered and continue to doubt my abilities as an archaeologist, as I ponder: *Is it possible a more qualified archaeologist would have found more ‘archaeology’ than I?* These concerns, however, become concealed once I translate my observations and record them within my notebook:

Survey of Lot 190 revealed no cultural evidence. This is based on: 1. Poor ground visibility; 2. Disturbance of land due to farming/pastoralism. Based on this observation, my survey strategy is now to focus on areas where the dunes have been exposed. Morning’s survey was good to get feel for topography and archaeology of area (Wiltshire 2009f).

The decision to survey paddocks with greater ground visibility further north on the property is represented as logical, but my notebook conceals the insecurities I feel due to the lack of Old People’s places encountered thus far. As a result, the insecurity that surrounds my role as an archaeologist leads me to survey where I believe Old People’s places and belongings are most likely to be encountered.

The following day we drive through the main, grass-covered paddocks of TS and park the 4WD at the north western corner of Lot 190; a gate in the fence beckons us towards an undulating dune area dotted with native vegetation (see Figure 5.12). There is a distinct lack of pastoral grasses and already this area seems more promising due to the increased ground visibility, increasing the potential to locate any Old People’s places and/or belongings that may be present. It is not long before we encounter an area containing Old People’s belongings.



Figure 5.12 *Undulating dunes north of Waltowa Wetland (photo K. Wiltshire 2009a)*

A small, white object stands out in surrounding dune; I am drawn to this anomaly and pick it up to examine it closer, turning it around in the palm of my hand and feeling its smoothness. It is quite small and draws little attention to itself, likely ignored by many (if any) passers-by; but to an archaeologist it commands attention. My recent experience working as a consultant archaeologist in NSW tells me it *looks* like a stone artefact, but I am unsure as the raw material is not immediately apparent to me. After a few seconds of contemplation I determine this object is flake piece and the raw material is quartz: a quartz flake piece! I record my observations into my notebook, writing “1 x flake pce, quartz” (Wiltshire 2009f). The connection between the artefact, notebook and my observations come together to record the this stone artefact. I then record the stone artefact’s GPS co-ordinates, creating a connection between the artefact and its spatial location within the Waltowa Wetland landscape, building the archaeological ‘data’ layer by layer.

This detailed transcription is accompanied by a photograph of the Old People’s belonging, which entails removing the stone artefact from its context and placing it onto the back of a clip board above a photographic scale. The connection and positioning between the artefact and the photographic scale is an important cultural ritual to ensure I produce a photograph of archaeological calibre (see Figure 5.13). In this process, the relationships between the

artefact, scale, camera and I transforms the Old People's belonging into a pictorial representation of a stone artefact, adding another layer of archaeological data. Once all the observations I can produce from the artefact are recorded in my notebook, I place it back onto the dune's surface and continue to look for any other Old People's belongings within closer proximity, which may constitute this area as a 'site'.

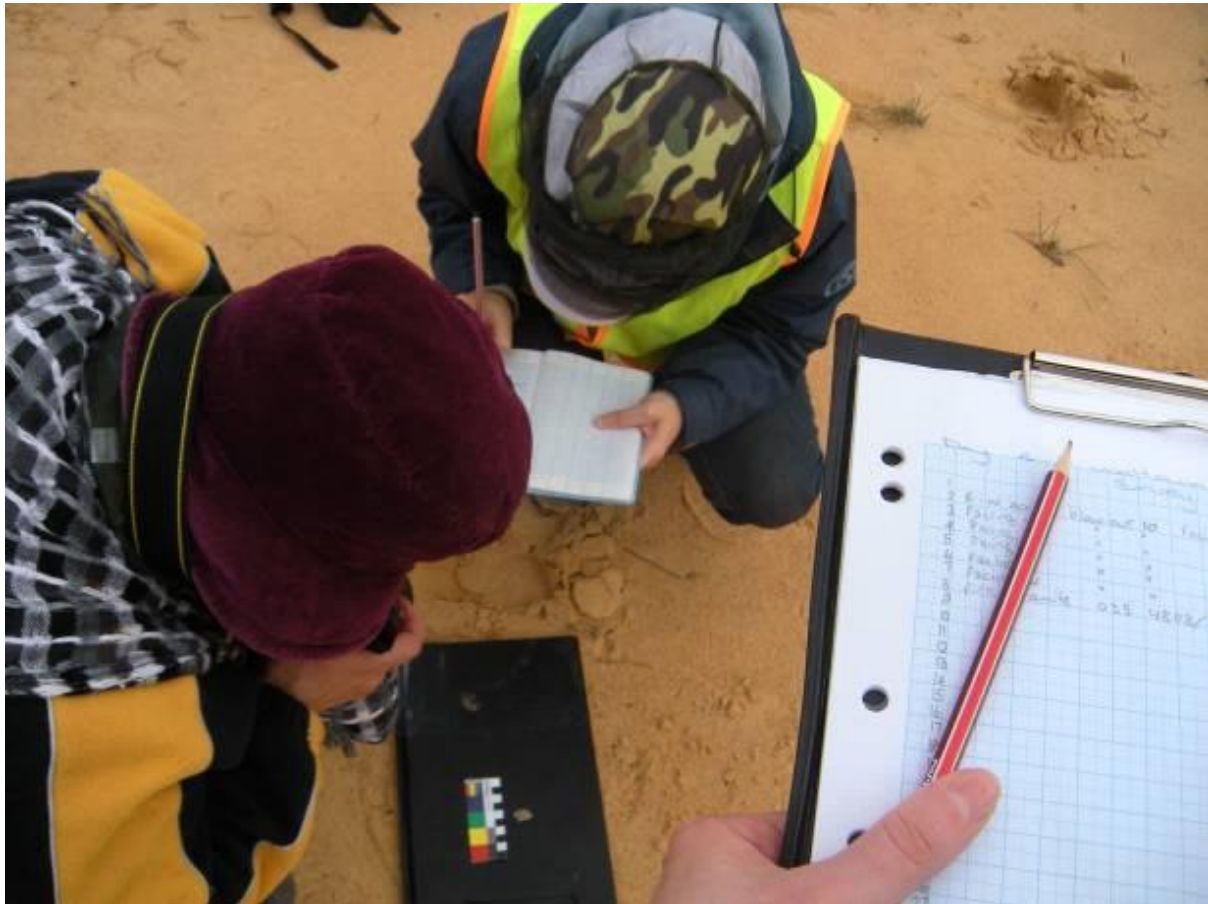


Figure 5.13 *The cultural ritual of artefact photography*
(photo courtesy of M. Meriwhether 2009)

Soon enough I locate more stone artefacts. These artefacts have been manufactured from grey chert, a raw material I recognise from my previous experience as an archaeologist. As a result of this familiarity, I am more confident in my identification of these Old People's belongings as artefactual. In association with these stone artefacts, I also encounter a feature that is unfamiliar at first, but after a few seconds of contemplation I identify it as a "cooking rock scatter". The term "cooking rocks" is used to describe the presence of charred or heat fractured rocks; a term preferred in favour of "hearth" or "fireplace". My use of this term likely derives from and is influenced archaeological reports produced by Luebbers (1986-1987) who uses the term prolifically.

Given these Old People's belongings are located within close proximity, I decide to record these belongings, their spatial relationship and the environmental context in which they occur on a Site Recording Form (see Appendix 5), as well as an AARD Site A Card and B Archaeological Card (see Appendix 5). And so continues a process of compulsive writing that meticulously records the Old People's belongings encountered to produce incredibly detailed, written observations. Adding to the layers of existing observations, the type, raw material and GPS co-ordinate of each stone artefact is also recorded in my notebook; in total, 13 stone artefacts are recorded within this one area. Lastly, photographs are taken of every stone artefact as well as the cooking rock scatter using a range pole, which I carefully position between myself and the scatter in order to produce another photograph of archaeological calibre (see Figure 5.14).

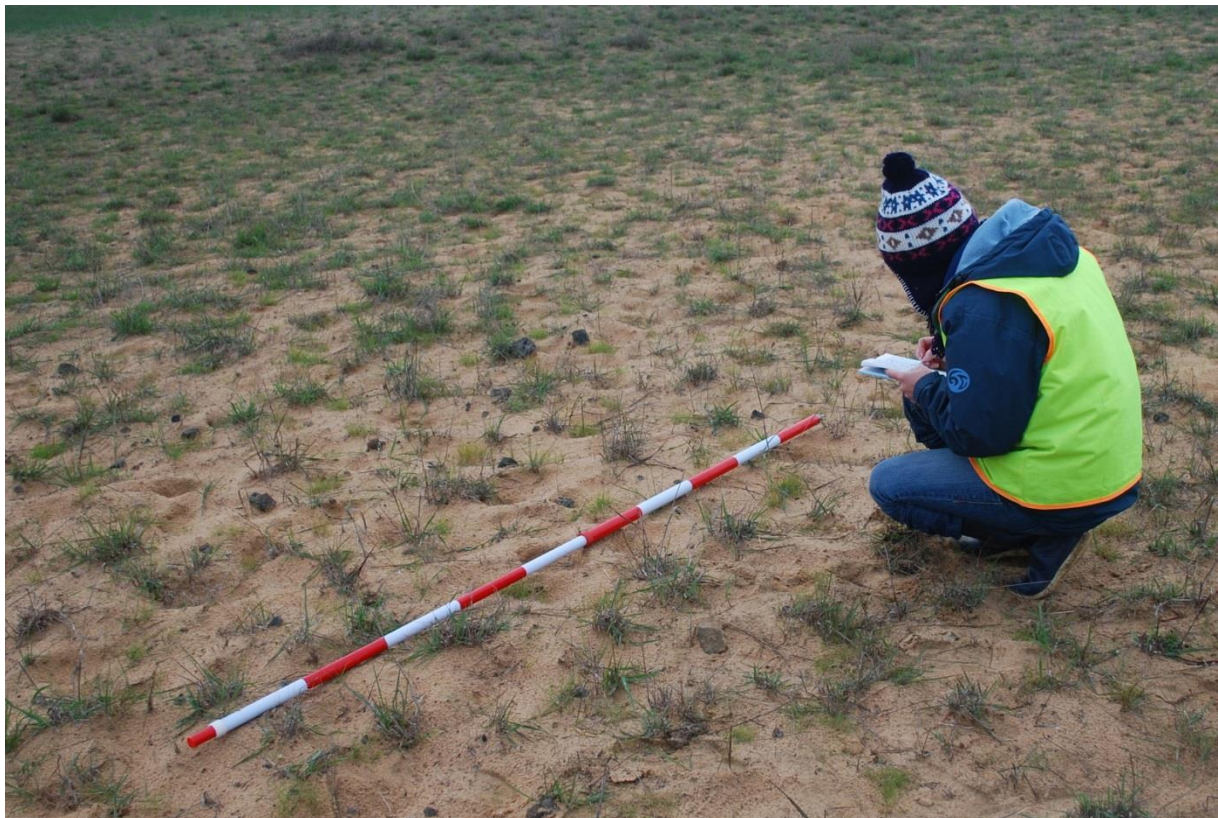


Figure 5.14 *The cultural ritual of recording a cooking rock scatter*
(photo K. Wiltshire 2009)

Overall this 'site' recording ritual brings together Old People's belongings, forms, written observations, photographs and an archaeologist to record an archaeological 'site'; however, I consciously use the steep internal sides of the dune blowout as an arbitrary yet perceived

‘site’ boundary to avoid using the term ‘site’ in my written description. Thus, the ‘site’ is referred to as “Blowout 1” (see Appendix 5).

As the survey progresses over the next few days, the landscape of undulating dunes opens up before us. We start to locate, identify and record Old People’s places and belongings more regularly. The more Old People’s places and belongings we locate, identify and record, the more my confidence grows as an archaeologist. As my confidence increases, the quicker the identification process becomes, eventually resulting in a split second and less considered decision regarding an artefact or feature’s archaeological nature. At the same time, my field notes become less detailed; I am no-longer concerned about missing any Old People’s places or belongings that may be present.

Despite this, the obvious lack of middens and the presence of so many stone artefacts confuse me; a lack of stone artefacts within the region has been a prominent archaeological ‘fact’ since Tindale and Hale (1930) excavated *Ngaut Ngaut*. Consequently I examine each stone artefact I locate with intense excitement, believing I have located a rare find. Initially every, single stone artefact I encounter is recorded, noting its type, raw material and individual GPS co-ordinates. At one blowout, I record 54 stone artefacts in this manner, driven by a “manic passion” (cf. Latour and Woolgar 1986:51) for recording my observations; naturally, I develop a few favourite stone artefacts along the way (see Figure 5.15).

As the survey progresses and more stone artefacts are recorded, their presence becomes less rare and I cease recording every stone artefact we encounter; instead attempting to quantify the number of stone artefacts present within each dune blowout. Stone artefacts of a particular form and/or with retouch now capture or “captivate” (cf. Harrison 2006) my attention. Yet their mere presence appears to not only contradict my previous experience as an archaeologist within Ngarrindjeri *Yarluwar-Ruwe*, but also contradict previously accepted understandings regarding the rarity of stone artefacts within the region. The more stone artefacts I record, however, the less I question my ability as an archaeologist and instead start to question these previous knowledges, which I have up until this point accepted as self-evident.



Figures 5.15 One of my favourite stone artefacts and a very questionable beanie (photos K. Wiltshire 2009a)

Interlude – Survey Narrative

These ‘things’ confused me. Yet they excite me too ...

I have just returned from 10 day archaeological survey, surrounded by cold whipping winds, Angus cattle that I’m a little bit afraid of and undulating dunes that seem to have a certain crispness to them as a result of recent autumn rains. I am still in disbelief how seemingly at ease the land-owner was with my presence in this landscape; his landscape. But his persistence to ride his quad bike right up to our survey party, over areas I had identified as archaeologically significant, had me sprinting to meet him every time I heard the distinct hum of his quad in order to spare these precious artefacts. Running in wet sand with heavy boots is not much fun.

I have done this survey systematically! Though I still doubt my abilities. I have already read so much, but read more to fill this sense of insecurity. What I lack in experience I can surely make up for in knowledge obtained from these texts?

I record every single stone artefact I encounter. Systematically. Meticulously. I photograph each stone artefact, carefully positioning the photographic scale to ensure I am happy with the image of this ‘thing’ – to ensure it looks like a photograph of a stone artefact. I record its physical attributes in my notebook and its location on a site recording form. I am obsessive with the amount of detail I record about this one small thing that has gone un-noticed and has been silent within this landscape for 150 years. This obsessive process might seem absurd for some, but my equally obsessive efforts to read, learn and know everything I can in response to my anxiety about my abilities tells me stone artefacts are rare within this region. Yet the more I survey, the more stone artefacts I find. “Where are the middens?” I keep saying to myself. I’m scared I’m doing something wrong. As I start to become familiar with this landscape, my anxiety lessens. I start to see a pattern in these ‘things’ (or do I?). And the excitement sets in. “Another stone artefact!” “This is by far my favourite artefact.” My confidence grows. I question my ability less and I start to question what I have read. Not only do I start to feel competent as an archaeologist, I think I may be onto something...³⁸

³⁸ Narrative presented at the Critical Heritage Studies conference (Wiltshire 2014b) and Australian Archaeological Association conference (Wiltshire 2015).

Assembling Observations

Following the surveys, I return to my home in Adelaide with a collection of written observations and photographs. As the process of transcribing these observations into a linear report unfolds, I review texts by Tindale (1940, 1974) and the Berndts (Berndt et al. 1993), in order to establish a set of observed, ethnographic ‘facts’ or knowledges about Ngarrindjeri lifeways that will contextualise the survey results. The resulting section of the report presents my subjective interpretations of these text-based knowledges that focuses on *Lakinyeri* boundaries, camp lifestyle, economic strategies including tools and equipment as well as available resources (see Wiltshire 2009a:16-19; Appendix 1).

Following this, I draft a section of the report that focuses upon previous archaeological investigations within *Yarluwar-Ruwe*. Given the large amount of stone artefacts recorded during the archaeological surveys, I use the knowledge contained within these texts to construct an account of Ngarrindjeri stone artefact use (see Wiltshire 2009a:20-24). This account uses knowledges that are the product of excavations along the Murray River (Hale and Tindale 1930; Mulvaney 1960; Mulvaney et al. 1964), investigations on Kangaroo Island (Tindale 1937, 1957; Tindale and Maegraith 1931; Cooper 1960) and excavations along the *Kurangk* (Luebbers 1981, 1982). Overall, this section concludes:

...stone artefacts were an apparently minor component of the Ngarrindjeri tool kit throughout the Lower Lakes and Coorong, which is supported by the absence of stone artefact use in any of the ethnographic or historic sources...Additionally, the absence of stone artefacts appear to be characteristic of Ngarrindjeri occupation areas in the Coorong, which could be due to the lack of suitable raw materials and a possible reliance on other materials (Luebbers 1981:41) ...Within the upper layers of Devon Downs very few stone artefacts were found and low artefacts densities for the lower Murray have also been recorded (see Mulvaney 1960; Lance 1991; Wood 1994), further supporting Luebbers’ (1981) argument that Ngarrindjeri people in this area were relying on wooden and bone tools...(Wiltshire 2009a:23-4).

In addition to this, I draft a section of the report that comprises more general resources relating to stone artefacts, to construct a section in the report entitled “Stone Artefact Attributes and Terminology” (Wiltshire 2009a:25-29; see Appendix 1. For the most part, this section draws upon Holdaway and Stern (2004) in order to present a set of ‘facts’ or knowledges about stone artefacts; namely, the attributes used to identify, describe and categorise Old People’s belongings as stone artefacts. This section describes the attributes of flakes, broken flakes, flake pieces, cores and hammer stones as well as ‘tools’, which are categorised as flakes that exhibit purposeful retouching (Holdaway and Stern 2004:38). This section also details how these ‘tools’ can be further categorised into a *typology* or type of tool, such as scrapers,

thumbnail scrapers, unifacial points and geometric microliths, based on their form and retouch characteristics.

In reviewing the knowledge contained within Holdaway and Stern's (2004) text, I intensely study their written descriptions and accompanying photographs in order to make successful connections between this text and photographs of stone artefacts taken during the archaeological surveys. I am able to identify attributes in many of these photographs and respectively assign typologies to some of the stone artefacts recorded, which is allowed in part by my obsessive recording methods that included photographing most of the stone artefacts I encountered. I also used photographs of stone artefacts taken during the archaeological surveys as a means to assembling my own pictorial representation of these attributes in the report (see Figures 5.16 and 5.17).

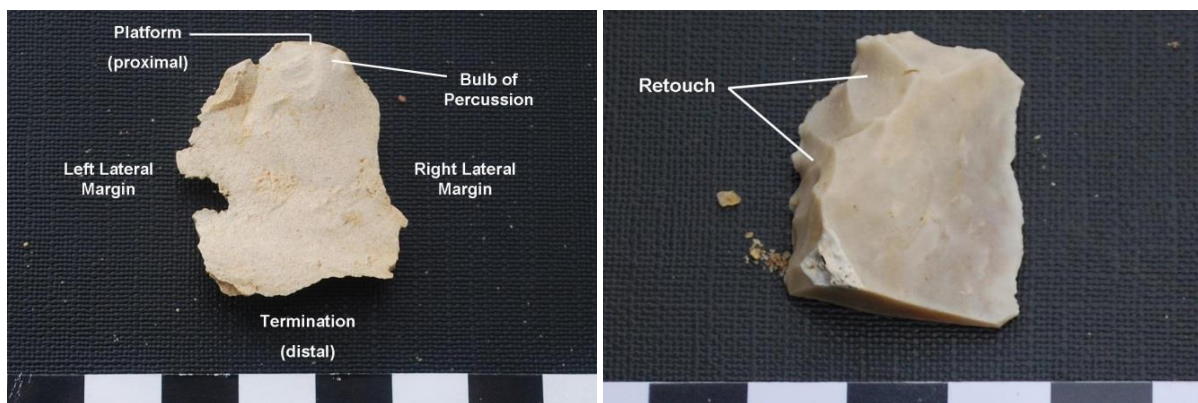


Figure 5.16 (above left) features of the ventral surface of a flake (Wiltshire 2009a:26)
Figure 5.17 (above right) grey chert proximal tool with retouch along one of its margins (Wiltshire 2009a:28)

Following these sections of the report, I draft the methods used during the archaeological surveys. Firstly, this section briefly sets out the aims of the survey, which are to locate, identify and record Old People's places and belongings with the view to obtain a general understanding of Ngarrindjeri lifeways at Waltowa Wetland. Subsequent to the aims, the surveys at Bidman Flats and TS are described as investigating:

(two) different environments, respectively: low lying areas prone to inundation around the wetland were surveyed on Bidman Flats, with areas of higher topography and undulating dune systems surveyed on Tatiara Station (Wiltshire 2009a:30).

The decision to focus the surveys on "(dune) areas located higher in the surrounding wetland topography" (Wiltshire 2009a:30) implies existing knowledge from NHC was considered in developing a survey strategy. Whilst this is true for the Waltowa Wetland landscape more

broadly, in my reporting I present other “decisive factors” (Wiltshire 2009a:30) such as plausible past land use patterns and site preservation as playing a role in focusing the surveys in this environmental context. Specifically, I argue: Ngarrindjeri people were more likely to camp on higher ground overlooking the wetland than along the margins of the wetlands, which would have been prone to inundation; low lying areas have a high degree of disturbance and a low degree of ground visibility due to pastoral activities (i.e. pastoral grasses); pastoral disturbance in dune areas is limited due to its unsuitable nature for sheep or cattle grazing; and dune areas have a high percentage of ground visibility (Wiltshire 2009a:30).

In addition to this, I outline the ‘technical’ details of the survey, which include recording GPS co-ordinates, ground visibility, land use, approximate size and extent of Old Peoples places and belongings (Wiltshire 2009a:30-31; see Appendix 1). In instances where stone artefacts were located, I describe the ‘data’ recorded as including raw material, typology and retouch (if any). Overall, I describe this process as an “[archaeological] assessment...with a view to recording the location, extent, character and state of preservation of materials within each [dune] blowout” (Wiltshire 2009a:30). Lastly, the report points out “interpretations of stone artefacts recorded during survey and included in this report are *preliminary* observations [emphasis added]” (Wiltshire 2009a:32), alluding to a lack of confidence in my ability to accurately identify stone artefacts and their attributes.

In presenting the results of the archaeological surveys, I review the observations in my field notebook and commence translating and transcribing these observations into facts, figures and tables. These facts, figures and tables are further compartmentalised into a series of numerical dune ‘blowouts’; a conscious choice on my behalf to avoid using the term ‘site’. Justifying this approach, the report states:

Whilst each blowout containing cultural material has been allocated an arbitrary boundary (the boundary of the blowout respectively), the location of the blowouts is only partially representative of past Ngarrindjeri land use patterns in the area. More accurately, the entire area surrounding the wetland should be considered one complex *cultural landscape*, in which selected areas have preserved evidence of past Ngarrindjeri occupation [emphasis added] (Wiltshire 2009a:33).

Following this statement, I describe where each ‘blowout’ is located within the Waltowa Wetland landscape, together with the total and most common artefacts it contains. For example, blowout one contained:

...one cooking rock scatter in association with 13 stone artefacts...Flake pieces where the most common artefact type, with milky and clear quartz the most common raw materials respectively (Wiltshire 2009a:36).

Each dune blowout description is followed by a table containing the Old People's belongings recorded and their individual GPS co-ordinates (see Table 5.1). Following each table, the report contains photographs illustrating the Old People's belongings within each blowout, usually comprising at least one landscape or 'blowout' photograph and several photographs of stone artefacts. In doing so, there is a conscious choice to present captivating or aesthetically pleasing stone artefacts, particularly those with retouch which are edited to include an arrow indicating the location of said retouch (see Figure 5.18).

Description	Easting	Northing
Milky quartz flake piece	0352989	6063738
	0353023	6963741
	0353033	6063732
	0353015	6063724
Clear quartz flake piece	0353036	6063732
	0353028	6063730
	0353025	6063730
Rose quartz flake piece	0353026	6063739
Clear quartz flake	0353041	6063740
	0353037	6063720
Rose quartz flake	035026	6063739
Chert proximal broken flake	0353021	6063727
Milky quartz unifacial point	0353078	6063710
Cooking rock scatter	0353035	6063738

Table 5.1 Artefact distribution within Blowout One (Wiltshire 2009a:36)

Following the description of the stone artefacts, brief descriptions of other Old People's belongings such as granite, historical objects and mussel shell are included; however, of the

19 blowouts presented within this section of the report, only two blowouts contain a few shell fragments.



Figure 5.18 Yellow chert scraper with retouch and crushing (indicated by arrow; K. Wiltshire 2009a:39)

The only blowouts that are not presented in this manner within the report are the last three blowouts recorded during the archaeological surveys, which are located adjacent to Waltowa Wetland. These blowouts contain a large number of stone artefacts, where “(a) representative sample of artefact types (including various raw materials) was recorded...” (Wiltshire 2009a:76). For these areas I describe the distribution of the Old People’s belongings within the blowouts as follows:

Cooking rocks are of a high density and their distribution covers the entire surface of the blowout. In particular, the density of cooking rock distribution appears to be denser in the northern section of the blowout (Wiltshire 2009a:75).

This statement is followed by two to three photographs illustrating the nature of the blowout and/or cooking rock density (see Figure 5.19).



Figure 5.19 *Density of cooking rocks in northern section (Wiltshire 2009a:76)*

The report presents another table with a summary of the stone artefacts recorded, followed by photographs illustrating some of these stone artefacts. Once again there is a conscious choice to present captivating or aesthetically pleasing stone artefacts, resulting in the inclusion of stone artefact with retouch and/or stone artefacts that fit within a particular typology. In doing so, I commence my infatuation with one stone artefact in particular—a unifacial or ‘pirri’ point (see Figure 5.20)—which is subsequently featured three times within the report as well as on the cover alongside one of my other favourite artefacts (Wiltshire 2009a: 29, 87, 95; see Appendix 1). This stone artefact is also included alongside a large flake that appears to be of the same raw material (see Figure 5.21); however, the raw material for these stone artefacts is misidentified as “silcrete”, presumably due to its similarity to silcrete stone artefacts recorded during my recent experience of working as a consultant archaeologist in N.S.W. Lastly, any pieces of granite and/or ‘historical’ objects recorded within the blowouts are also included within this section of the report.



Figure 5.20 Love at first 'site': the unifacial point (K. Wiltshire 2009a:87)



Figure 5.21 And its mate: the 'silcrete' flake (K. Wiltshire 2009a:87)

In total 22 blowouts containing Old People's belongings are presented within the report. In

the process of transcribing the contents of these blowouts, I am meticulous with the amount of detail included within this section of the report due to the insecurity in my abilities as an archaeologist; I am concerned I may fail to include a vital piece of information. As a result, I am afflicted by a “strange mania for inscription” (Latour and Woolgar 1986:48) and this section of the report is the most comprehensive and time-consuming to produce, comprising half of the report’s total size (see Appendix 1). Following this section I transcribe a brief summary detailing the most common stone artefact type and raw material recorded during the archaeological surveys—flake pieces and chert, respectfully (Wiltshire 2009a:90). In presenting this summary I assemble perceived connections between my observations to argue blowouts adjacent to Waltowa Wetland have “(the) highest density of cultural materials” (Wiltshire 2009a:92) in comparison to blowouts recorded elsewhere within the wetland landscape.

Lastly the report creates connections between facts, figures, tables and text-based knowledges in order to present preliminary interpretations of the survey results. Specifically, the report states:

The focus of activity appears to be in [blowouts adjacent to the wetland], where stone knapping, tool processing and cooking were carried out. Less intense, but still important, similar activities would be taking place in [the other blowouts] and these are reflected by the small stone artefacts and cooking rock scatters. The differences recorded...may suggest they were being utilised for different activities and/or by different groups of [Ngarrindjeri] people...[the blowouts adjacent to Waltowa Wetland] would have provided comfortable, well-drain places to camp. Additionally, given that camp areas around the Lakes were occupied up to 8 months a year but not during the winter months, those areas recorded in [the other blowouts] may represent winter camps, which were used when people moved inland in search of resources or to well-watered areas in the lower Mount Lofty Ranges. Therefore, these low density areas are likely to represent small camps that were occupied briefly by people who were moving through the area, possibly in winter time.

...[blowouts] located adjacent Waltowa Wetland would have provided focus for Ngarrindjeri resource exploitation. Additionally, given the large amount of stone artefacts recorded within this area and the knowledge that Ngarrindjeri women of the Coorong were not allowed to possess sharpened stone artefacts, it is possible that [this blowout] was predominately being utilised by Ngarrindjeri men...(Wiltshire 2009a:93).

Following these statements I transcribe an interpretation of some of the stone artefacts, connecting these ‘artefacts’ and with previous archaeological knowledges specific to the region. This section focuses upon stone artefacts with retouch, crushing and specific tool types, where my infatuation with the unifacial point develops and is described in detail as:

...similar to and could be classed as [a] 'Pirri Point'. Hale and Tindale (1930:205) characterise pirri points by their 'leaf-point' shape and retouch on their lateral margins...Pirri points are a distinct stone tool type recorded in the lower layers at Devon Downs rock shelter dated to 4,000 to 5,000 BP. Despite this, pirri points have never been recorded on the surface of any sites within region...(Wiltshire 2009a:94).

Given the surface location of this unifacial point, I suggest several possible explanations including:

Recent surface sediments have been eroded to reveal older sediments and artefacts dated to 4,000 to 5,000 BP; occupation in this area is dated between 4,000 to 5,000 BP, but was abandoned shortly afterwards; [or] these stone artefacts were brought to this area from an older area or sediment dated between 4,000 to 5,000 BP (Wiltshire 2009a:94).

In addition to this, I note the lack of 'small tools' recorded during the archaeological surveys, which are "according to Hale and Tindale (1930:208)...rarely found on camp-sites in the Murray Valley to be known of recent origin..." (Wiltshire 2009a:94). Despite this, I also note "several of the small cores recorded...suggest these cores were being worked to produce flakes of a smaller size, possibly to create such 'small tools'" (Wiltshire 2009a:94). To support this statement I include photographs of two such small cores recorded during the archaeological surveys (see Figures 5.22 and 5.23).

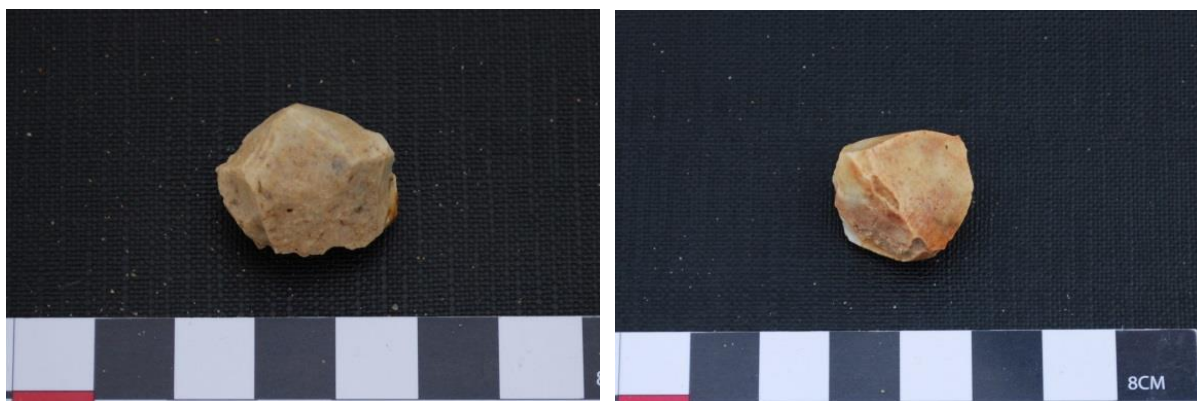


Figure 5.22 (above left) *Quartzite core* (photo K. Wiltshire 2009a:95)

Figure 5.23 (above right) *Chert core* (photo K. Wiltshire 2009a:95)

In addition to this, the report also transcribes an interpretation of the variety of stone artefact raw materials recorded during the archaeological surveys. Drawing on established archaeological knowledges that detail the known source of some raw materials within the region, the report concludes the variety of non-local raw materials observed during the pedestrian surveys "(indicate) that Ngarrindjeri people who inhabited or used these areas had established trading networks with neighbouring cultural groups" (Wiltshire 2009a:96).

In transcribing an interpretation of the density of stone artefacts recorded during the archaeological surveys, I draw heavily on archaeological and ethno-historical resources in order to produce the following statement:

...Angas (1847), Hale and Tindale (1930), Tindale (1957) and Luebbers (1981) suggest stone tools were a minor component of the Ngarrindjeri tool kit, which comprised mainly of spears, nets, baskets and mats centred on the manufacture and maintenance of fishing equipment. Additionally, low artefact densities within the Coorong (see Luebbers 1981) and along the Murray River (see Hale and Tindale 1930; Mulvaney 1960; Lance 1991; Wood 1994) have been also recorded. In historical accounts of Ngarrindjeri people who inhabited the lower Murray, the main cutting implements were items other than stone, such as pieces of mussel shell, bone or reeds (Angas 1847:92; Mulvaney 1960:74; Lance 1991:57). Additionally based on evidence from Devon Downs, Hale and Tindale (1930:206) argue Ngarrindjeri people in this area were also relying on wooden and bone tools rather than stone artefacts (Wiltshire 2009a:96).

In creating a connection between these resources and observations during the archaeological surveys, I determine the high density of stone artefacts at Waltowa Wetland is a 'unique' and 'rare' occurrence. In doing so, I state:

...these areas may well be the largest stone artefact scatters ever recorded within Ngarrindjeri country, and thus provide a unique opportunity to add knowledge about Ngarrindjeri technology within the region (Wiltshire 2009a:96).

In presenting a brief interpretation of the historical objects recorded during the survey, I note more "(detailed) research into these items to determine manufacture date could indicate a minimum date for site use during the historic period" (Wiltshire 2009a:98). Reflecting on this statement, it appears I am making a clear distinction between 'pre-historic' and 'historic' Ngarrindjeri lifeways at Waltowa Wetland; however, in summarising the overall report I later state "historical artefacts...may indicate continued connection and use of Waltowa Wetland by Ngarrindjeri people in historic times" (Wiltshire 2009a:99). The brief nature in which I discuss the historical objects can also be attributed to my inability to 'deal' with these physical objects. In hindsight, I perhaps did not know how to incorporate their presence into the overall narrative of Ngarrindjeri lifeways I had confidently constructed from the 'pre-historic' objects. Yet their agency leads me to suggest "present day knowledge and recorded personal histories of those who were familiar with the area could shed light on a more detailed history..." (Wiltshire 2009a:98).

In presenting an interpretation of 'cooking rocks', my familiarity with and confidence in identifying these physical objects has developed since the initial stages of the survey. As a result I state these cooking rocks indicate a hearth or fireplace, "(where) various activities

would have occurred, including but not limited to the preparation and cooking of food” (Wiltshire 2009a:97). Once again I include references to archaeological and ethno-historical sources in order to support my observations. Despite this, the interpretation of these physical objects seems to be at odds with the lack of faunal—particularly shellfish—remains recorded. In particular, the report emphasises this lack of shellfish or middens recorded during the archaeological surveys by stating:

Archaeological evidence has shown shellfish was intensely utilised as a resource within the Lower Murray, Lakes and Coorong (Stirling 1911; Hale and Tindale 1930; Mulvaney 1960; Mulvaney et al. 1963; Luebbers 1978, 1981)...despite the archaeological and historical evidence testifying the popularity of these shellfish, the remains on the ground in present day are sparse and may be suggestive of land use patterns (Wiltshire 2009a:97-98).

The report then presents several possible explanations for the lack of shellfish remains, including: resources being used by Ngarrindjeri people at Waltowa Wetland may differ from other areas in the region and leave little archaeological trace; the level of occupation may be seasonal or short term rather than year round, which the archaeological evidence suggests is the case for other areas at Waltowa Wetland; occupation could be older than other archaeological sites with evidence of intense shellfish use; Waltowa Wetland may have not been associated with or utilised by family groups with large resource consumption, but rather by smaller groups of Ngarrindjeri people who only consume the occasional meal; and lastly, the lack of shellfish remains could be due to preservation factors (Wiltshire 2009a:98).

Lastly, I transcribe a preliminary summary of my interpretations, which include: blowouts located adjacent to Waltowa Wetland appear to be the focus of different activities and/or groups of people in comparison to the broader wetland landscape, due to the density and variety of Old People’s belongings recorded in these blowouts; and, blowouts adjacent to Waltowa Wetland appear to be the focus of intense stone artefact production and the manufacture of highly specialised tools for specific purposes (Wiltshire 2009a:99). Following this summary, I transcribe a list of recommendations that include undertaking detailed stone artefact analysis and further “(surveys) around Waltowa Wetland [to] contribute valuable knowledge to Ngarrindjeri history of the region” (Wiltshire 2009a:100).

Interlude – Uncle Neville Narrative

I feel tired and a little bit grumpy. Following a long day of surveying, I drag my feet, making my way into the main meeting room of Camp Coorong and plonk myself into one of the soft, swivel chairs. My cheeks burn from Waltowa's cold autumn winds. Uncle Neville sits in the corner, dozing. But when I enter the room he opens his eyes, bringing himself back to reality. Despite my slight grumpiness, the sight of Uncle Neville instantly cheers me up. I sure do have a soft spot for this cheeky old fella.

We start yarning and my exhaustion turns to excitement when I tell Uncle Neville of all the exciting 'things' I have been finding on Tatiara Station. So many stone artefacts! Uncle Neville shows little interest in the 'things' I describe to him and proceeds to share with me stories of when he used to work on Tatiara Station as a sheep shearer; an occupation many Ngarrindjeri men were encouraged to undertake (Jenkin 1979:178; Kartinyeri and Anderson 2008:19,97; Linn 1988:122; NLP 2013:13; see Figure 5.10). I think: this makes sense; I know Tatiara Station used to run sheep before it became an Angas cattle station. But I am pre-occupied by the giddy and child-like excitement the stone artefacts at Waltowa Wetland produce in me. I proceed to ask Uncle Neville if he remembers seeing any stone artefacts in the dunes when he was working there as a sheep shearer, to which he replies yes but this question seems like a momentary distraction from the story he continues to share. The dunes of Tatiara Station are where he used to shoot rabbits; good tucker, I'm told. These dunes were also a place he could have an odd drink of ale from the prying eyes of the station manager; ale which the krinkaris sheep shearers purchased for him as Aboriginal people were prohibited from buying alcohol. I have always enjoyed hearing Uncle Neville's stories and I tuck this one away with many of the other stories he has shared with me over the years (see Figure 5.24)

Some weeks later, the process of writing the survey reports starts to unfold. I study the photographs of the stone artefacts I have recorded with an obsessed intensity, whilst the odd broken bottle shard is noted but of little interest to me. They are nowhere near as exciting as the stone artefacts! But as the weeks of the report writing unfold and I see the odd broken bottle amongst the assemblage of things I believe comprise the 'archaeology' of Waltowa Wetland, Uncle Neville's story is thought of; only on odd occasions to begin with. But then his story starts to nag a little amongst the endless descriptions of raw materials and marginal retouch. The bottle shards start to haunt the report writing process and Uncle Neville's story re-emerges to nurture an entanglement between the bottle shards and I.

I start to notice these bottle shards; take them more seriously; look at them more closely. And I begin to wonder: do they represent a physical presence of the segregation experienced and remembered by many Ngarrindjeri people? A segregation that remains mostly invisible within the settler-colonial Australian landscape. If so, the potential significance to become inscribed or attached to these bottle shards is not self-evident or sudden but emerges and reaches out to me from the bottle shards themselves in a slow, subtle fashion—like a soft tap at the door, which can be ignored to begin with; until it taps again, each time a little bit harder till the bottle shards have my undivided attention and in turn I start to pay these previous un-exciting things the attention they deserve. The bottle shards have entrapped me and shifted my understanding of the archaeological significance present at Waltowa Wetland.³⁹

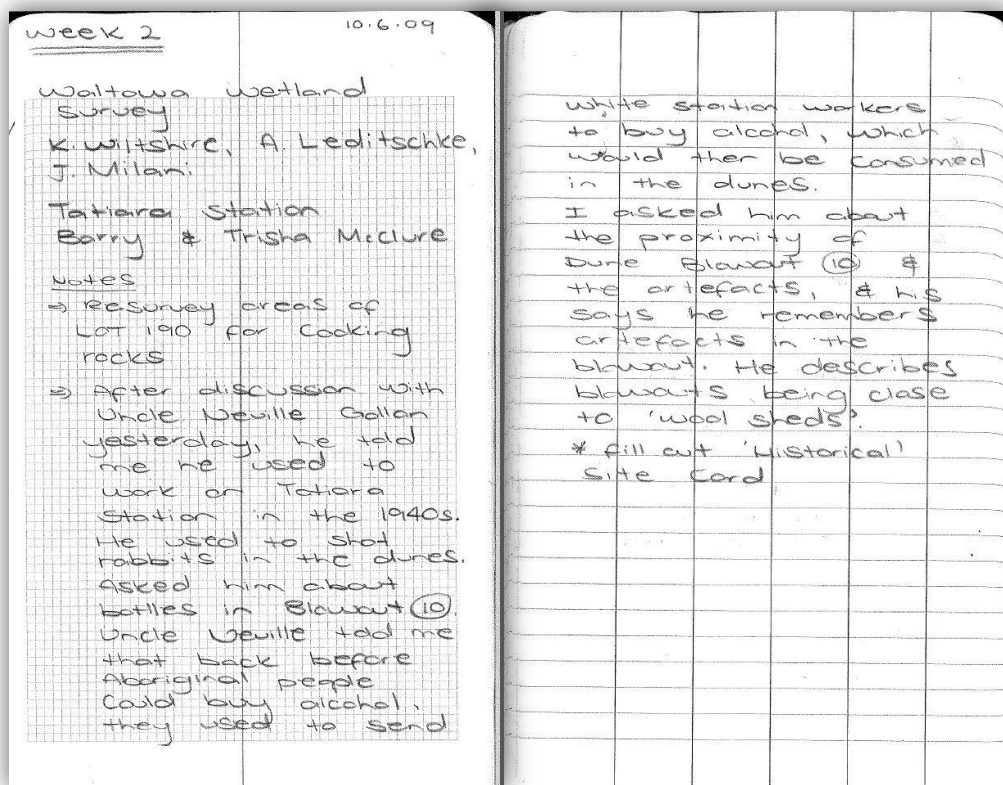


Figure 5.24 Knowledge shared by Uncle Neville Gollan during archaeological surveys (Wiltshire 2009f)

³⁹ Narrative presented at 'Forever Entangled – a workshop with Ian Hodder' (Wiltshire 2016) and Australian Historical Association conference (Wiltshire 2017).

Development of PhD

Once the reports are finalised, I carry out a PowerPoint presentation of the survey results to NHC members Uncle Tom Trevorrow, Aunty Ellen Trevorrow and Luke Trevorrow; I also present NHC with a copy of the reports. Following this I commence pursuing the possibility of using Waltowa Wetland as the focus of a new PhD project, discussing its potential with Ngarrindjeri Elders Uncle Tom and George Trevorrow. Pursuing a PhD project of this nature would allow for an in-depth, long-term study of Waltowa Wetland, which would address the recommendations of the reports as well as develop long-term management planning in-line with the aims of the NCCHP. In addition to this, a PhD project focused on Waltowa Wetland would move away from previous archaeological investigations undertaken within the region that have focused on rock shelter deposits, coastal midden sites and burials, to focus on an open wetland area as a “(little-studied) and recorded aspect of the complex settlement and occupation patterns of the Ngarrindjeri within this region” (Wiltshire 2009a:100). In general, open sites—with the exception of burials—have received very little attention within previous archaeological research undertaken within the region, reflecting a trend that is repeated more broadly (see Ulm 2013:187). This proposed PhD project would also seek to investigate and understand the high density of stone artefacts recorded during the archaeological surveys, which contrast with previous archaeological investigations carried out within the region. Lastly, pursuing such a PhD project would allow me to maintain and further develop my connection with the Ngarrindjeri Nation.

In order to pursue this PhD project, I commence writing a research proposal based on the survey results as part of a scholarship application (see Appendix 2). This research proposal highlights the high density of stone artefacts recorded during the archaeological surveys and the wetland environmental context within which they are located, emphasising their study has the potential to develop better understandings of Ngarrindjeri lifeways. Specifically, the research proposal states:

...areas within close proximity to the wetland were observed to have a high density of stone artefacts and appear to be focus of activity. Previously, several researchers (Hale and Tindale 1930; Tindale 1957; Mulvaney 1960; Luebbers 1981) have argued stone artefacts were a minor component of the local tool kit, with Ngarrindjeri people using mussel shell, reeds, bone and wooden artefacts rather than stone artefacts. Therefore, areas with a high density of stone artefacts are rarely encountered and recorded within this region.

Less intense but still important, similar activities appear to be taking place in areas further inland, which are reflected by the small stone artefact and cooking rock scatters recorded. Areas located further inland are likely to represent small camps that were

occupied briefly by people who were moving through the area, possibly in the winter time. These areas are also a little-studied and recorded aspect of the complex land use patterns of Ngarrindjeri people within this region (Wiltshire 2009e:2).

In-line with emphasising the focus upon the stone artefacts and the wetland context within which they are located, I state the main aims of the project are:

...to develop a better understanding of Ngarrindjeri adaptation to, and use of, freshwater lake and wetland environments. Specifically, detailed stone tool analysis will assist in developing a more detailed knowledge of Ngarrindjeri stone tool technology and use, thereby building upon previous knowledge of the Ngarrindjeri tool kit (Wiltshire 2009e:2).

In order to undertake this project, I propose a combination of background research including:

...ethnographic documents archived within the South Australian Museum and present day Ngarrindjeri knowledge's and personal histories...[and] further surveys...detailed stone artefact analysis and surface sampling of mussel shell fragments to establish a minimum land use date (Wiltshire 2009e:2).

In addition to this, the research proposal states the “project does not plan to undertake any excavation and all artefact analysis will be undertaken in the field, leaving all cultural materials in situ” (Wiltshire 2009e:3); however, this is later revised and the possibility of excavation is soon reconsidered (see Appendix 3).

Simultaneously, I assemble a seven page document outlining my research and archaeological experience to be submitted with the research proposal (see Appendix 2). This document outlines my ongoing connection with the Ngarrindjeri Nation, commencing with publications and presentations resulting from my honours project (see Wiltshire 2006a, 2006b, 2008; Wiltshire and Trevorrow 2006; Wiltshire and Wallis 2008), ongoing research and employment with the Ngarrindjeri Nation (see Wiltshire 2007-2011, 2009a, 2009d; Wiltshire and Wilson 2008a), and successful funding applications undertaken in collaboration with Ngarrindjeri organisations and FU colleagues (see Wiltshire and Wilson 2008b; Wiltshire and Hemming 2009). In addition to this I outline my previous paid and voluntary archaeological experience (Wiltshire 2009e:2-5). In reviewing this research proposal I am struck not only by how focused and confident I come across, but the amount of archaeological field experience I had gained since pursuing the previous PhD project; clearly, there is a lack of confidence in my abilities that still haunts me today.

Once the necessary actants have been assembled, I submit my scholarship application. Less than a month later I am notified that my application for a PhD scholarship has been successful; however, the PhD project is not without its challenges. In the months and years

that follow, the archaeological investigations are undertaken with the understanding that they will contribute to a better understanding of Ngarrindjeri lifeways at Waltowa Wetland. In turn, I believe these archaeological investigations will also contribute to refining regional models within *Yarluwar-Ruwe* more broadly, particularly in regards to stone artefact use; in other words, I pursue what I believe to be a ‘traditional’ archaeological PhD project, albeit one with a slightly left-of-centre theoretical framework that was yet to be defined.

Endless months are spent in the FU library reading and engaging with various theoretical approaches, attempting to formulate the basis of my theoretical framework. Literature reviewed at this time includes Australian-based approaches to cultural landscape studies (Byrne and Nugent 2004, Brown 2007, 2008, 2011; Harrison 2004), as well as phenomenology (Tilley 1994; Thomas 2001), as a means to develop a holistic framework through which to understand Ngarrindjeri lifeways at Waltowa Wetland. Like my role as an archaeologist, this theoretical framework continues to evolve over the course of my PhD journey. Given Actor-Network Theory (ANT) is the framework that underpins the operation of NRA and NRARPPU (S. Hemming, Pers. Comm., 2013; also see Hemming et al. 2016), I seek to incorporate ANT into my PhD and commence reviewing symmetrical archaeology (Olsen 2010, 2012; Shanks 2007; Witmore 2007; Webmoor 2007) and sociologies of scientific practice literature (Latour 1987; Latour and Woolgar 1986; Lynch 1985) as a means to try and comprehend ANT’s more dense literature (i.e. Latour 2005). Due to the denseness of this literature, however, I spend prolonged periods struggling to comprehend the how it will be applied to my PhD and purposefully distract myself by undertaking further field-work at Waltowa Wetland within weeks of commencing my PhD candidature.

Assembling Further Field-work

From my office I commence the necessary planning to undertake further archaeological investigations at Waltowa Wetland (see Figure 5.25). Following on from the recommendations of the previous archaeological investigations, these investigations aim to focus on a detailed recording of one of the blowouts located adjacent to the wetland with a high density of stone artefacts (Wiltshire 2010i:10). The nature of this field-work will involve the detailed recording of a percentage of stone artefacts present; a systematic approach that seeks to produce more detailed knowledge than the archaeological surveys. In doing so I believe knowledges produced by this detailed recording will not only contribute to a better understanding of Ngarrindjeri lifeways, but will challenge existing archaeological knowledges that claim the presence of stone artefacts—both historically and

archaeologically—are rare. Thus, I am drawn to undertake a detailed recording of these stone artefacts due to what I perceive to be their inherent ‘uniqueness’ and ‘rarity’.



*Figure 5.25 Preparing for further fieldwork: my office at Flinders University
(photo K. Wiltshire 2010)*

First and foremost, however, the detailed recording will need to be undertaken in situ as Ngarrindjeri Elders have requested Old People’s belongings are not to be removed from *Yarluwar-Ruwe*. Ngarrindjeri cultural protocols oppose the removal of Old People and their belongings (see Hemming et al. 2008; Hemming and Wilson 2010; Wilson 2005). In order to undertake a detailed recording of these stone artefacts in situ, then PhD supervisor Alice Gorman (AG) suggests a grid be set up within the blowout as a means to ‘systematically’ record the attributes for a percentage of stone artefacts present. This grid would also allow for a mapping of spatial distribution to determine whether there is any horizontal relationship present between stone artefacts. This method would also allow for an accurate estimate of the density of stone artefacts; an important ‘fact’ in order to challenge existing archaeological knowledges regarding the rarity of stone artefacts within the region.

This grid will comprise a number of one metre grid squares set up within the blowout, with each grid square assigned a unique reference code (i.e. A1, A2, A3). Within each grid square every stone artefact would be assigned a number, with a drawing frame and pin flags used to record its x and y axis, which in turn will allow the location of each stone artefact to be mapped onto a scale drawing. The grid square reference codes, individual artefact numbers, x and y axis as well as the stone artefact attributes would be transcribed onto recording forms developed specifically for the detailed recording (see Stone Artefact Recoding Form, Appendix 6). In developing these recording forms, my anxieties about my abilities as an archaeologist ensure I read widely to ensure the attributes included are consistent with approaches by other archaeologists (see Kamminga 1982; Hiscock and Hughes 1983; Hiscock 1989; Hiscock and Clarkson 2000; Holdaway and Stern 2004:107-274; Clarkson and O'Conner 2006). As a result of reading these resources, stone artefact type, raw material and mid-point dimensions are included as key attributes, whereas the presence of cortex, platform surface, platform size and flake termination will also be included if applicable (see Wiltshire 2010i:15). In addition to this, any stone artefacts with retouch or use-wear will have these additional attributes recorded on the reverse side of these forms, which include retouch type, location, percentage and type (see Stone Artefact Recoding Form, Appendix 6). In doing so, these recording produce a 'systematic' assemblage of attributes (cf. Bennett 2007b:6), which I believe will contribute to a better understanding of Ngarrindjeri lifeways; however, these attributes are more likely to represent the cultural practice of archaeology than the Ngarrindjeri culture that produced them. Lastly, colour-coded recording forms for other artefacts types such as cooking rocks, hammerstone/granite, bone/shell and historical artefacts are also developed (see Detailed Recording Forms, Appendix 6), as well as a photographic proforma to record all photographs taken during the field-work (see Photograph Proforma, Appendix 6).

Despite reading widely prior to the field-work and developing a detailed stone artefact recording method including the production of recording forms, I still lack confidence in my ability to positively identify the stone artefacts. In order to address my lack of confidence I wish to draw upon the knowledge and experience of more experienced archaeologists and invite archaeologist Roger Luebbers to visit during the detailed recording. Whilst I am certain about the uniqueness of the stone artefacts present at Waltowa Wetland, I lack confidence in my observations and hope Roger will confirm the archaeological nature of Waltowa Wetland truly is unique.

In order to successfully fulfil my role as an archaeologist it is important I am able to not only positively identify stone artefacts, but also positively identify their raw materials too. Given the large variety of raw materials recorded at Waltowa Wetland, I lack some certainty regarding their identification. Discussing this dilemma with AG in the lead up to the field-work, she suggests developing a reference collection prior to the grid survey, which would comprise a variety of stone artefact raw materials. AG suggests this reference collection should be shown to a specialist—a geologist, perhaps?—in order to positively identify the raw materials, thus creating a known comparative collection that could be used to identify raw materials during the detailed recording. Given these Old People’s belongings could not be removed from *Yarluwar-Ruwe*, such a specialist would need to visit Waltowa Wetland in order to identify such a reference collection. Thus, I seek to identify a suitable specialist by sending an email to a number of colleagues seeking suggestions of any known contacts. A colleague suggests Associate Professor Victor Gostin (VG), a well-known, semi-retired geologist, whom I arrange to meet prior to the field-work. Upon later meeting VG in his office, I show him some of the raw material photographs from the previous archaeological surveys; VG suggests one of the artefacts looks like “diatomite”, a term I am unfamiliar with but note it as a potential raw material that is later included on the final draft of the recording form (see Stone Artefact Recording Form, Appendix 6). VG is generous with his time and invites me to have lunch with him. Intrigued by the photographs I show him, VG agrees to come out to Waltowa Wetland to assist with the identification of the reference collection.

Since undertaking the previous archaeological surveys, I have a developing awareness of the gendered nature of Waltowa Wetland and suspect this area is associated with *korni* gendered knowledge (see Wiltshire 2009a:93); however, Ngarrindjeri cultural protocols ensure that the nature of this gendered knowledge is not shared with me or in my presence. In light of this, however, I want to ensure any field-work undertaken at Waltowa Wetland is respectful to Ngarrindjeri cultural protocols associated with this gendered area. I am concerned about *miminar*—particularly Ngarrindjeri *miminar*—undertaking field-work at Waltowa Wetland; concerns I discuss with Ngarrindjeri Elder Uncle Tom Trevorrow. Once again, however, these concerns cannot be discussed in any detail due to gender-based knowledge boundaries associated with Waltowa Wetland. Given the large amount of Old People’s belongings—presumably the result of gender based activities—that will be handled during the detailed recording, Uncle Tom and I decide all field-work participants should be smoked prior to and following the field-work (see Figure 5.26). This activity is carried out to ensure the handling

of Old People's belongings will not result in contemporary consequences for field-work participants or members of the Ngarrindjeri Nation.



Figure 5.26 Uncle Billy Rankine, Uncle Darrell Sumner and Uncle Tom Trevorrow smoking volunteers at Camp Coorong prior to field-work (photo K. Wiltshire 2010)

Organising this further field-work is much simpler than the previous archaeological surveys, given I now have access to the necessary equipment and a 4WD; however, I am now required to submit detailed Occupational Health and Safety (OHS) forms, which involve considerably 'work' to complete. To complete these forms I outline the potential risks associated with the further field-work, including vehicle accident, stings and bites, repetitive strain, exposure to elements and natural disasters, as well as the preventative actions to reduce these risks. Upon submitting these forms, the OHS Officer is particularly impressed with my inclusion of livestock and electric fences as potential risks, which are included as a result of my previous survey experience at Waltowa Wetland. Whilst these forms are necessary in order to undertake further field-work, the preventative actions described in them are of little use when I sleep through a 3.8 magnitude earthquake that strikes during the first week of this field-work (ABC 2010).

Disassembling the Detailed Recording

The detailed recording of the stone artefact scatter is undertaken over the next four weeks. During the first day of the detailed recording, the volunteers and I start setting up the equipment and physical structures required with an aim to record the entire dune blowout. This process commences with a north-south and east-west baseline through the middle of the blowout (see Figures 5.27 and 5.28). These baselines will allow for the boundaries of the dune blowout to be mapped using a baseline-offset method, separating the blowout into four separate quadrants. Following the setup of the baselines, we commence stringing up the grid within south-east quadrant. In the early afternoon, cultural rangers Craig Sumner, Des Karpany and Laurie Rankine arrive and assist with the grid set up and the selection of stone artefacts for the reference collection. Selecting the reference collection entails surveying the blowout to locate stone artefacts of various raw material types; a process that produces personal excitement at the variety of raw materials located, including yellow, red, green and



***Figures 5.27 and 5.28 Setting up the north-south and east-west baseline
(photos S. Smith 2010)***

heat fractured cherts. Given the large variety of raw materials present and ensuring the reference collection is as ‘representative’ as possible, results in approximately 20 stone

artefacts being selected. These stone artefacts are pin flagged and bagged, with both the pin-flags and the bags labelled to ensure the stone artefacts can be returned to their original location following the field-work; their approximate location is also plotted on a mud map (see Figure 5.29). The reference collection is photographed and placed in a container with the equipment, which is taken back to Camp Coorong every night throughout the duration of the field-work.

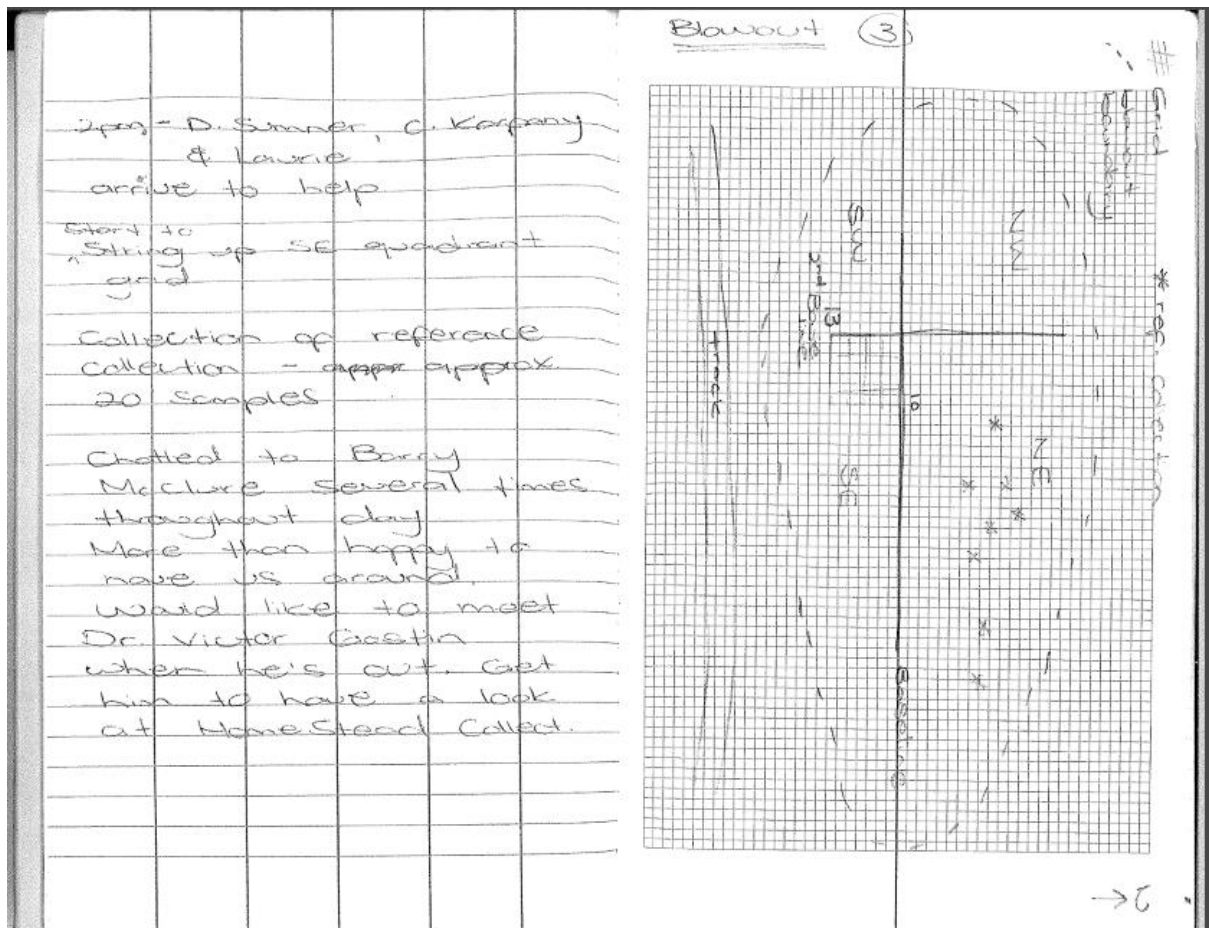


Figure 5.29 Mud map (R) showing location of baselines, grid and approximate location of reference collection stone artefacts (Wiltshire 2010-2011)

At the conclusion of the first day we have set up a 13m x 10m grid; however, I have underestimated how much 'work' is involved in setting up this grid and consider downsizing the grid to record 50% of the dune blowout. Despite using a minimal amount of pegs to limit the impact of the detailed recording on the dune blowout surface, I have also underestimated the amount of tent pegs required for such a task. On the way home we call into the Meningie hardware store to replenish our much needed tent peg supplies.

By the second day, I am excited to finally commence the detailed recording using the grid we have set up. Prior to the recording, volunteers ‘clean’ each grid square with a large, soft bristled paint brush to remove foot prints in preparation for it being photographed; every effort is made to limit the impacts of human disturbance during the recording process. Following this process, we place the drawing square over the first grid square and pin flag any stone artefacts, cooking rocks or other artefacts present. One by one, the pin flags are removed as one volunteer records the attributes and measurements of Old People’s belonging located within the grid square onto recording forms, whilst the other simultaneously maps their location on a scale drawing (see Figures 5.30 and 5.31). Once again, the identification of attributes is influenced and constrained by my previous experience as well as learned knowledges, whereas the dimensions are determined by measuring the artefacts using Kincome digital vernier sliding callipers. Any attributes that cannot be identified are described in as much detail as possible and photographed for future identification. In addition to this, any stone artefact types or those with retouch present are photographed. Some of the stone artefacts are also left pin flagged to show Roger when he arrives (see Stone Artefact Recording Form, Appendix 6).

During the detailed recording my attention is particularly focused on stone artefacts with retouch or ‘tools’ types. I considered such ‘tools’ as having the potential to contribute to existing knowledge regarding Ngarrindjeri lifeways, believing an analysis of their attributes will provide a better understanding of the role they played within the region. As a result, I am drawn to these stone artefacts types and even develop favourite stone artefacts, which become familiar like old friends; “*Oh, I remember you!*” I exclaim when I physically re-encounter them or later view their photograph. In particular, my favourite artefact—a unifacial point—recorded during the previous archaeological surveys is sought out again during the first week of the field-work. I take great pride in showing this stone artefact to visitors and volunteers, as well as subsequently including photographs of it within reports, presentations and this thesis. In many ways, there is a common thread of subjective reaction that connects my activities to those of the amateur collectors who preceded professional archaeology in Australia, but whose influence might be closer than we think.



Figure 5.30 The “inscription devices” (cf. Latour and Woolgar 1986:51) used to record and map Old People’s belongings at Waltowa Wetland (photo S. Smith 2010)

In addition to being drawn to stone artefacts of a particular form or with certain attributes, I am also drawn to stone artefacts based on their raw materials, especially those manufactured from yellow, green and red cherts (see Figures 5.42 and 5.43). The colour of these stone artefacts is so vivid, one volunteer comments the green chert resemble split peas (A. Della-Sale, Pers. Comm., 2010); their vivid colour makes them stand out amongst the dullness of the dune’s pale, sandy surface. Drawing conclusions from previous archaeological knowledges and my previous experience as archaeologist within the region, I know these raw material sources do not occur locally. As a result, stone artefacts manufactured from these raw materials became ‘precious’ to me for their rarity as well as their aesthetically pleasing nature.

As we proceed, the methods of the detailed recording become refined and rather than recording every stone artefact and cooking rock within each grid, flake pieces less than one centimetre and cooking rocks less than five centimetres are omitted from the detail recording. At the same time the colour variety of quartz raw material is also recorded “in case preference for particular quartz (i.e. clear, milky, rose)” (Wiltshire 2010-2011) stone artefacts

can be ascertained from the results. In paying closer attention to these stone artefacts, I also start to notice a number of crescent shaped quartz stone artefacts—geometric microliths, perhaps? By the end of second day it appears the plan to grid and record 50% of the blowout is over-ambitious based upon the time it has taken to record the contents of each grid square. By the end of week I determine the grid will need to be down-sized to a “string grid through middle of blowout...[as] time constraints may mean [we are] unable to record whole blowout” (Wiltshire 2010-2011). In other words, I have underestimated the amount of time necessary to undertake the detailed recording and thus need to narrow down area to be recorded. In addition to this I have overestimated how many Old People’s belongings would be located in each grid square, having allocated an entire form per grid square (see Detailed Recording Forms, Appendix 6).

Figure 5.31 Example of scale map showing grid and artefact locations resulting from detailed recording.

identify the raw material of my favourite artefact and its associated flake, which I have pin flagged, bagged and labelled to bring to the station house along with the reference collection for identification. VG is equally impressed by the captivating nature of the unifacial point and holds it up to the camera as we take photos (see Figure 5.32); he identifies the raw material as quartzite and not silcrete as previously suspected. In the process of identifying the raw materials of the reference collection, it soon becomes apparent that archaeologists and geologists speak very different languages. For example, I am keen to identify stone artefact raw materials and their source, but VG proceeds to educate me about the geological age and how the raw material was formed, using my notebook to elaborate (see Figure 5.33).



Figure 5.32 Tatiara Station owner Barry McClure and Victor Gostin holding my favourite artefact (photo S. Smith 2010)

Following our discussion at the station house, I show VG the dune blowout and surrounding areas where we are undertaking the detailed recording. Walking around and examining the landscape, VG examines exposed stratigraphic sections of the dunes and suggests possible geomorphic formation processes for Waltowa Wetland, which he claims could be verified through excavation and radiocarbon dating. I follow VG around and make observations that seem to make little sense, but I am able to later translate and transcribe these observations

into a preliminary chronological sequence for the Waltowa Wetland dunes (see Wiltshire 2010i:34).

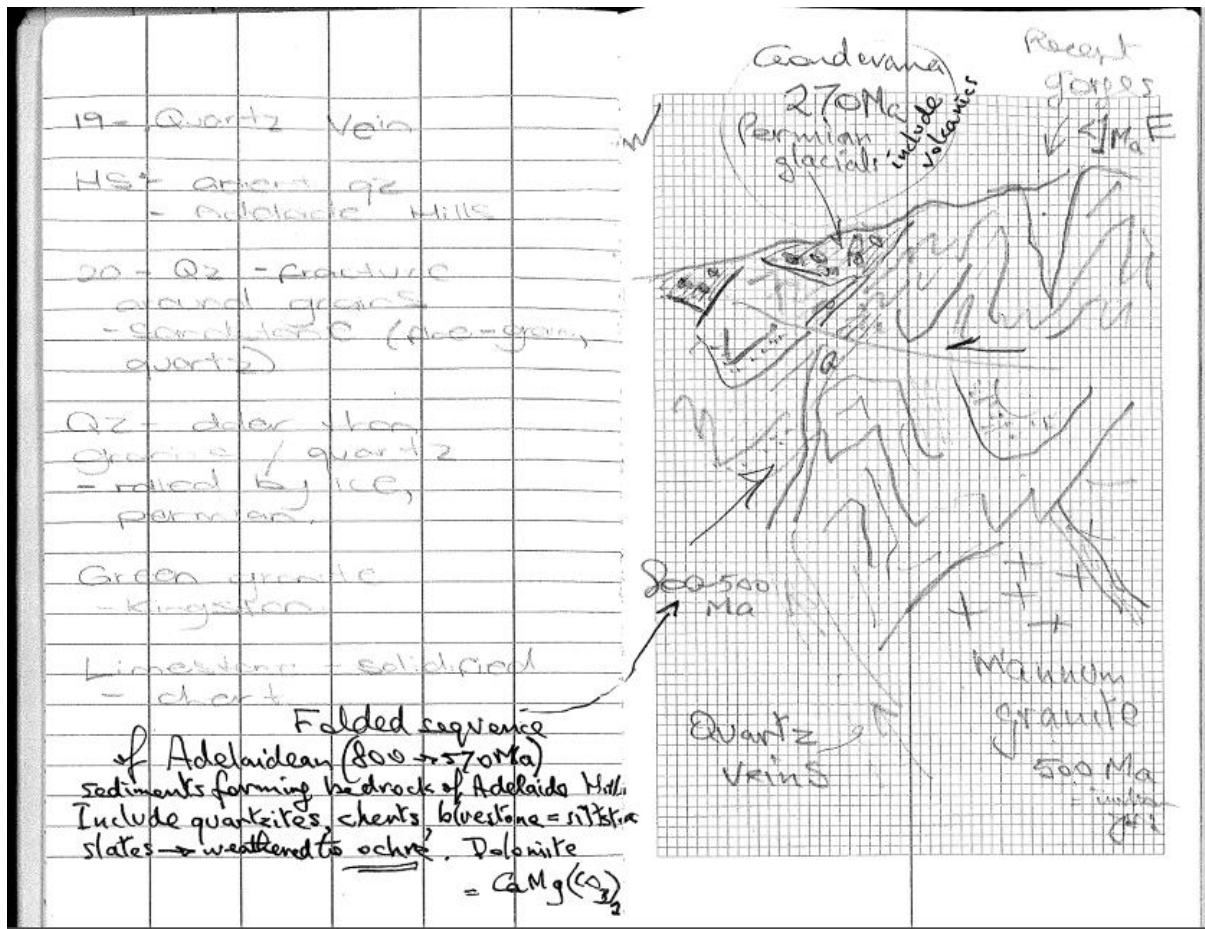


Figure 5.33 *Lost in Translation: Victor Gostin's geological notes in my notebook (Wiltshire 2010-2011)*

During the first week of the detailed recording, the volunteers and I also spend a half day surveying some of the surrounding dune blowouts not included as part of the previous archaeological surveys. It is during these surveys that a volunteer draws a connection between vertical slots in one of the buildings at TS and gun ports seen during previous fieldwork at Port Arthur, Tasmania (see Figure 5.34). In response, I record these features as 'potential' gun ports but remain unsure of their identification. Regardless of their validity, for Ngarrindjeri Elders who are shown these 'gun ports', they provide a physical representation of the long history of violence experienced by the Ngarrindjeri Nation (D. Sumner, Pers. Comm., 2010).



Figure 5.34 Potential 'gun ports' on one of the buildings on Tatiara Station
(photo K. Wiltshire 2010)

The second week commences with a visit by Roger Luebbers and we proceed to look at some of the previously recorded dune blowouts together. During this process, Roger, the volunteers and I walk around these blowouts, picking up several stone artefacts and examining them closely (see Figure 5.35). Roger picks up a couple of robust stone artefacts with steep edges, which he identifies as wood working tools. A concave scrapper is also 'found'—a tool likely used to de-bark spears (Wiltshire 2010-2011). As we walk around the dune blowouts Roger suggests an excavation at Waltowa Wetland would provide information regarding the structure and formation of the dune blowouts, whilst providing dates that would give some context to the results of the detailed recording currently being undertaken; it seems such excavation is necessary to make confident statements about the archaeological record at Waltowa Wetland.



Figure 5.35 *Volunteers Candice Hartman, Emily Zubkevych and Roger Luebbers examining stone artefacts at Waltowa Wetland (photo K. Wiltshire 2010)*

Whilst we wander around the dunes, Roger notices a particularly dense area of stone artefacts located away from the grid and suggests a smaller grid could be set up to record this. Despite the deflated nature of the dune blowout, Roger believes there may still be some context and knapping areas remaining that could be ascertained by the detailed recording. We proceed to discuss the nature of the detailed recording and Roger agrees we have been over-ambitious in the area we had aimed to record. Roger's opinion confirms that it is acceptable to record a smaller area and the fear of being criticised for underestimating the time involved in undertaking a detailed recording lessens. As a result of this discussion, the grid area is downsized significantly to a 1m x 2m grid running north-south through the middle of the dune; we now aim to record just 5% of the dune blowout (see Figure 5.36 and 5.37). We also plan to set up another grid running east-west to record the dense area of stone artefacts noticed by Roger (see Figure 5.38); however, I am aware of a number of stone artefacts with retouch and various 'tool' types located outside the grid, which I believe are important and should also be recorded. As a result, I "pin flag tools of interest not occurring within grid" (Wiltshire 2010-2011), with the view to map these stone artefacts as well as the boundary of the blowout using a baseline-offset method (see Figure 5.39).

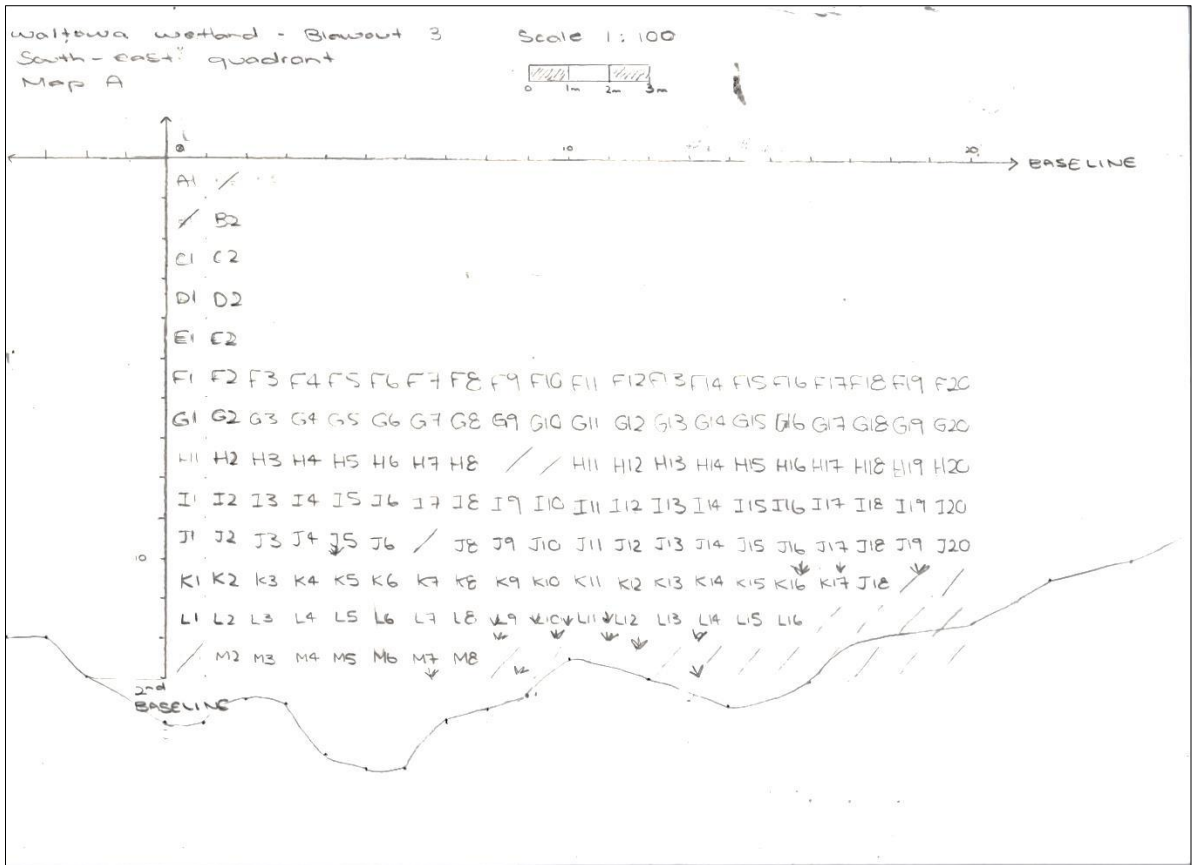


Figure 5.36 Scale map of grid locations showing grid area narrowed down to 1m x 2m.



Figure 5.37 Volunteers Candice Hartman and Emily Zubkevych undertaking detailed record in downsized grid (photo K. Wiltshire 2010)



Figure 5.38 Detailed recording of an east-west grid (photo A. Della-Sale 2010)

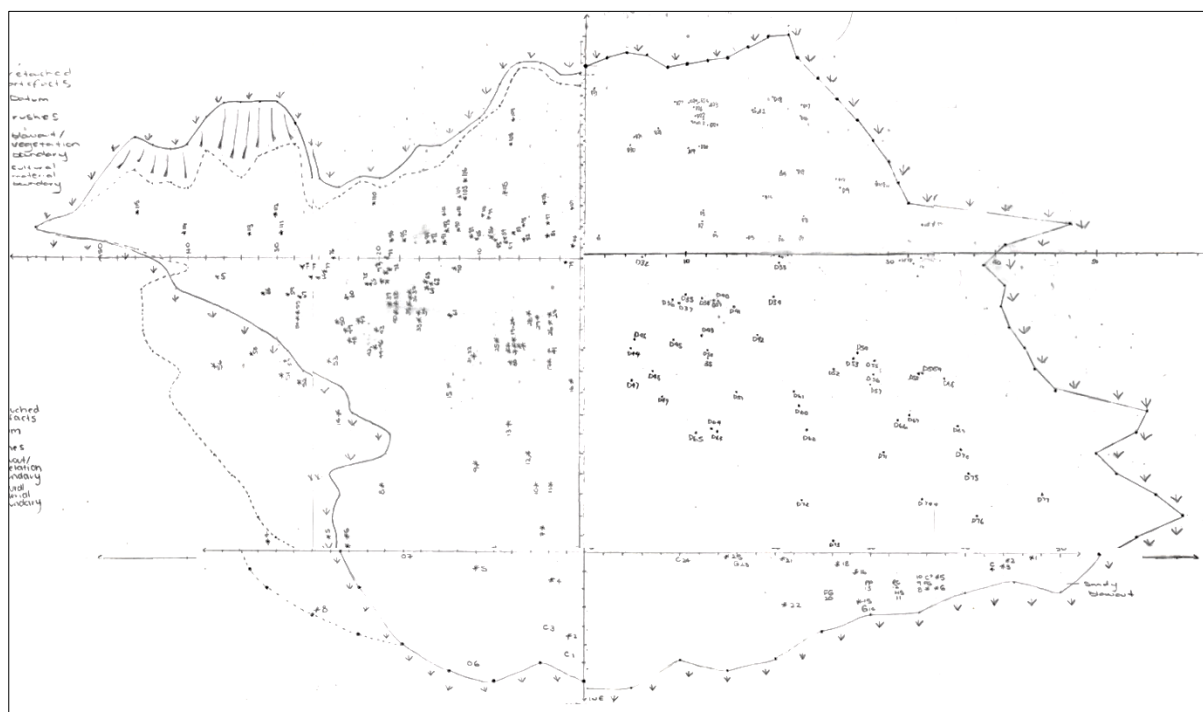


Figure 5.39 Baseline-offset map of stone artefacts and dune blowout boundary.

The process of detailed recording is a repetitive and dull process, only interrupted by the excitement of encountering certain Old People's belongings, such as small quartz stone

artefacts that appear to have resin residue (see Figure 5.45). These stone artefacts are particularly exciting as they suggest the manufacture of composite weapons such as a death spear likely occurred at this location; however, the dangerous nature of these Old People's belongings due to their association with sorcery does not occur to me at the time (see Berndt et al. 1993:252; Hemming et al. 1989:24). Given the importance I place upon these particular stone artefacts, I discuss with Uncle Tom Trevorrow collecting and storing them within CC's keeping place, so I can arrange analysis to be undertaken on them. In doing so, I ensure the artefacts are pin flagged and bagged allowing them to be returned to their original location following analysis.

As the detailed recording continues to unfold, I notice the quality of the stone artefact photographs is poor, with many of the photographs being either over-exposed or out of focus; the photographs are simply not of an archaeological calibre. Roger suggests collecting some of these stone artefacts to be photographed in more detail at CC using equipment and accessories such as a light reflector and blue background to improve the quality of the photographs. Over the next couple of weeks I proceed to pin flag, bag and collect artefacts for photography, ensuring any stone artefacts collected could be returned to their original location. One of the volunteers, Shannon Smith, decides to illustrate some of the artefacts I have collected for photography; I am impressed with her detailed illustration and offer to pay for her to return in the last week of the fieldwork for the sole purposes of illustrating a sample of these stone artefacts (see Wiltshire 2010i:17). In doing so, I believe such drawings will also contribute to an analysis of the stone artefacts attributes, which will provide a better understanding of the role of stone artefacts within the region.

During Roger's visit, the volunteers and I spend some time surveying the surrounding dune blowouts not yet recorded; there is a sense of excited anticipation at what we might encounter. In particular, a chert nodule with only a few initial flakes removed is located, giving an insight into the form of this raw material prior to flaking. Whilst recording this nodule I think of the Old Person who must have carried it some distance, only to leave it laying here before its potential could be realised; a manufacture process that was likely interrupted by colonisation. We also locate a large hammer stone, only the second one I encounter within this landscape but certainly not the last; I am excited not only by its presence but also its size. We wander over to areas of exposed dune stratigraphy, which Roger contemplates with interest and compares to Lake Mungo's 'Walls of China'. I become preoccupied with a "manic passion" (cf. Latour and Woolgar 1986:51) for recording and

photographing the things we encounter and have not noticed the volunteers have walked on ahead. Suddenly they shout: “*Another hammer stone!*” We pass the heavy hammer stone to one another, examining it excitedly. I place it back onto the dune blowout’s surface, positioning the hammer stone above a photographic scale to ensure I produce another photograph of archaeological calibre (see Figure 5.40). In this process of undertaking this cultural ritual, the excitement associated with encountering this artefact becomes concealed.



Figure 5.40 *Another hammer stone!* (photo K. Wiltshire 2010)

Despite Roger assisting with the identification of some of the stone artefacts, following his departure I still lack confidence in my stone artefact identification abilities; this is despite reading widely prior to the field-work. In preparation for week three, I once again consult texts relating to stone artefacts and make reference notes in my notebook, including the identification of backing, edge damage, core measurements and platforms on a core (see Figure 5.41). Despite this preparation, I am surprised when we later encounter a granite anvil and core when surveying one of the surrounding dunes (see Figure 5.48). None of the previous archaeological knowledges for the region mention granite being used for the manufacture of stone artefacts. Whilst I had previously encountered numerous pieces of granite within the Waltowa Wetland landscape, I had assumed this raw material was simply a

manuport associated with Ngarrindjeri dreaming ancestor *Ngurunderi*. As my focus widens to now include these previously unconsidered artefacts, I ensure photographs are taken of granite outcrops occurring within Lake Albert as a potential raw material source (see Figure 3.2). Barry also informs me of the presence of a granite outcrop on TS, but it will be a couple more years until I will finally locate and record this outcrop (see Figure 3.1).

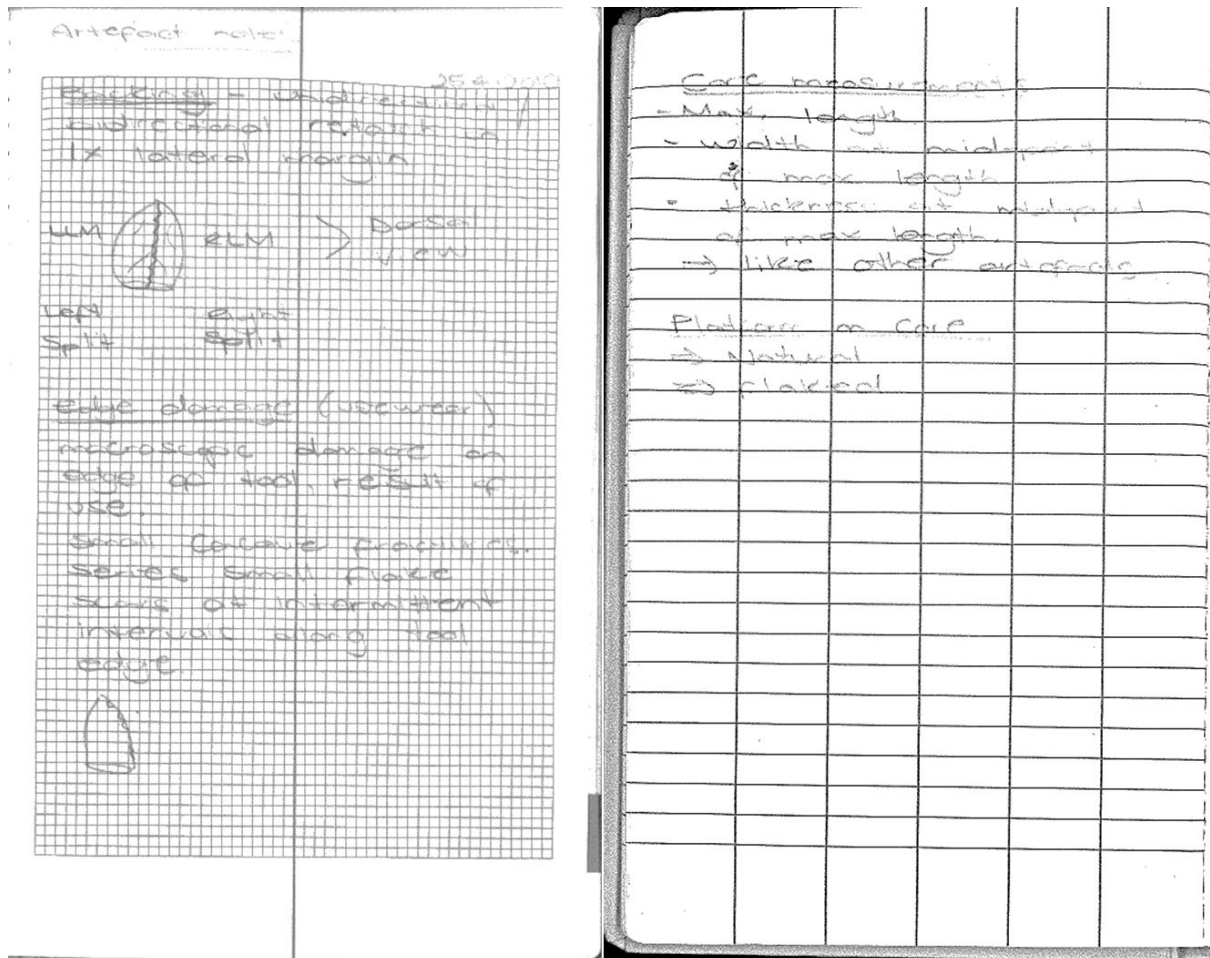


Figure 5.41 Stone artefact reference notes (Wiltshire 2010-2011)

As the field-work unfolds over the next few weeks, tensions emerge again with one of the volunteers. In particular, a volunteer requests to look at my note book to better understand the observations I record. Whilst I am uncomfortable with this request as my ‘archaeological’ observations are not a polished product like the archaeological reports I produce, I reluctantly agree. A few days later, I walk in on the volunteer sitting at the table in our cabin taking notes from my notebook; I am livid! Nevertheless, I suspect my frustration with this volunteer—and particularly my reaction at them taking notes—stems from my lack of confidence in my abilities as an archaeologist. The information recorded in my note book is raw, subjective

observations that I feel are not good or professional enough to be viewed publicly. Clearly, I see my strength as an archaeologist is in what I do with these observations; translating them into irrefutable archaeological knowledges in the form of a professional report format.

As the final week of field-work unfolds, much of this week is spent finishing the east-west grid and photographing stone artefacts using the method suggested by Roger. This method entails photographing the stone artefacts on the floor, next to a window in one of the cabins at CC, using a light reflector to reduce shadowing. The photographic background consists of a piece of glass suspended above a piece of blue rubber by two tin cans. Prior to photographing the stone artefacts, I commence by taking approximately 20 test photographs, testing the most ideal light conditions. In other words, I place the light reflector in different positions as well as turn the cabin lights on and off to ascertain which light conditions produce the most aesthetically pleasing photographs. Following this, the stone artefacts are photographed by tool type, including artefacts with resin, cores, granite artefacts, hammer stones, points, bipolar flakes, broken tools, concave scrapers, rectangular scrapers, retouched flakes, robust scrapers, scrapers with context, thumbnail scrapers and geometric microliths (see Figures 5.42 to 5.47). Whilst all the stone artefacts are photographed individually, I take group photographs of some including the points, geometrical microliths and coloured cherts (see Figure 5.43 and 5.45). In particular, I photograph my favourite artefact with a large quartzite flake, creating an alliance between them (see Figure 5.46). In total, I take over 700 photographs.



Figure 5.42 Orange chert retouched flake (photo K. Wiltshire 2010)



Figure 5.43 Red chert stone artefacts (photo K. Wiltshire 2010)



Figure 5.44 *Quartz flake piece with resin (photo K. Wiltshire 2010)*



Figure 5.45 *Chert geometric microliths (photo K. Wiltshire 2010)*



Figure 5.46 *Quartzite unifacial point and flake (photo K. Wiltshire 2010)*



Figure 5.47 *Pink granite core (photo K. Wiltshire 2010)*

On the last day of the detailed recording we return all collected stone artefacts to the blowout; but not before I grasp one last opportunity to be photographed with my favourite artefact (see Figure 5.48). Following this photograph, I place the unifacial point back onto the dune blowout's surface and walk away; there is a twinge of sadness at not knowing if I will ever see this 'old friend' again. Whilst leaving TS, we say goodbye to Barry and Sir Montaque; I thank Barry once again for his generosity and we drive the two hours back to Adelaide, exhausted but elated. Now, what to do with all this 'data' I have 'collected'?

More Assembling

Beyond the boundaries of Waltowa Wetland the process of transcribing my observations into an archaeological report unfolds once again (see Appendix 4). This report commences by stating archaeological investigations at Waltowa Wetland were developed in collaboration with NHC and NLPA (Wiltshire 2010i:3). In demonstrating this collaborative approach, the report describes the smoking ceremonies carried out in order "(to) cleanse individuals of any bad spirits associated with the landscape and any archaeological materials found in that

landscape” (Wiltshire 2010i:12). Furthermore, the report also describes how an important part of the archaeological investigations was “(facilitating) a re-connection of Ngarrindjeri elders, individuals and cultural rangers to the Waltowa Wetland area” (Wiltshire 2010i:12).



Figure 5.48 All-time favourite artefact (photo S. Keiller 2010)

Following this, the report outlines the methods used to undertake the detailed recording of stone artefacts, which I refer to as a ‘macro-analysis’; a term used to make the in situ recording of stone artefacts appear more scientific in nature. I state the macro-analysis was undertaken:

As NHC had requested no archaeological materials be collected...Given the long history of collecting Ngarrindjeri archaeological materials by antiquarians and researchers that have ended up in museums and institutions in Australia and overseas, it was important that all collected stone artefacts stay on Ngarrindjeri country at all times (Wiltshire 2010i:14).

Stone artefacts with resin are, however, an exception to this macro-analysis, as the report states:

Given the importance of these artefacts to add knowledge about lifeways at Waltowa Wetland, the researcher negotiated with NHC to have these artefacts stored within Camp Coorong’s keeping place. Currently, the researcher is in discussion with several other university based researchers about possible analysis to be conducted on these artefacts. The locations of these stone artefacts were marked with a metal tent

peg and GPS co-ordinates recorded to ensure they may be returned to their exact location within Blowout Three if that is what NHC desire (Wiltshire 2010i:14-15).

Following this, the report describes the methods employed during archaeological investigations to address my limited experience as an archaeologist. Specifically, the report states:

Due to the *limited* experience of the researcher in detailed stone artefact analysis, numerous methods were employed to ensure accurate recording. Several of the artefacts were shown to senior archaeologist Roger Luebbers for identification and kept as a reference collection for the duration of the field-work...Following his departure, any stone artefacts encountered that could not be assigned a type were described in as much detail as possible and photographed for future reference [emphasis added] (Wiltshire 2010i:16).

A similar description is provided regarding the establishment of a raw material reference collection in order to provide “positive identification” (Wiltshire 2010i:16).

In outlining the detailed recording itself, the report describes the downsizing of the grid that occurred as the archaeological investigations progress as follows:

Initially, the researcher had planned to set up a grid over the entire blowout, which was commenced with a 20m wide grid running north-south through the middle of the blowout...within the first few days of the field-work it became clear that there would not be *enough time* to complete this 20m grid through the site within the four weeks allocated. Therefore, based on the [stone artefact] spatial distribution patterns observed on the accompanying grid maps (distribution patterns were observed within a 2 x 2m area) and advice from archaeologist Roger Luebbers, the grid was downsized to 2m wide running north-south through the blowout.

Whilst recording the artefacts within this grid *it became obvious* that there were dense areas of stone artefacts within selected areas of the blowout, particularly in the middle. Therefore, an additional grid was set up running east-west to record the distribution of the artefact scatter in the opposite direction to the first grid. Due to *time constraints* this grid was only 1m wide and artefacts within every second grid square were recorded [emphasis added] (Wiltshire 2010i:18).

In doing so, time constraints are represented as playing a key role in the subsequent size of the grid used to undertake detailed recording.

Prior to discussing the results of the grid survey, the report presents additional blowouts recorded during archaeological investigations as well as other observations, including the archaeological nature of a blowout located adjacent to the grid survey area, the potential formation history for the Waltowa Wetland landscape and the presence of potential gun ports on TS. In doing so, the report emphasises the high density of charred rocks and the low density of stone artefacts present within a previously recorded blowout located within close proximity to the grid survey area. Taking into account what are observed to be differences in

the archaeological nature between this blowout and that of the grid survey area, the report concludes:

...that two very distinct and different activities were occurring within this area within a relatively short distance. Given this, a grid system to record artefact spatial patterning and density within this blowout could be compared to data from [the existing grid survey]...to add further knowledge about Ngarrindjeri lifeways at Waltowa Wetland (Wiltshire 2010i:32).

Likewise, observations of exposed stratigraphic sections by VG are assembled to transcribe a potential formation history for the Waltowa Wetland dunes. In doing so, VG's observations become translated into evidence, which in turn become aligned with my own archaeological observations to produce a statement regarding Ngarrindjeri lifeways at Waltowa Wetland:

The stratigraphic *evidence* and associated archaeological materials suggest two possible phases of occupation during the Holocene and Pleistocene respectively. However, occupation of Waltowa Wetland may have occurred between these two stratigraphic phases. *More research is required to positively date* the occupation chronology at Waltowa Wetland, which may include archaeological excavation, radiocarbon dating and/or possible collaboration with university-based, palaeo-environmental researchers [emphasis added] (Wiltshire 2010i:34).

Lastly, the presence of potential gun ports on TS is presented within the report; a presence that becomes aligned to knowledges of violence toward Ngarrindjeri Old People as a means to strengthen the reality of these gun ports (see Wiltshire 2010i:36). The report both alludes to and obscures my uncertainty regarding these features, to conclude their presence “(is) obviously not clear evidence of previous violent clashes between colonialist and Ngarrindjeri people and *more research is required to positively link* the two” [emphasis added] (Wiltshire 2010i:36). Overall, these observations suggest further research will allow for the production of confident statements about whether these features are gun ports.

Following the presentation of these observations, the results of the grid survey are presented as preliminary due to the ‘data’ having not yet been analysed; in other words, the attributes recorded during the detailed recording have not been entered into an excel spread sheet in order to produce facts, figures and tables, which allow for the production of statements and knowledges about Ngarrindjeri lifeways at Waltowa Wetland. Despite this, the report presents a preliminary analysis of the stone artefacts recorded, assembling observations, photographs and written resources in order to produce knowledge about these stone artefacts. These knowledges describe physical attributes and manufacture techniques, with minor references to chronological context and function. For example, unifacial points recorded during the grid survey are described as:

...artefacts that converge to a point that have retouch on their lateral margins, which are sometimes referred to as Pirri Points...In southern Australia pirri points are a distinct stone tool type recorded in the lower layers at Devon Downs rock shelter dated to 4,000 to 5,000 BP and are generally presumed to have been hafted onto the tip of a spear as a projectile point or used as a drill (Wiltshire 2010i:39-40).

These descriptions focus upon stone artefacts rather than Ngarrindjeri people or culture that produced them; a product of archaeological practice that once again mirrors that of amateur collectors, despite my use of systematic and 'scientific' archaeological methods.

Finally, the report presents a brief interpretation of the preliminary results. This interpretation acknowledges the limitations of these investigations, by stating:

Obviously, the precise significance of Waltowa Wetland cannot be adequately assessed within this report. Despite this, a brief interpretation of archaeological materials recorded during the field is included. Interpretations of archaeological materials are *based on the researcher's prior knowledge* and thus further research will only add further knowledge about these materials [emphasis added] (Wiltshire 2010i:48).

Despite the sterile nature of this statement, the reference to my prior knowledge constraining interpretations provides a rare glimpse into the archaeologist behind the archaeology (cf. Roveland 2000:19). Following on from this, the report transcribes an interpretation for stone artefacts recorded, which parallels the previous report by maintaining the detailed recording area is a focus "(of) intense stone artefact production, with the manufacture of highly specialised tools for specific purposes" (Wiltshire 2010i:50). An interpretation for a lack of faunal marine remains also parallels the previous report (see Wiltshire 2009a:98, 2010i:50). Lastly, the report assembles observations with text-based knowledges to present a brief interpretation of the Waltowa Wetland sedimentary sequence, which suggests Ngarrindjeri lifeways at this location may extend into the Pleistocene. For the most part, previous archaeological investigations within *Yarluwar-Ruwe* have provided dates that range within the last 10,000 years; however, the Ngarrindjeri Nation (2006:11) believe they have occupied *Yarluwar-Ruwe* since *Kaldowinyeri*. Thus, the inclusion of any suggestion regarding the chronology of Ngarrindjeri lifeways at Waltowa Wetland reflects my interest and cultural practice as an archaeologist, rather than the interests and culture of the Ngarrindjeri Nation.

Final Archaeological Surveys

Many months following the completion of the second archaeological report, the 'data' from the recording forms is entered into an excel spread sheet, with the view it will be analysed in order to produce facts, figures and tables that will represent Ngarrindjeri lifeways at Waltowa

Wetland; however, doubts start to creep in regarding the ability of this data to represent the complexity of Ngarrindjeri lifeways. For the most part, the grid survey seems like an elaborate mechanism for the production of facts, figures and tables that represent my interests as an archaeologist. Despite spending days entering this data into an excel spread sheet, these doubts ensure the data remains unanalysed, which in turn resist the production of archaeological knowledges; I instead distract myself with further archaeological surveys, with the belief that recording more Old People's place will assist in better understanding Ngarrindjeri lifeways at Waltowa Wetland.

Once again I commence assembling the required actants needed to undertake a two week archaeological survey, which focuses on areas south-east of Tatiara Station that remain unsurveyed. By this stage organising field-work has become a straight forward, routine and predictable process. Furthermore, previous archaeological investigations have resulted in a connection and familiarity with Old People's places and belongings at Waltowa Wetland, which allows for their identification with ease. This connection is, however, challenged when I encounter Old People's belongings I am unfamiliar with. For example, encountering a stone axe for the first time initially results in confusion (see Figure 5.49); I pick up this Old People's belonging and examine it, turning the heavy object around in my hands and think to myself: *What is this thing? What is it made of?* I do not recognise the raw material. I run my hand over its polished edges and after a few moments of contemplation I wonder if this object might be an axe; however, I have never encountered an axe before and I am apprehensive to confidently identify it as such. As a result, I record this Old People's belonging as a 'possible' axe. The following week its archaeological identity is established when colleague Karen Martin-Stone confirms my identification.

Despite the unfamiliarity of this Old People's belonging, the connection with Old People's places and belongings at Waltowa Wetland result in an increased confidence in my abilities as an archaeologist; a confidence that is reflected in the observations I produce. With this increased confidence I am no longer concerned with recording every individual stone artefact I encounter, instead producing less detailed observations that include a brief description of the Old People's place and/or belongings accompanied by one or two GPS co-ordinates (see Figure 5.50). As archaeological investigations unfold, this process is further refined to include north, east, south, west and central GPS co-ordinates for every blowout recorded (see Figure 5.51). Overall my practice as an archaeologist becomes more routine requiring less

detail as archaeological investigations unfold, no-longer haunted by a lack of confidence and anxieties about my abilities.



Figure 5.49 *The unfamiliar stone axe (photo K. Wiltshire 2011)*

Shortly following the completion of these surveys, I commence working as a Heritage Specialist for the NRA—a role I subsequently fulfil on a part-time and casual basis throughout most of my PhD candidature. This role focuses upon undertaking archaeological surveys of areas to be revegetated as part of the *Murray Futures* program; however, I also continue to contribute to other heritage projects as well as draft funding applications and associated reporting (see Hartman et al. 2014a, 2014b, 2015; Trevorrow et al. 2011; Wiltshire 2012a, 2012b, 2012c, 2012d, 2012e, 2013b, 2014a, 2014c, 2014d, 2014e, 2014f). Whilst the PhD is always in the forefront of my mind, it frequently takes a backseat to these other activities; activities I undertake due to my sense of ethical responsibility towards members of the Ngarrindjeri Nation. This role does, however, provide an opportunity to further develop my archaeological skills and knowledge of Ngarrindjeri *Yarluwar-Ruwe*, providing contextual skills and knowledge for my PhD.

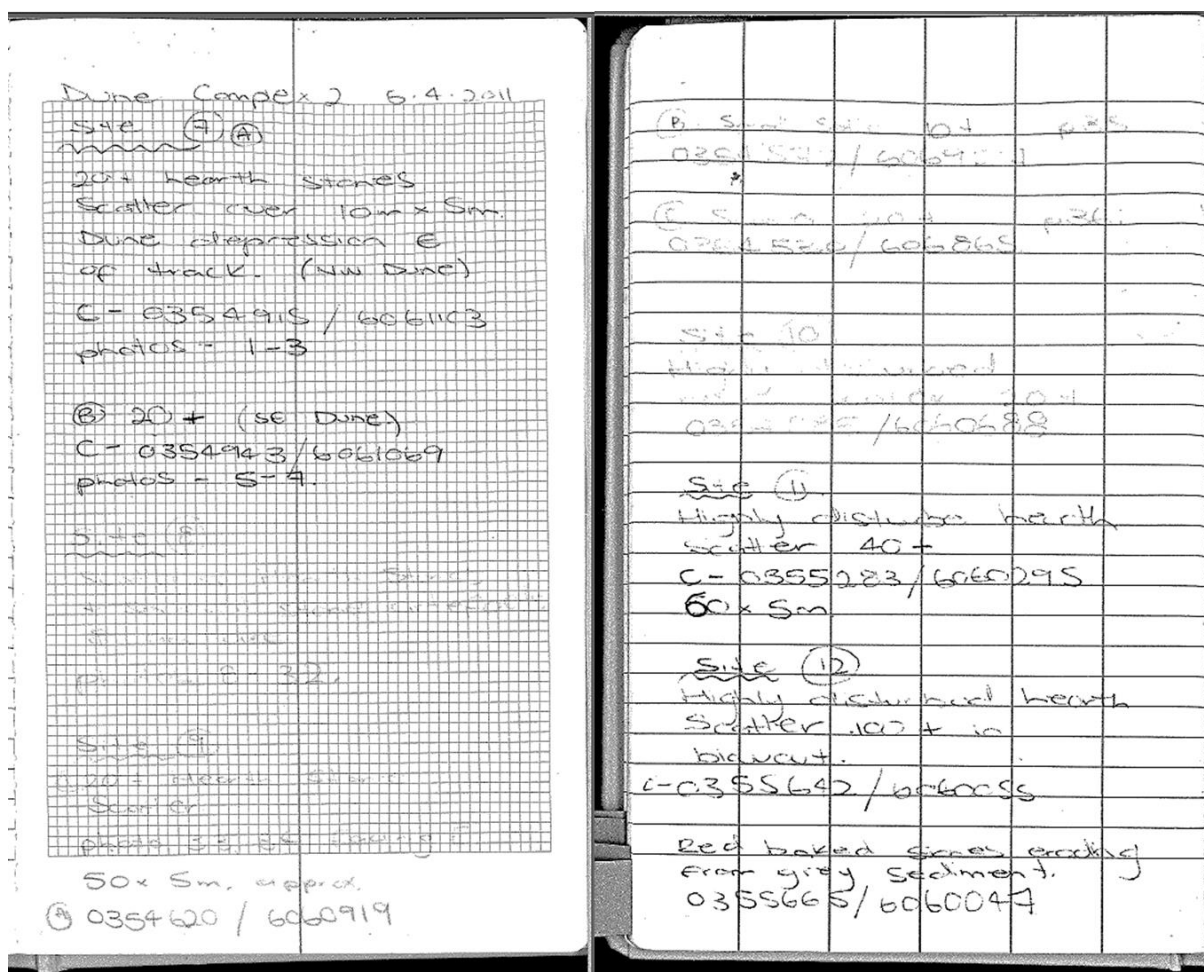


Figure 5.50 Less detailed observations (Wiltshire 2010-2011)

At the same time, my connection with the Ngarrindjeri Nation shifts as a result of this role. In particular, I experience first-hand the added pressures placed upon members of the Ngarrindjeri Nation, particularly in light of the partnership between NRA and the State Government. The relaxed social atmosphere that characterised my connection prior to the development of NRA has disappeared, only to be replaced by an endless feeling of being attacked from all angles due to various, non-stop external pressures from government, industry and researchers. As a result of these pressures, short-term archaeological surveys seem to be the main means of determining Ngarrindjeri interests in areas to be revegetated. This privileging of archaeological practice results in feelings of frustration amongst my NRA colleagues. At the same time, my role as a Heritage Specialist provides an opportunity to experience the privileging of archaeological practice that this PhD research will eventually seek to challenge.

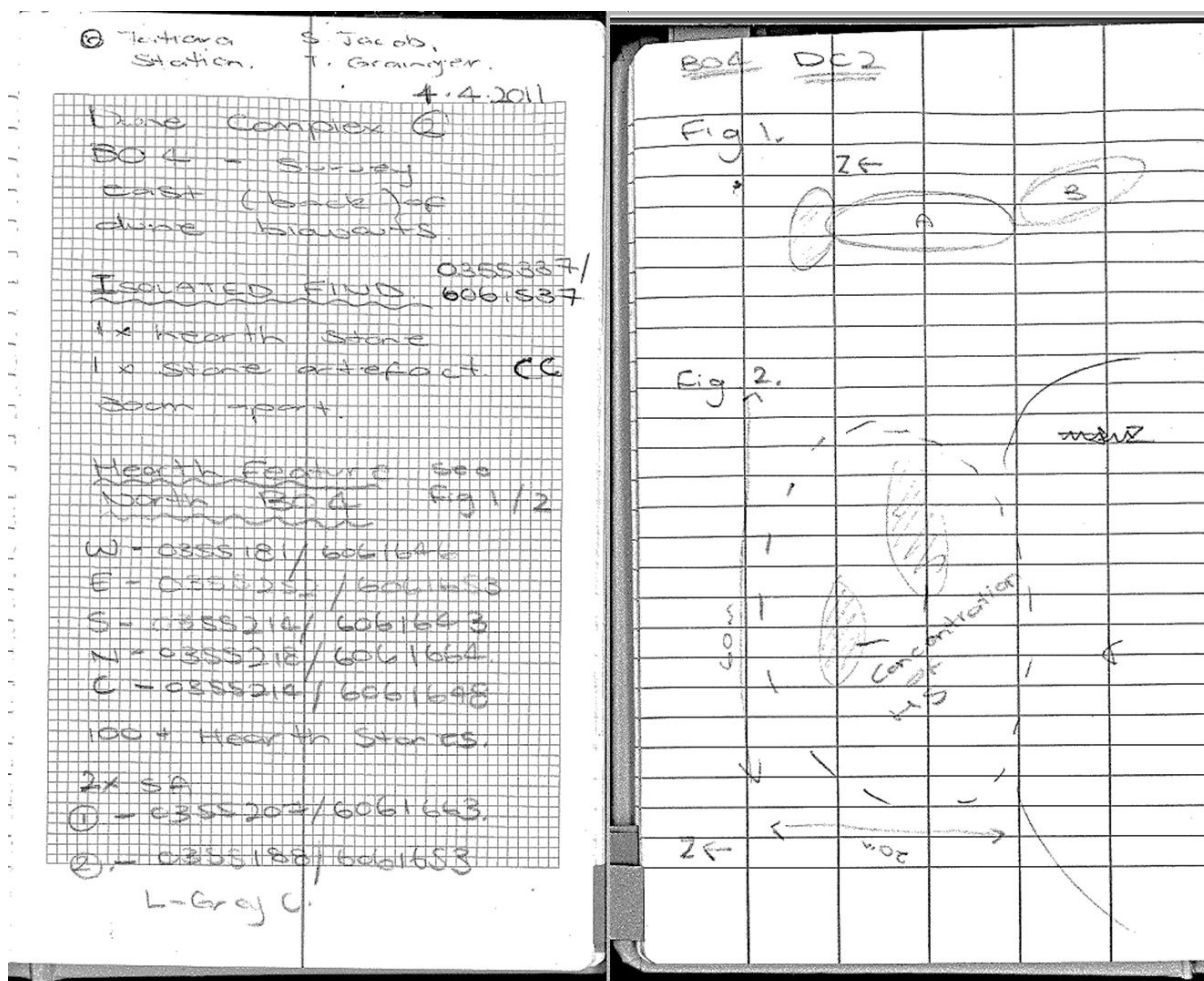


Figure 5.51 Routine observations (Wiltshire 2010-2011)

As a result of this role and its busy nature, observations from these final archaeological surveys are never formalised into an archaeological report (see Wiltshire 2011); an outcome that produces a distinctly ‘messy’ feel. Despite this, questions remain regarding the large quantity of stone artefacts and the distinct lack of middens observed during archaeological investigations, both of which contrast with “generally accepted hypotheses” (cf. Wood 1993:9) for the region. Given Waltowa Wetland is characterised by aeolian dunes subject to erosion that are generally associated with a lack of surface integrity, preliminary interpretations of Ngarrindjeri lifeways based on these observations are also likely to be problematic (see Ashmore and Griffiths 2011:5; Holdaway et al. 2008; Rick 2002). Specifically, observations of Old People’s belongings and places may reflect taphonomic processes rather than the complexity of Ngarrindjeri lifeways. Given the problematic nature of preliminary interpretations based on archaeological surveys, undertaking archaeological excavation at Waltowa Wetland seems like the next logical step; an activity that was discussed early on in the PhD, subject to “ongoing community collaboration throughout all

stages of research” (see Appendix 3). For the most part, the act of excavation would allow for the establishment of a preliminary chronology; an act there seems like a self-evident process in order to better understand Ngarrindjeri Lifeways at Waltowa Wetland.

Waltowa Wetland Workshop

In light of completing archaeological surveys at Waltowa Wetland, I commence co-ordination of a one day workshop to present results of these surveys and discuss the possibility of excavation with broader members of the NN. The flyer designed for the workshop visually emphasises the Pink Lake, dunes and stone artefacts as prominent features of Waltowa Wetland (see Figure 5.53). The workshop is structured to provide an opportunity to share knowledge regarding Waltowa Wetland between generations of Ngarrindjeri people as well as the broader non-Ngarrindjeri community. As a means to emphasise the interconnection that exists between culture and nature in-line with Ngarrindjeri philosophy of *Ruwe-Ruwar*, staff from DEWNR are also invited to participate and share results of recent environmental research undertaken at Waltowa Wetland. Lastly, NRA colleagues arrange for workshop and a site visit to be recorded by Change Media to coincide with the production of a documentary (see Change Media 2012b, 2013).

Subsequently, a “big mob” (T. Trevorrow, Pers. Comm., in Change Media 2012b) turns out for the Waltowa Wetland Workshop. At its commencement Uncle Tom Trevorrow gives a Welcome to Country, followed by a presentation by DEWNR Project Officer Kate Mason. In her presentation, Kate emphasises the heavily modified nature of Waltowa Wetland as a result of the culvert that restricts inflows of freshwater from Lake Albert; however, this culvert *does* allow for manual management of water levels that promote the most beneficial floral and fauna responses. Kate also emphasises there is a need for better connection with Lake Albert in order to reduce salinity in Waltowa Wetland. Following this, Living Murray Icon Site Co-ordinator Adrienne Friers discusses her role in trying to promote and secure environmental water for the Coorong, Lower Lakes and Murray Mouth (CLLMM) icon site. Adrienne emphasises wetlands such as Waltowa Wetland are “dying” (A. Friers, Pers. Comm., in Change Media 2012b) because there is not enough water coming to the CLLMM region from the MDB. In this sense, the workshop and the subsequent production of a documentary provide a means to promote the collaborative research being undertaken by government, scientists and the Ngarrindjeri Nation, in hopes of securing environmental water for the CLLMM region. Thirdly, Grant Rigney—Indigenous Facilitator for the CLLMM icon site—provides a Ngarrindjeri perspective on the previous presentations. Grant discusses the

importance of cultural water and how much is required to ensure the cultural significance of areas like Waltowa Wetland are sustained and managed effectively. In doing so, Grant emphasises how the NN are working with government and researchers to meet their cultural obligations in managing *Yarluwar-Ruwe*, by inserting the philosophy of *Ruwe/Ruwar* into management of areas like Waltowa Wetland to ensure a sustainable future for the NN. Lastly, Grant points out how archaeology is assisting in supporting the interests of the NN in areas like Waltowa Wetland.

Following this I present the results of archaeological investigations undertaken to date and how these investigations have provided a better understanding of Ngarrindjeri lifeways at Waltowa Wetland. My presentation emphasises the archaeological significance of Waltowa Wetland, which I maintain may not necessarily reflect Ngarrindjeri significance. Specifically, my presentation highlights the high density of stone artefacts produced from non-local raw materials. Based on these observations, I argue non-local raw materials were transported to Waltowa Wetland for the production of stone artefacts. My presentation also notes the large amount of heat fractured stone present at Waltowa Wetland, which—together with stone artefacts—are higher in density in areas adjacent to the wetland. In these high density areas there is a notable increase in the density and variety of ‘tools’ present, including a number of artefacts with resin indicating the manufacture of very specific, composit weapons. My presentation also describes the contrasting Old People’s belongings present at the two adjacent areas and that two distinct activities appear to be occurring in this location. In describing these areas I highlight how heat fractured rocks appear to be eroding from the dune crests, as opposed to the sheltered, internal sides of the dune blowouts. Comparing Old People’s belongings present at Waltowa Wetland to other areas within Ngarrindjeri *Yarluwar-Ruwe*, I state Waltowa Wetland has one of the highest—if not *the* highest—density of Old People’s belongings I have seen in my previous experience as an archaeologist within the region. Whilst I speculate this *may* be due to Waltowa Wetland’s high ground visibility as a dune landscape, I also maintain I have never encountered anything like the nature of this ‘archaeology’ in similar dune landscapes within the region. Lastly, I emphasise the lack of middens located at Waltowa Wetland and how I find this surprising, given the literature maintains middens are one of the most common ‘site’ types within the region. In relation to this, I point out that previous archaeological investigations within the region have concluded stone artefacts were not readily available nor used. In doing so, I muse about the ways in

which a history of amateur collection may have impacted understandings of Ngarrindjeri stone artefact manufacture and use.



**WALTOWA WETLAND
WORKSHOP**

Wednesday 5th December 2012
10am – 2pm
Camp Coorong, Meningie

Join us for an opportunity to
discuss the past, present and future
importance of Waltowa Wetland.

This workshop will discuss how
Ngarrindjeri heritage and natural
resource management has contributed
to the importance of Waltowa Wetland.
The workshop will also act as a forum
to discuss future research and
management aspirations. Workshop
includes site visit to Waltowa Wetland.
Formal accreditation for eligible
participants. Lunch provided.

Ngarrindjeri
Yarluwar-Ruwe

R.S.V.P. 30th November 2012
kelly.wiltshire@ngarrindjeri.org.au
Mob: 0419 839 647

Figure 5.52 Waltowa Wetland Workshop flyer.

In describing the ways in which results from Waltowa Wetland contrast with previous archaeological investigations carried out within the region, I highlight the diversity of habitats and environments that make up Ngarrindjeri *Yarluwar-Ruwe*. I argue applying the results from limited archaeological investigations to *Yarluwar-Ruwe* more broadly is highly problematic. Despite this, I believe archaeological investigations at Waltowa Wetland

provide an opportunity to challenge and refine previously developed regional models and build a better understanding of the complexity of Ngarrindjeri lifeways. I also emphasise the issues with these results; namely, Waltowa Wetland is characterised by aeolian dunes subject to high erosion rates and Old People's belongings visible on the surface lack chronological integrity required to contribute to existing regional models. To address this I suggest archaeological excavations at Waltowa Wetland could be carried out; however, given the culturally sensitive nature of this activity I did not wish to "charge ahead" with this excavation. Despite this, I once again highlight the high rate of erosion at Waltowa Wetland and how excavation might provide an opportunity to develop a better picture of Ngarrindjeri lifeways before Old People's places succumb to this erosion. I also suggest alternative avenues of further investigations, including obtaining a preliminary chronology through surface sampling and the testing of stone artefacts with resin. Lastly, I emphasise archaeological excavation at Waltowa Wetland is not necessary and will only be carried out under the direction of members of the Ngarrindjeri Nation.

Following my presentation, I am asked by a NRA colleague if Old People's materials were removed during archaeological investigations. In response, I emphasise only stone artefacts with resin were removed, due to their "rarity" and the possibility they may never be relocated for further analysis due to their size. Furthermore, I emphasise receiving permission from NHC to removed these particular stone artefacts and they are currently in storage on country at CC's keeping place. Every other stone artefact shown in the presentation remains on country, including my favourite unifacial point that I try to relocate everytime I return to Waltowa Wetland—not always successfully. In response to my presentation, Grant also raises concerns about impacts of livestock on Old People's places; however, I maintain the high rate of erosion is a much larger threat to these places. In response Grant suggests Waltowa Wetland should be the focus of revegetation activities in order to manage and protect Old People's places.

Following these questions, Uncle Tom—who had been quietly sitting in the audience—stands up to share his knowledge of Waltowa Wetland. Uncle Tom proceeds to emphasise how Waltowa Wetland is a significant part of lands and waters around Lake Albert and how Ngarrindjeri people have been living there a long, long time. Uncle Tom proceeds to share how many years ago an Aboriginal group from Victoria tried to occupy Ngarrindjeri *Yarluwar-Ruwe*. In response, members of the Ngarrindjeri Nation gathered and camped at Waltowa Wetland where a great battle ensued. The blood that was shed by these Ngarrindjeri

Old People fighting for Ngarrindjeri country is evidenced by the Pink Lake. Uncle Tom explains this is a story he learnt whilst growing up in the area. As a result, he would see the dunes at Waltowa Wetland from the Princes Highway and wanted to go have a look because he knew from this story that is where the Old People used to camp; however, Ngarrindjeri were not allowed to visit these areas of *Yarluwar-Ruwe* because they were on private property and “trespassers get prosecuted” (T. Trevorrow, Pers. Comm., in Change Media 2012b). Ngarrindjeri people were denied access to the places of their Old People in their lands and waters. Subsequently, Uncle Tom emphasises the importance of the archaeological investigations at Waltowa Wetland in acting as a facilitator for Ngarrindjeri people to reconnect with their heritage. Ngarrindjeri people can now see where the Old People used to camp and how the stone artefacts fit with their stories. As a result, Uncle Tom states the NN now have that story in “black and white” (T. Trevorrow, Pers. Comm., in Change Media 2012b), making reference to the reports produced as a result of the archaeological investigations.

Gesturing his hands in the direction of Waltowa Wetland (see Figure 5.53), Uncle Tom proceeds to describe the tall reeds that used to grow there, reminiscing about collecting 200 or more swan eggs at a time in his younger days with his Ngarrindjeri brothers. The wetland used to also be full of turtles and fish; however, since the 1960s Uncle Tom has witnessed Waltowa Wetland slowly die and this concerns him greatly. Responding to the presentations given by DEWNR staff about management of Waltowa Wetland, Uncle Tom cheekily points out Ngarrindjeri people never had to manage wetlands because wetlands managed themselves; but given the historical mismanagement and drought conditions within Ngarrindjeri *Yarluwar-Ruwe* more broadly, wetlands including Waltowa Wetland now require active environmental and cultural management.



Figure 5.53 *Uncle Tom discusses the importance of Waltowa Wetland (courtesy of Change Media 2012b)*

Following Uncle Tom's presentation we break for lunch, before a convoy of cars carrying workshop participants heads out to Waltowa Wetland. Despite being tired, Uncle Tom decides to join the convoy at the last minute. I am over-joyed, appreciative and relieved; Uncle Tom's presence ensures Ngarrindjeri knowledges of Waltowa Wetland will not be drowned out by the archaeological knowledge. Following a 15 minute car ride, the convoy of cars drive up to the first blowout and workshop participants step out into its bright, sandy surface. I lead the group to the first blowout where there is a dense scattering of heat fractured rocks (see Figure 5.54). The occasional low hum of a truck travelling along the Princes Highway can be heard in the distance as it races past the Pink Lake. Once all the workshop participants have congregated, Uncle Tom draws their attention to the heat fractured rocks that indicate this is an Old People's place where a high density of fire, camping and gathering occurred. Uncle Tom also emphasises the presence of stone artefacts used to make weapons, which is in-line with Old People's stories of Waltowa Wetland. There is great enthusiasm for both Uncle Tom's stories as well as the sea of Old People's belongings that surround us. Station owners Barry and Trisha McClure have joined the group and ask about the presence of fractured rocks on high points, to which Uncle Tom points out Old People never had fires on high points unless they were signal fires to indicate a ceremony or event had commenced. In response to this, Grant mentions the use of signal fires in the

NN's first reburial of repatriated Old People to let members of the NN know that ceremony had commenced (see Figure 5.4).

The convoy of workshop participants proceed to an adjacent dense stone artefact scatter, where I point out the general location of my favourite unifacial point as the workshop participants disperse. The blowout is peppered with people and there is a sense of excitement



Figure 5.54 Grant Rigney, Laurie Rankine Jnr, Uncle Tom Trevorrow and I looking at heat fractured rocks at Waltowa Wetland (courtesy of Change Media 2012b)

at encountering and examining the many stone artefacts present. I take great pride in showing participants some of the familiar stone artefacts. Within 5 minutes of our arrival Ngarrindjeri rangers have found my favourite stone artefact, which is passed around and examined with great enthusiasm (see Figure 5.55). After about an hour at Waltowa Wetland the convoy heads our separate ways. I thank Uncle Tom for taking his time to contribute to the workshop and site visit. In weeks that follow the workshop, NRA colleagues express to me the importance of this event in providing an opportunity for knowledge exchange not only between Ngarrindjeri and non-Ngarrindjeri people, but between older and younger generations within the Ngarrindjeri community. I had not comprehended the importance of this event to members of the Ngarrindjeri Nation; rather, I had considered the workshop as a vehicle to discuss the possibility of archaeological excavation. Most importantly, however, the workshop would be one of the last times spent with Uncle Tom on *Yarluwar-Ruwe*.

Post-Workshop Planning

Following the workshop, my attention is still focused on the prospect of undertaking archaeological excavation; however, given Waltowa Wetland is characterised by aeolian dunes subject to erosion, areas of in situ Old People's belongings will need to be identified if excavation is to take place. I invite geomorphologist Dr Peter Mitchell to undertake a site visit at Waltowa Wetland to obtain further knowledge of dune formation processes and assist with the identification of such areas. Subsequently, Mitchell examines exposed stratigraphic sections at Waltowa Wetland in order to suggest possible formation processes as well as a possible stratigraphic context for Old People's belongings, both of which he states can be verified through archaeological excavation and radiocarbon dating (P. Mitchell, Pers. Comm., 2013). Mitchell also identifies an eroding hearth within the internal sides of a dune blowout that would be suitable for excavation. Following this identification, I review previous observations contained within my notebook and subsequent reports to identify eroding hearths of a similar nature. Three eroding hearths are identified for potential archaeological



Figure 5.55 *Examining my favourite artefact at Waltowa Wetland*
(courtesy of Change Media 2012b)

excavation (see Figure 5.56). In addition to this, geophysical surveys are undertaken at Waltowa Wetland to try and locate in situ hearths suitable for archaeological excavation. As a result of these surveys, four anomalies are detected that are likely to be in situ hearths (see Ross 2013).

Following the identification of these areas, discussions continue with NRA regarding archaeological excavation; however, my connection with the Ngarrindjeri Nation has made me acutely aware of the sensitive nature of archaeological excavation and potential contemporary consequences for Ngarrindjeri people from disturbing Old People's belongings and places. Despite this underlying concern, we discuss the possible excavation of in situ as well as eroding hearths, allowing for a certain level of flexibility regarding where excavations may be focused. Specifically, the discussion of in situ hearths highlights the likelihood this will impact upon currently undisturbed Old People's belongings, with the potential to accelerate erosion in those areas. On the other hand, excavation of eroding hearths will provide an opportunity to gain knowledge in lieu of further erosion. The excavation of eroding hearths will also provide an opportunity to undertake short-term and long-term management actions such as sand bagging and revegetation, which will assist in the protection of Old People's belongings undisturbed by excavation. In light of these discussions, NRA colleagues determine eroding hearths are the preferred area to undertake archaeological excavation.

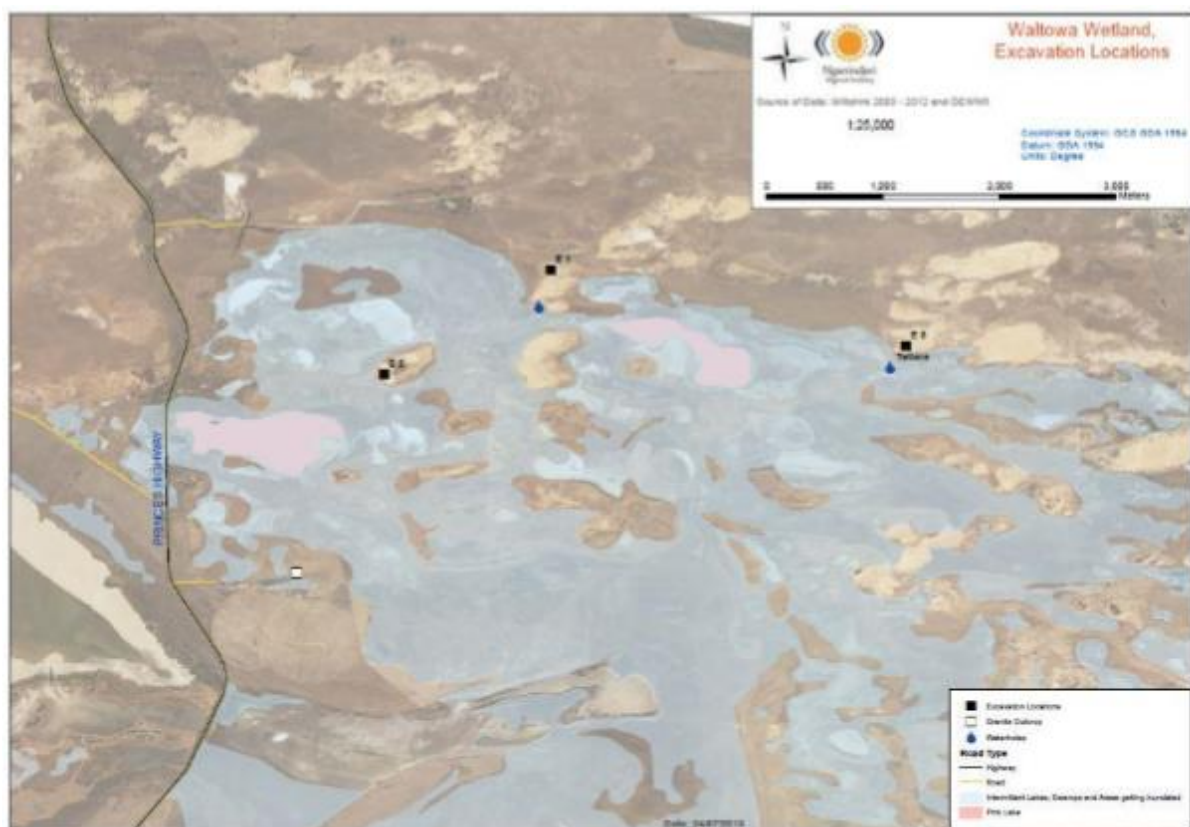


Figure 5.56 Potential excavation locations at Waltowa Wetland (courtesy of NRA 2013)

In order to excavate eroding hearths, I propose a specialised excavation method that combines a traditional excavation square and a column sampling approach (see Wiltshire 2013a:8-11 for full description; see Appendix 7). This excavation method proposes the x axis of the excavation will be a maximum of 2m to allow the full width of the hearth to be excavated and recorded. In contrast, the y axis will be 50cm in breadth in order to respect the sensitive nature of archaeological excavation and limit its impact on Old People's belongings (See Figure 5.57). In addition to this, the post-excavation analysis is proposed to be undertaken at CC, respecting Ngarrindjeri cultural protocols by ensuring all Old People's belongings remain within *Yarluwar-Ruwe*. Lastly, any Old People's belongings removed during archaeological excavation will be reburied in their associated area in order to once again respect these cultural protocols (see Wiltshire 2013a:14).

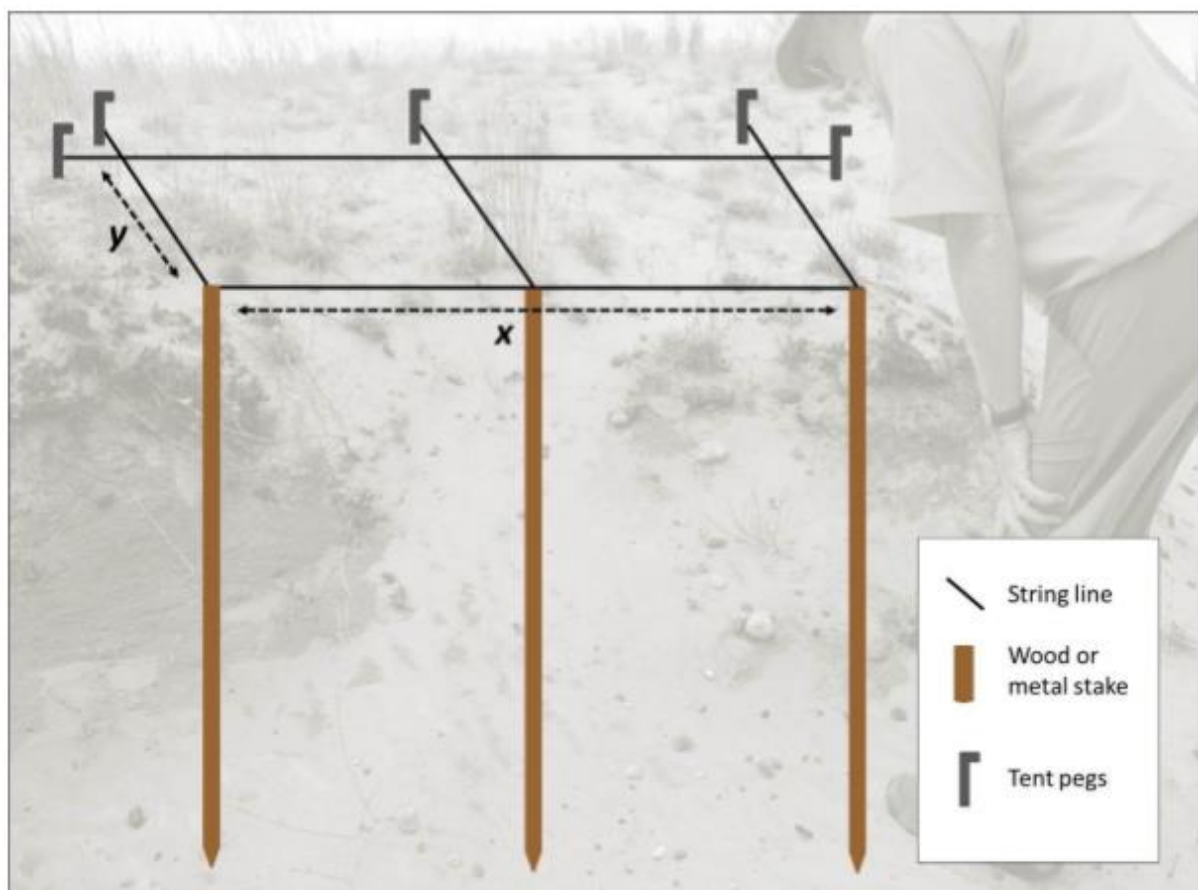


Figure 5.57 *Potential excavation method (Wiltshire 2013a:9)*

Despite adopting a flexible approach and devising excavation methods with a view to respect Ngarrindjeri cultural protocols, I am concerned there has been a lack of sufficient discussion regarding excavation and initiate further discussions with NRA colleagues over a prolonged period. In some cases discussions are held at fortnightly Ngarrindjeri *Yarluwar-Ruwe* (NYR)

meetings; however, my role as a Heritage Specialist that results in working closely with members of the Ngarrindjeri Nation on a daily basis also provides an opportunity for regular and informal one-on-one discussions. As a result of these discussions I become aware of conflicting perspectives regarding archaeological excavation that are not necessarily expressed within a meeting context. Whilst on the surface it appears members of the NN are generally supportive of archaeological excavation, there is an undercurrent of concern that archaeological excavation is not culturally appropriate due to its destructive nature. These concerns produce a growing sense of unease regarding the act of excavation, despite my archaeological sensibilities telling me excavation is the next logical step. On voicing this sense of unease, NRA colleague Tim Hartman interprets as my *miwi* talking to me (see Bell 2014:218-225). In light of this I am apprehensive to pursue archaeological excavation; an apprehension produced by wanting to respect Ngarrindjeri cultural protocols. At the same time, however, this apprehension produces frustration with members of Ngarrindjeri Nation who are supportive of archaeological excavation. Amidst these prolonged and ongoing discussions, respected Ngarrindjeri Elder Uncle Tom Trevorrow passes away suddenly. I am devastated. The physicality of Uncle Tom's absence is felt by all.

Interlude – The Archaeology of Absence⁴⁰

Writing a thesis can evoke a range of emotions. At times there is burning passion that keeps you writing for days (and nights) with the sense your research is truly making a difference. At other times there is the head thumping pain that leaves you incapable of stringing two sentences together. And sometimes there are tears. At times they are the tears of too many late nights, too many deadlines and too much caffeine; but they can also be the tears of the emotional involvement one has with their thesis. Personally, these tears result from the realisation that the ‘archaeology’ I am researching is as emotionally charged as it is politically for those who seek to care for, protect and preserve it. Ngarrindjeri people are capable of truly caring for the ‘things’ commonly referred to as ‘archaeology’. They become stressed and suffer from poor health when it is not cared for, go to court in order to protect it and ultimately pass away before their time trying to preserve it. Thus, with such tears comes the realisation that what you are researching is not ‘archaeology’ at all, but are being invited into the lives of people who are spiritually, emotionally and physically connected to the well-being of some-‘thing’ that is not just part of their country but is also part of them.

⁴⁰ The title of this interlude—written shortly following Uncle Tom’s passing—takes inspiration from Buchli and Lucas (2001:122), who state death “(always) leaves its trace, if only in the gap left by its absence, an absence as physical as any presence”.

Unsuccessful Assembling

In the months that follow, I decide to commence the delicate task of pursuing the permit necessary to undertake archaeological excavation in SA (Wiltshire 2013a; see Appendix 7). A research design produced as part of the application process emphasises a collaborative approach to excavation, which “(will) combine archaeological research with contemporary Ngarrindjeri knowledge to develop a collaboratively constructed understanding of Ngarrindjeri connections, significance and life ways associated with Waltowa Wetland” (Wiltshire 2013a:1). In reviewing this research design, it is clear I was seeking to privilege both archaeological and Ngarrindjeri knowledges in better understanding the complexity of Ngarrindjeri lifeways at Waltowa Wetland. The research design maintains “archaeological excavations [will] also aim to provide an opportunity for Ngarrindjeri organisations, elders and individuals to critically reflect on the excavation process and resulting data in better understanding of Ngarrindjeri life ways associated with Waltowa Wetland” (Wiltshire 2013a:3). Despite this, the excavation aims “(to) obtain in situ data in order to provide stratigraphic and chronological context for cultural material variability observed during pedestrian surveys” (Wiltshire 2013a:2); aims that seem to reflect my interests as an archaeologist rather than the inspirations of the NN. In addition to proposed excavations, further investigations also include 13 proposed surface sampling locations, as a means to contextualise excavation results by obtaining a broader understanding of intra-site chronology across the Waltowa Wetland landscape.

As I’m working full-time at NRA, it takes several months to draft and submit the excavation permit, including the production of a detailed research design, creation of recording forms, labels and maps, and obtaining the letters of permission from NHC and NRA. I feel a sense of achievement when the application is complete. As I pour over the application one last time, I have a sudden realisation: this is an application for a Section 21, 23 and 29 seeking permission from the Minister of Aboriginal Affairs to interfere with or damage an Aboriginal site or object. By submitting this application the Ngarrindjeri Nation is effectively supporting the legal destruction of their Old People’s places and belongings. Knowing this would be against Ngarrindjeri cultural protocols, I do not submit the application and set about discussing with NRA colleagues alternative ways to proceed with the excavations.

In the discussions that ensue, members of the Ngarrindjeri Nation decide they have a right to interact with and manage their Old People’s places on their own terms, with excavation providing a mechanism for this interaction. Members of the Ngarrindjeri Nation decide they

do not need to obtain a permit to interact with the places of their Old People. Instead, NHC sends a letter to AARD reframing excavation as “cultural activities” and exerting their cultural rights under Section 37 of the Aboriginal Heritage Act (AHA) 1988, which states “nothing in this Act prevents Aboriginal people from doing anything in relation to Aboriginal sites, objects or remains in accordance with Aboriginal tradition” (see Appendix 8); however, what is deemed as “Aboriginal tradition” seems to vary depending on who is currently employed to administer the Act on behalf of the Minister for Aboriginal Affairs. Subsequently, the letter states:

Cultural activities at Waltowa Wetland will include Ngarrindjeri people directly interacting with physical traces of their heritage. Some of these interactions will include the physical ‘excavation’ (previously referred to as archaeological excavations) of this heritage, which will be undertaken respectively by Ngarrindjeri individuals and managed appropriately by NHC and NRA in order to adhere to Ngarrindjeri cultural protocols and fulfil Ngarrindjeri research objectives. As such, some of the knowledge gained during this cultural activity will contribute to Kelly Wiltshire’s PhD research, which is being undertaken in collaboration with NHC and NRA. As a result, Kelly will contribute to and assist with this specific cultural activity as directed by NHC, NRA and Ngarrindjeri individuals (NHC 2014:1).

The letter also makes reference to perceived risks and the cultural protocols in place in order to address such risks, which include the selection of appropriate areas and methods in order to undertake cultural activities. As a result, the letter states:

...from a Ngarrindjeri perspective there are no perceived risks associated with the interaction between Ngarrindjeri people and the physical traces of their heritage as a result of these cultural activities. Any such interaction will continue to be managed respectfully by NHC and NRA on the behalf of the Ngarrindjeri Nation in accordance with previously mentioned Ngarrindjeri cultural protocols. Ngarrindjeri reserve the right to interact with and manage their heritage at their own discretion, in line with Section 37 of the *Aboriginal Heritage Act 1988*. Therefore, this letter is a gesture of goodwill on behalf of NHC in order to notify Aboriginal Affairs and Reconciliation Division (AARD) of NHC’s intention to undertake these cultural activities (NHC 2014:1).

In response to this letter, negotiations ensue between NRA, NHC and AARD, with AARD taking issue with my proposed role to “(assist) with this specific cultural activity as directed...” (NHC 2014:1), essentially leaving me in breach of Section 21 of the AHA. As a result, an agreement is reached whereby only Ngarrindjeri people will undertake excavation, with my role delegated to the supervision of excavation and therefore not in breach of AHA.

Despite the lengthy discussions that have occurred in the lead up to reaching this agreement, there still seems to be an undercurrent of concern from NRA colleagues regarding the cultural appropriateness of archaeological excavation. In particular, some colleagues point out

that members of the Ngarrindjeri Nation may only be supportive of excavation as a result of my long-term connection with them; in other words, members of the Ngarrindjeri Nation are happy for *me* to excavate despite the cultural inappropriateness of this activity. During my own internal struggles regarding whether to proceed with excavation, this had crossed my mind and made me conscious of the complexity of my connection with the Ngarrindjeri Nation. Did members of the Ngarrindjeri Nation feel obligated to support excavation because of our long-term connection? The process of whether or not to excavate was proving more and more complex.

In addition to this, I start to experience the gender-based knowledges and divisions relating to Waltowa Wetland. Indications regarding the gendered nature of Waltowa Wetland start to emerge within the context of assembling the first report. Specifically, a statement from this report makes reference to:

...the large amount of stone artefacts recorded within this area and the knowledge that Ngarrindjeri women of the Coorong were not allowed to possess sharpened stone artefacts, it is possible that [this blowout] was predominately being utilised by Ngarrindjeri men...(Wiltshire 2009a:93).

By the time the detailed recording is undertaken there is a growing awareness—and concern—regarding this gendered nature, which result in field-work participants being smoked during archaeological investigations (see Figure 5.28). Determining, however, the exact source regarding the gender-based nature of Waltowa Wetland is complex due to cultural protocols that influence the way in which knowledge is shared. Specifically, the gendered nature of Waltowa Wetland was not noticeably shared from a single source, but developed slowly as knowledge is shared in fragments (cf. Bell 2014:393); a common practice, as Ngarrindjeri Elder Uncle Neville Gollan (in Bell 2014:392) explains:

It could take three months, three years for them to tell you that one story complete...You'd be invited in an given bit of knowledge and depending on your behaviour, if they thought you were worthy, your be given the stories.

Ngarrindjeri Elder Uncle George Trevorrow (in Bell 2014:392) also explains how non-immediate comprehension was also part of the way in which knowledge would be shared:

She never spoke straight out and told me things. She was one of those elders that spoke almost in riddles...You'd have to go away and think about that. Then the answer would come to you later, what she really meant.

Thus, an understanding of the gendered nature of Waltowa Wetland developed slowly as archaeological investigations unfolded, but became more pronounced in the context of

potential excavations. Most notably, some NRA colleagues express their concern at *my* involvement as a *mimini* in the excavation of an area associated with *korni* gendered knowledges, which may result in contemporary consequences for myself and those involved with this activity. In response to these concerns the act of excavation shifts again, with this activity to be undertaken only by Ngarrindjeri *Kornis*. This concern also results in a number of meetings to discuss archaeological excavations at Waltowa Wetland; however, members of the Ngarrindjeri Nation respect the gender-based knowledge boundaries associated with Waltowa Wetland that prohibits my involvement as a *mimini* in these meetings. In turn, keeping a distance from these meetings demonstrates my respect for these gender-based knowledge boundaries. Furthermore, respecting Elders and their decisions—as well as knowledge boundaries—ensures I never question decisions regarding the act of excavation; decisions I assume are informed by the gendered nature of Waltowa Wetland and thus cannot be privy to.

In response to these emerging concerns, I again delay proceeding with archaeological excavation and instead facilitate a focused group discussion with NRA colleagues and members of various Ngarrindjeri organisations, in order to think through, discuss and make a final decision regarding excavations. Expanding upon my research design, I carry out a presentation outlining the benefits of excavation at the commencement of the discussion (see Wiltshire 2014g). By taking a collaborative approach, I argue the excavation will provide an opportunity to critically reflect on process and production of archaeological knowledge in order to privilege Ngarrindjeri knowledges. The excavation will also provide an opportunity to demonstrate the value and validity of Ngarrindjeri knowledges about Waltowa Wetland. Secondary to this, the excavations will provide an opportunity to better understand Ngarrindjeri lifeways at Waltowa Wetland, in turn contributing to understandings of Ngarrindjeri lifeways on a broader regional scale.

As the discussion ensues, there is an air of undecidedness regarding excavations at Waltowa Wetland. By this point discussions regarding excavation have been unfolding for over 12 months, mostly due to respecting the pre-existing responsibilities, obligations and commitments of the NN that are prioritised in-lieu of these discussions. Despite this, I am desperate for a decision as to whether I should precede with excavation; by this stage my PhD scholarship has run out, my submission date is looming and time feels as though it is slipping away. The strain, stress and uncertainty of undertaking excavation is weighing heavily on my mind this day and as the discussion heads towards uncertainty, I break down and cry. “*I don’t*

care whether I excavate or not. I just need a decision. I need to move on with my life!'". I cannot stop crying and in light of my emotional state the discussion comes to an end. No decision is reached this day and more discussions are planned in my absence.

By this time I feel I am right in the thick of the mess; up to my knees in mud, metaphorically speaking (cf. Nicholas 2009:49). I am mentally and emotionally exhausted. Experiencing and witnessing the stress the act of potential excavation is causing myself and members of the NN, I decide to cease pursuing this activity in the days following this discussion. In short, the connections needed to successfully undertaken archaeological excavation have fallen apart. In turn I feel as though my PhD has also fallen apart; I'm not sure how to proceed with a PhD that is absent of excavation. Despite maintaining that excavation was not necessary, it seems I was relying on this activity to authenticate my PhD more than I imagined. Without its existence, the focus and purpose of my PhD is now more uncertain than ever.

In light of this uncertainty I set out in search of answers. In the weeks following the decision to no-longer pursue excavation, I have one-on-one conversations with my PhD supervisors, NRA colleagues and members of the Ngarrindjeri Nation about the focus and purpose of my PhD. "*What do you think my PhD is about?*", I ask. To my surprise they all provide similar answers: to critically reflect upon archaeological practice. In the weeks and months following these discussions I begin to re-engage with the once impenetrable and incomprehensible ANT related literature. I also engage with sociologies of scientific practice and ethnographies of archaeological practice literature, which allow for a greater comprehension of ANT's concepts and their application in my PhD. Piece by piece, the focus of the PhD becomes clear. I come to realise my PhD is no-longer 'traditional' archaeology PhD project with a slightly left-of-centre theoretical framework, but a PhD where the results are the *process* of undertaking archaeological practice. In my pursuit of archaeological investigations—particularly excavation—it would seem I lost the true focus of my PhD research; and in a rather dramatic fashion, the PhD had to fall-apart in order to comprehend this focus. Thus, the PhD research that commenced and was mostly carried out under the focus and title of "Ngarrindjeri Lifeways at Waltowa Wetland", emerges as "an auto-ethnography of archaeological practice with and for the Ngarrindjeri Nation".

Chapter 6 – Discussion: Further Disassembling

The researcher must not get up on any high horse but must be humble
and let the actants speak.
(Alvesson and Sköldberg 2009:33)

This chapter presents a detailed discussion of the auto-ethnography presented in the previous chapter, which comprise a number of key findings. Drawing upon the conceptual tools, metaphors and vocabulary of ANT, this chapter further disassembles the assemblage of heterogeneous actants described within the auto-ethnography. This discussion focuses on the how connections assemble, how they shift and—in some cases—how these connections fall-apart over the course of archaeological investigations at Waltowa Wetland. In doing so, this chapter provides a better understanding of the successful and unsuccessful connections that contribute to and resist the production of archaeological knowledge; connections that are usually obscured within linear accounts of research.

6.1 Key Findings

The auto-ethnography's key findings have been categorised into three themes. The first theme discusses the agency of the Ngarrindjeri Nation in reassembling archaeology and archaeologists. The second theme explores how archaeological investigations remain sheltered from this agency, whilst giving rise to a mutually constitutive connection between archaeologist and 'archaeology'. The third and final theme discusses the process of literary transcription where an assemblage of observations, photographs and text-based knowledges are reassembled to produce archaeological knowledge; a process that obscures the messy reality of archaeological practice.

Connection with the Ngarrindjeri Nation

The first theme that emerges from this research is the agency of the Ngarrindjeri Nation in actively reassembling archaeology and archaeologists; an agency that is initially obscured within the auto-ethnography. The auto-ethnography presented within the previous chapter commenced by describing the assemblage of influential experiences and interactions that ultimately allowed for the development of a connection with members of the Ngarrindjeri Nation. In disassembling the development of this connection, the auto-ethnography describes the established connection between Flinders University researchers and the Ngarrindjeri Nation. For the most part, however, the reciprocal, mutually constitutive nature of this

established connection is obscured, with focus directed towards the activities of Flinders University researchers—as evidenced in an article based on my honours project:

...as a university student wishing to conduct my honours research with members of the Ngarrindjeri community, it is important to acknowledge these pre-existing relationships and the guidance of Flinders University researchers who have long-standing working relationships with the Ngarrindjeri community...These relationships and guidance were a key factor in my acceptance as a researcher by Ngarrindjeri community members (Wiltshire 2011:33).

In other words, the agency of the Ngarrindjeri Nation exercised in the development and maintenance of this established, long-term connection remains marginalised—or “black-boxed” (cf. Latour 1987, 1999)—within the auto-ethnography. Focusing on the role of Flinders University researchers obscures the mutually constitutive nature of this agency.

The capacity of Ngarrindjeri agency to influence other actants, including Flinders University researchers, is a result of the reciprocal, mutually constitutive relationship that exists between them. This is not to assert that Ngarrindjeri agency does not exist independently; rather, the Ngarrindjeri Nation “(require) the scaffolding of other people and things to make actions happen in the world” (Byrne et al. 2011:11). Therefore, the Ngarrindjeri Nation collaborates with Flinders University researchers in order to exercise agency and produce outcomes that privilege Ngarrindjeri interests, rights and responsibilities; a point emphasised by Grant Rigney (Change Media 2012b) during the Waltowa Wetland Workshop, who describes how the Ngarrindjeri Nation are working with researchers and government in order to insert the philosophy of *Ruwe/Ruwar* into management of areas like Waltowa Wetland. Without the establishment of such connections, the ability of the Ngarrindjeri Nation’s agency to influence other actants is limited (cf. Harman 2007:43; Latour 1988:160).

In light of this, the auto-ethnography proceeds to describe my activities and interactions with members of the Ngarrindjeri Nation during my honours research, where the mutually constitutive nature of this connection starts to become evident. For example, the terms of my honours project were actively negotiated and influenced by members of the Ngarrindjeri Nation in order to shift and reassemble its focus, methodology and outcomes. As a result, the agency of Ngarrindjeri Elders ensured archaeology, rather than Ngarrindjeri people, culture and history, were the focus of the honours project. In addition to this, Ngarrindjeri Elders who were negotiating the terms of this honours project were also actively negotiating the repatriation of Old People’s belongings with AARD. Ngarrindjeri Elders were interested to know the status of belongings removed during the Lower Murray Lakes Archaeological

Study (LMLAS) and why this study was never finalised—answers AARD were unable to provide at the time. As a result of these negotiations, Ngarrindjeri Elders and Flinders University researchers suggested the LMLAS would provide a timely case study to narrow the focus the honours project. Therefore, the choice of the LMLAS as a case study emerged from contemporary Ngarrindjeri concerns. Despite this, the auto-ethnography directs focus towards my negotiations and agency as a researcher, easily obscuring the agency of the Ngarrindjeri Nation.

In addition to influencing the focus of my honours, the agency of the Ngarrindjeri Nation resulted in a process of translation, ultimately influencing the development of my role as an archaeologist. During my honours research I describe how being “present” (cf. Bell 1998:284) provided an opportunity to be mentored—or “worked upon” (cf. Latour 1987, 1999)—by Ngarrindjeri Elders. This mentoring formed part of the work and negotiation involved in successfully assembling a connection with the Ngarrindjeri Nation; a connection that resulted in a process of translation and a shift in my “mindset” (cf. Smith and Wobst 2005a:7; Wiltshire 2011), accompanied by an understanding of the importance of respect—a core Ngarrindjeri value. This includes respect for knowledge, Elders and associated cultural protocols. In short, my connection with the Ngarrindjeri Nation provided practical lessons and experiences that no amount of reading, training or a degree could prepare me for. It was Ngarrindjeri agency, and not a book, that taught me how to undertake collaborative research in this context. Furthermore, the ethical responsibility developed from the criticisms of Ngarrindjeri Elders ensured this connection was maintained; a connection that provided numerous opportunities to gain experience and develop my skills as an archaeologist. Therefore, my continuing development as an archaeologist is a product of a mutually constitutive and ongoing connection with the Ngarrindjeri Nation.

The influence of Ngarrindjeri agency on my development and role as an archaeologist comes as no surprise, for members of the Ngarrindjeri Nation have never been passive bystanders to archaeology, archaeologists and the closely related collecting activities of non-professional amateurs. The Ngarrindjeri Nation has experienced a long history of their Old People and their belongings being stolen from *Yarluwar-Ruwe*; activities the Ngarrindjeri Nation have protested against for generations. In particular, members of the Ngarrindjeri Nation have always resisted the removal of Old People from their resting places—regardless of whether this removal occurred in a systematic manner or not. For example, in 1903 Ngarrindjeri people at *Raukkan* complained to the Aboriginal Friends Association of the theft of Old

People from *Kumarangk* (Hemming and Wilson 2010:188). Writing in the 1940s, anthropologists Ronald and Catherine Berndt recall:

Some work into the archaeological past of this region had been carried out prior to our period of research...[and] certainly other archaeological work has been done since then. Our reason for mentioning it here is to note that in the early 1940s some of the older people including Albert Karloan and Pinkie Mack were outspoken about those who excavated burial mounds and camp sites...condemning them for desecrating their land (Berndt et al. 1993:16).

These Old People were stolen with the knowledge that their removal was opposed by Ngarrindjeri people, with museum staff undertaking activities in secret and some looters resorting to night-time raids of burials areas in order to avoid retaliation from Aboriginal people (Fforde 2004:61-2, 2009:42-3; Griffiths 1998:81). Fforde (2004:63) concludes: “There can be little doubt, therefore, that most collectors were well aware of the great significance Aboriginal people attributed to the remains of their ancestors”. Furthermore, Fforde (2004:69) argues, “Many collectors were aware that their actions went against the cultural traditions...of Australia’s indigenous population” (Fforde 2004:69).

In addition to these acts of resistance, the agency of the Ngarrindjeri Nation has also influenced the interpretation of archaeological investigations. For example, recognising the authority of senior Ngarrindjeri women, Edward Stirling spoke to Ngarrindjeri Elders Aunty Louisa Karpany and Aunty Jenny Ponggi in 1911 regarding the resting place of Old People at Swanport; a connection likely developed as a result of Stirling’s collection of Ngarrindjeri artefacts for the South Australian Museum as Curator of Anthropology during late nineteenth and early twentieth century (Hemming et al. 1989:1). Ngarrindjeri Elder Louisa Karpany told Stirling of a smallpox epidemic that affected the area in the 1830s (Bell 1998:81; Stirling 1911:13-20,40). As a result, Stirling (1911:15) believed the burial area was the result of smallpox, but later revised this hypothesis following an examination of Swanport’s stratigraphy and the depth at which Old People were buried. It is possible, however, that Ngarrindjeri Elder Louisa Karpany told Stirling about the smallpox epidemic as a means to protect knowledge of the resting place in-line with Ngarrindjeri cultural protocols (see Bell 1998:361-417; 2008:100). Knowledge regarding resting places of Old People was closely guarded as a means to protect them (Bell 1998:302); a method still in practice today.

In instances where long-term connections with members of the Ngarrindjeri Nation developed, the influence of their agency on archaeological interpretations is more pronounced. The close friendship that developed between Ngarrindjeri Elder *Milerum* and

Norman Tindale over a 10 year period is a case in point. Tindale (1968:624) argued contemporary Ngarrindjeri knowledges would provide a better understanding in interpreting archaeological investigations within the region. As a result, it was such knowledges that led Tindale (1968) to conclude that differences between Shelter 2 and Shelter 6 at *Tungawa* could indicate evidence for gender-based divisions and areas, providing a rare and relatively early insight into the existence of *mimini* gendered places at a time when androcentric constructions of Ngarrindjeri lifeways were prevalent.

Contemporary Ngarrindjeri knowledges also contributed to the additional “Refugee Phase” of occupation suggested by archaeologist Roger Luebbers following his archaeological investigations along the *Kurangk*. As Bell (1998:450) points out:

From his reports...of the Northern and Southern Coorong, it is evident that he involved the Ngarrindjeri Heritage Committee in his work. Input from contemporary people was a central part of his research design, and provided valuable insights into Ngarrindjeri cultural heritage and existing links being maintained with their traditional past.

The agency of the Ngarrindjeri Nation also ensured Luebbers developed an understanding and respect for Ngarrindjeri cultural protocols, as demonstrated by his concern to the potential disturbance of Old People’s resting places:

...there was a 100 percent certainty that if we did excavations in some of the sites we were most interested in that we were going to, almost, in some way, disturb human remains and that is a *great concern* to myself and those custodians’ responsibilities, because disturbance like that does open up the possibility that there are people who have been buried will return in spirit form and will be adverse for feelings of people living there. The first task was to acquaint Ngarrindjeri people with that likelihood and I asked for permission to continue if disturbance would occur [emphasis added] (Luebbers in Wiltshire 2006c:68-69).

The concerns Luebbers highlights also came to characterise my discussions with members of the Ngarrindjeri Nation regarding archaeological excavation at Waltowa Wetland; concerns that derive from the deep connection between the Ngarrindjeri Nation, their lands, waters and all living things including their Old People in-line with the philosophy of *Ruwe/Ruwar*. In this regard, Ngarrindjeri Old People, their places and belongings form part of *Yarluwar-Ruwe* and to disturb or remove these results in contemporary consequences for Ngarrindjeri people’s wellbeing. As Ngarrindjeri Elder Uncle George Trevorrow (in Bell 1998:286) explains:

Where the people must go, they must remain. They can’t be dug up and moved elsewhere. We cannot tamper with the place of the dead, the tools of the dead, the things sacred that are left with the dead, or the dead themselves...if you interfere

with them, you know, it brings something back on you. So that's why you can't interfere with them and we would like that other people don't interfere with them as well. That's our spiritual belief. With middens, and the burials, you know, it's something we don't feel very good about. We don't like it when people interfere with them, because we know what effects it has on us as people.

Bell (1998:307) further expresses this point by explaining: "In a spiritual and physical sense the land contains the power of the ancestors. To disturb burial sites causes a rupture in the Ngarrindjeri world and has consequences for the living". As a result, amidst the events surrounding the HIRC, Bell (1998:37) recalls:

The lengths to which the Ngarrindjeri applicants were prepared to go to prevent injury and discretion to their sacred places is evidence of their *attachment* to and *concern* for their places and their Old People [emphasis added].

Thus, the protection of Old People and their belongings acts to preserve and protect the Ngarrindjeri Nation and their *Yarluwar-Ruwe*. At the same time, however, Ngarrindjeri Elders also recognise that archaeological investigations can inform the development of management strategies for the protection of Old People, their places and belongings (Bell 1998:295; G. Trevorrow in Wiltshire 2006c:91; T. Trevorrow in Wiltshire 2006c:84); as Ngarrindjeri Elder Uncle George Trevorrow (in Wiltshire 2006c:91) explains:

...it's important for us to let a certain amount of work and things to happen so we can start drawing out a picture of our history. We know it all in our minds and our memories you know, but that's not good enough for white people. It has to be something written on paper or that's the only way they understand us, because we can talk to them till we are black in the face, blue in the face...

This point was highlighted by Ngarrindjeri Elder Uncle Tom Trevorrow during the Waltowa Wetland Workshop, emphasising how the archaeological investigations and reports they produce provide evidence in "black and white" (Change Media 2012b) to support Ngarrindjeri stories about Waltowa Wetland. This was also the case during Luebbers investigations along the *Kurangk* and shores of Lake Alexandrina, as Uncle Tom Trevorrow explains (in Wiltshire 2006c:84):

...with Roger and his approach is that he wanted to do a fairly big study into our sites and which he did, he covered a lot of area and he marked down, identified a lot of our sites, and out of it produced a fairly big report. We wanted to build on that...[so] that we could use our information that we would have there as a record to show the bigger picture, the full picture of our occupation of the Coorong, Lakes and Murray area...that information would have been used to help us to document and record more thoroughly and accurately all our sites around our lands and waters and it would register them under the *Aboriginal Heritage Act* and it would be a document that we could be able to produce to government departments or developers in making them aware of our rich heritage and where it exists.

Therefore, in spite of these potential consequences for Ngarrindjeri people's wellbeing, Luebbers was allowed to proceed with archaeological investigations; as Bell (1998:295) illustrates:

Roger Luebbers (1996) describes the way in which he was given permission, *albeit reluctantly*, in 1986-7 to conduct an archaeological survey from Pelican Point to Poltalloch Bluff. Throughout, despite their obvious *distress*, Ngarrindjeri remained *willing to co-operate*. Luebbers reports that, in the fifteen years he had known Ngarrindjeri people, protection of burial remains and sites of cultural significance has been a constant aspiration in all negotiations [emphasis added].

Luebbers proceeded to undertake archaeological investigations in a way that would minimise disturbance of Old People, their places and belongings; however, in light of disturbing Old People's resting places, these archaeological investigations were further reassembled to ensure Old People were provided the appropriate respect and were subsequently reburied. Ensuring the respectful treatment of Ngarrindjeri Old People resulted in the analysis and final report from these archaeological investigations remaining unfinished (Hemming 1999:3; Wiltshire 2006c).

Similarly, archaeological investigations at Waltowa Wetland adopted a flexible approach as a means to respect Ngarrindjeri cultural protocols and minimise disturbance to Old People's places and belongings. The detailed recording of stone artefacts occurred in situ, whereas excavation would focus upon the partial disturbance of eroding Old People's belongings, including management actions to assist in long-term protection of Old People's places and belongings. In addition to this, a collaborative and critical approach to excavation and the knowledges produced was also planned; an approach absent from previous archaeological investigations at Waltowa Wetland. Lastly, Old People's belongings would be reburied following their analysis. Thus, my connection with Ngarrindjeri Nation resulted in a process of translation, whereby the nature of archaeological investigations is reassembled in order to respect the Ngarrindjeri philosophy of *Ruwe/Ruwar* and associated protocols.

Despite this reassembling, mutual concerns regarding the contemporary consequences of archaeological excavation remain, resulting in prolonged discussions and the postponement of excavation. In addition to this, the gendered nature of Waltowa Wetland added another level of complexity to these contemporary consequences. My gender as a *mimini* is a particular cause for concern, shaping the concerns and behaviours in the context of archaeological excavation at Waltowa Wetland. In other words, the gendered nature of Waltowa Wetland is experienced via these concerns as well as the distances and silences

associated with gender-based knowledge boundaries; distances and silences that were respected over the course of archaeological investigations. Respecting such gender-based knowledges and divisions results in the knowledge that Waltowa Wetland is a gendered area, but never knowing the nature of the gendered knowledge associated with this area; reflecting cultural protocols associated with knowledge boundaries that have long existed as part of the Ngarrindjeri world.

Lastly, the mutually constitutive nature of my connection with the Ngarrindjeri Nation results in a mutual ethic of concern regarding the contemporary consequences of archaeological excavation at Waltowa Wetland. This mutual ethic manifests itself in concerns for my well-being as a *mimini*, as well as the well-being of the Ngarrindjeri Nation in light of the destructive nature of excavation. As a result of this mutual ethic of concern, the connections necessary to enact the reality of archaeological excavations at Waltowa Wetland fall-apart, in turn resisting the production of further archaeological knowledge. Despite this, the use of auto-ethnography to reflect upon the process of *not* excavating allow for a better understanding of the connection and continuity that continues to characterise Ngarrindjeri lifeways in relation to Waltowa Wetland; that is, Ngarrindjeri knowledges and concerns relating to its formation and contemporary nature that exist exclusive of archaeological understandings. These understandings may have never been revealed through a process of ‘traditional’ excavation, which a ‘traditional’ archaeology thesis may have sought to obscure. In short, the auto-ethnography not only demonstrates the ongoing connection to, knowledges of and concern for Waltowa Wetland that resulted in the initiation of archaeological investigations, but the continued existence and agency of Ngarrindjeri gendered knowledge that resulted in the conclusion of these investigations.

Connection between Archaeologist and ‘Archaeology’

The second theme that emerges from this research is the mutual connection that develops between archaeologist and ‘archaeology’ in the context of archaeological investigations; a connection that—unlike the previous theme—remains mostly sheltered from the agency of the Ngarrindjeri Nation. The auto-ethnography presented in the previous chapter describes the surveys and detailed recording that create the basis for archaeological investigations; seemingly self-evident, unproblematic and accepted methods of archaeological investigation used to produce written, illustrative and photographic observations. As an archaeologist, I do not question the use of these methods, the knowledges these methods produce, nor whom these knowledges privilege due to their self-evident nature. The seemingly self-evident nature

of these methods ensures archaeological investigations remain sheltered from the critique and agency of the Ngarrindjeri Nation, in the same way such methods remain sheltered from theoretical reflection (cf. Hodder 1999; Lucas 2012). Despite this, the agency of the Ngarrindjeri Nation *does* allow for a reassembling of detailed recording and proposed excavation methods as a means to respect Ngarrindjeri cultural protocols and privilege Ngarrindjeri knowledges; however, the self-evident nature of these methods to better understand Ngarrindjeri lifeways ensures these methods—and the archaeological interests they privilege—remain unchallenged. Furthermore, these seemingly reassembled methods still sit within the broader archaeological discipline and contribute to the ongoing sustainment of the discipline rather than actively reassembling it. Therefore, the self-evident nature of these methods remains unchallenged—or “black-boxed” (cf. Latour 1987, 1999)—within the broader archaeological discipline where my practice is situated, ensuring the agency, philosophy and protocols of the Ngarrindjeri Nation remain marginalised.

Despite being sheltered from the agency of the Ngarrindjeri Nation, the mutual connection that develops with the ‘archaeology’ still contributes to my development as an archaeologist. My role as an archaeologist is deeply entangled with the mere presence of these Old People’s belongings. For example, there is a strong sense of insecurity in my abilities as an archaeologist when I initially fail to locate any Old People’s places or belongings; however, confidence in my ability as an archaeologist strengthens as the presence of Old People’s places and belongings begin to emerge. Furthermore, my ability and role as an archaeologist is further strengthened by the connection that develops with these Old People’s places and belongings; a connection that allows for the production of accurate and confident observations that translate the identity of Old People’s places and belongings into sites and artefacts—the ‘archaeology’ of Waltowa Wetland. As Holtorf (2002:49) points out, the “(identities) ascribed to things are not their essential properties but the result of specific relationships of people and things” (Holtorf 2002:49). In this sense, the connection that develops between ‘archaeology’ and archaeologist results in a process of translation, allowing for production of a new “archaeological identity” (cf. Holtorf 2002)—both for the ‘archaeology’ and the archaeologist. In other words, neither the archaeologist nor the ‘archaeology’ are self-evident, but emerge simultaneously as a result of the connection that develops during archaeological practice (cf. Van Reybrouch and Jacobs 2006:37); without the archaeology there can be no archaeologist.

The connection between archaeologist and ‘archaeology’ resulting in the production of observations is mediated by an assemblage of equipment or “inscription devices” (cf. Latour and Woolgar 1986:51; Van Reybrouck and Jacobs 2006:39). Specifically, the production of written observations requires equipment such as a notebook and recording forms; however, the more detailed the observations, the more elaborate or technical the inscription devices. For example, the detailed recording required a more elaborate assemblage of inscription devices in order to produce more detailed observations. At the same time, my Markrite© notebook is both an inscription device and artefact produced by the cultural practice of archaeology; a cultural artefact that emphasises my role as an archaeologist. Similarly, a photographic scale is an essential, unique and often overlooked artefact of the cultural practice of archaeology. Unlike a trowel—the artefact stereotypically associated with archaeology and archaeologists—a photographic scale is inexpensive, portable and easily obtained, with many archaeologists likely to have one tucked away in their back pocket, wallet, bag or desk draw; and like artefacts in many cultures, the photographic scale comes in an array of unique patterns depending on whom is using it and their affiliation. Together with equipment such as a camera, the photographic scale mediates the production of photographic observations.

Text-based knowledges that derive from previous archaeological practice also mediate the connection between archaeologist and ‘archaeology’. These knowledges are an “artefact” (cf. Roveland 2000:1-2) through which we come to know the ‘archaeology’ of a region beyond a field-work context; however, the agency of these knowledges also acts to limit understandings of the complexity of Ngarrindjeri lifeways. For example, given archaeological investigations within Ngarrindjeri *Yarluwar-Ruwe* remain limited, places such as *Ngaut Ngaut*, *Tungawa* and *Roonka* are considered ‘key sites’ within the region (see Figure 6.1; Hemming and Trevorrow 2005:247; Hemming et al. 1989:6). Hutchinson (2012:10), for example, refers to *Ngaut Ngaut* as a “traditional Aboriginal site” and goes on to state:

The Department of Environment and Natural Resources recognises and considers Ngaut Ngaut a site of cultural and national significance due to insights this site has provided into occupational prehistory of Australia (Hutchinson 2012:11).

This significance, however, reflects the interests of archaeology and archaeologists; that is, rock shelters were privileged by archaeologists due to their deep, undisturbed deposits suitable for excavation (Frankel 1991:56; Moser 1995:163; Ulm 2013:187). As Horton (1991:153) claims, *Ngaut Ngaut* “(showed) that digging in rock shelters, not middens or

swamps, was the most productive approach to writing the prehistory of Australia”. Despite such claims, ethnographic observations indicate rock shelters were only a minor component of Aboriginal lifeways, which previous archaeological investigations of *Ngaut Ngaut* and *Tungawa* confirm (Mulvaney et al. 1964:501; Smith 1977:174).

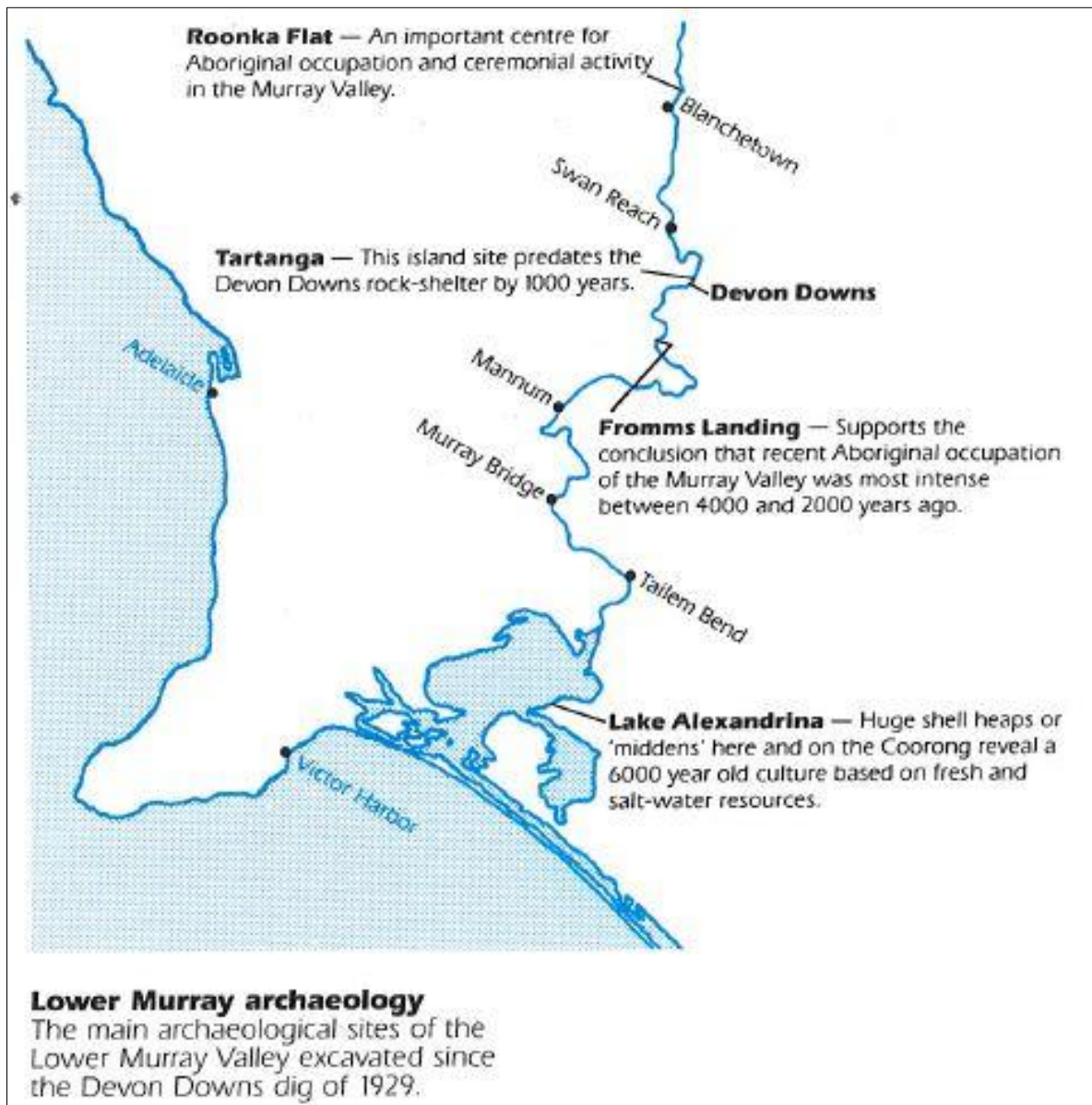


Figure 6.2 'key archaeological sites' (Hemming et al. 1989:6).

In addition to this, there has been limited archaeological investigation of middens along the Murray River, despite being one of the most common 'site' types within the region (Wood 1993:9; for exception, see Wilson 2017). Similarly, wetlands are an under-studied and poorly understood aspect of Ngarrindjeri lifeways, despite their importance to *Yarluwar-Ruwe* and areas within being listed as a Wetland of International Importance under the Ramsar

Convention; a convention that recognises the archaeological significance of wetlands (Lillie and Ellis 2007:3). While archaeological investigations of wetlands remain limited, Luebbers (1981, 1986-1987, 2015; also see Luebbers 1978) suggests inland wetlands were the focus of Ngarrindjeri lifeways during the early to mid-Holocene when climatic conditions were wetter.

The knowledges produced from previous archaeological investigations within the region also reflect the interests of Western researchers and privilege technological interpretations common during the period that these investigations took place. As a result, archaeological knowledges from these ‘key sites’ have become imbedded within the literature, reinforcing misrepresentations of Ngarrindjeri lifeways—particularly regarding stone artefact use within the region despite recent re-analyses (see Bland 2012; Roberts 1998). For example, in summarising archaeological knowledges from *Ngaut Ngaut*, *Tungawa* and *Roonka*, Wood (1993:8) states:

The unifying factor in all of these sites is the comparative scarcity of stone artefacts in the deposits...The paucity of artefacts at the Devon Downs site led Hale and Tindale (1930:204) to describe the assemblage as a “degenerate stone industry”. Of the nearly 1,500 pieces of stone recovered from nearly 100 cubic metres of well-stratified occupation deposit, only 125 *definite stone artefacts were recovered* [emphasis added].

More recently, midden analysis by St George (2009:96) has applied this misrepresentation to Ngarrindjeri lifeways, stating:

Only very limited quantities of quartz and chert stone flaked artefacts were present...This pattern was also observed further afield in the Fromm’s Landing and Devon Downs sites along the Murray River, where *a significant decrease in the quantity of stone artefacts was noted after 3,000-2,000 BP* [emphasis added].

In doing so, St George (2009:96) draws further conclusions that state a lack a stone artefacts within the northern *Kurangk* “(may) have been indicative of a regional adaptation wherein *stone tools did not play a significant role* and were not utilised as regularly within the south-east ca 2,000 BP to present” [emphasis added]. This is despite the existence of film footage recorded on the shores of the *Kurangk* showing Ngarrindjeri Elder *Milerum*—who grew up along and held detailed knowledge of the *Kurangk*—making bone tools using a hammer stone, anvil and stone flake (see Tindale 1937).

In short, contemporary literature continues to circulate knowledges produced by previous archaeological knowledges, without further consideration of the connections that contributed

to their preliminary—and sometimes highly problematic—nature. In particular, this literature fails to consider the impact of amateur collecting within Ngarrindjeri *Yarluwar-Ruwe*, as Griffiths (1998:67) points out:

These artefacts constitute a much underused and almost forgotten part of the south-eastern Australian archaeological record. Archaeologists conduct field surveys today rarely consult these collections, perhaps do not even know they exist. Yet surely we cannot interpret what remains in the field without discovering what has been so recently removed. These boxes of artefacts are, of course, very difficult sources to use, hard to access and often ambiguous in meaning and provenance.

For example, Hodgson (1997:7) briefly notes the existence of one such collection by amateur archaeologist Tom McCourt, which “(is) now held ‘in care and custody’ by the Beachport Council within the McCourt Aboriginal Artefact Museum in the township of Beachport”; however, Hodgson (1997) fails to give this collection any further consideration in her archaeological survey within south east South Australia. Yet, if McCourt’s (1975) book—which only presents a section of a collection found during personal investigations—is any indication, this collection is likely to be vast. Indeed, Griffiths (1998:74) argues amateurs collected stone artefacts in vast numbers, with literally hundreds of artefacts collected in a manner of days. As Edwards (1970:164) demonstrates:

South Australia [used to] provide a special service through one of its enterprising outback tour promoters who advertises in his circulars, “...points of interest include searching for Aboriginal artefacts of which large discoveries have been made on previous trips...” This sort of attitude was amply demonstrated to me some ten years ago when an extensive burial ground in the Murray Valley, containing some 50 complete skeletons, was uncovered during a wind storm. The discovery was made on Thursday – the press featured it on Friday. An eager charter bus owner arranged weekend tours to the site and the collectors converged. The Museum with characteristic 48-hour delay, arrived on the scene to find not a single bone. So the nation is deprived of the information which might have resulted from a systematic study of the site.

In failing to comprehend these impacts, a paucity of stone artefacts—both historically and archaeologically—is accepted as self-evident, reinforced by archaeological knowledges that ‘demonstrate’ the decrease of stone artefact use within the region. On the other hand, middens are considered to be most common ‘site’ type, due to their relative visibility and archaeological knowledges that ‘demonstrate’ the intensification of shellfish over time (see Luebbers 1981, 1982; Smith 1977, 1982). This model, however, homogenises the complexity of Ngarrindjeri lifeways into a single historical trajectory of change, which assumes and emphasises spatial and temporal similarities that do not account for place or time specific variability (cf. Ulm 2013:184). Reflecting on the situation within Australia more broadly, Ulm (2013:188-189) points out, “the patchy distribution of studies has encouraged the

identification of continuities between widely separated sites and regions...[but] we should not expect all people to behave in the same way during all periods in the past". As previously noted, Ngarrindjeri Elder Uncle Tom Trevorrow (in Hemming and Trevorrow 2005:243) describes how areas of *Yarluwar-Ruwe* had specific functions, where:

...parts of the land is where ceremonies were carried out and where women carried out their ceremonies according to their teachings and beliefs. Other parts of the land were where people lived and food gathering took place.

Therefore, "generally accepted hypotheses" (cf. Wood 1993:9) from limited archaeological investigations inhibits understandings of the complexity of Ngarrindjeri lifeways, as demonstrated by the sense of confusion in response to the paucity of middens and abundance of stone artefacts at Waltowa Wetland. In addition to this, during the initial stages of archaeological investigations, charred or heat fractured rocks are described as "cooking rocks", drawing on previous archaeological reports with a distinct economic focus (see Luebbers 1986-1987). This term is, however, problematic as it implies that these particular Old People's belongings were purely associated with cooking and/or related economic activities, despite the obvious lack of faunal remains. In the context of archaeological investigations at Waltowa Wetland it would seem at least some of these Old People's belongings were used for signal fires, indicating they are in fact associated with a ceremonial rather than economic purpose.

As connection between archaeologist and 'archaeology' develops and continues to contrast with these text-based knowledges, the self-evident nature of these text-based knowledges is challenged, in turn influencing further archaeological investigations at Waltowa Wetland. The detailed recording specifically focuses upon the analysis of stone artefacts as a means to contribute to and/or challenge long held "generally accepted hypotheses" (cf. Wood 1993:9). The connection between archaeologist and 'archaeology' is also relative to the nature of written observations. In other words, the nature of these written observations develops as the connection between archaeologist and 'archaeology' develops. For example, uncertainty and a lack of confidence ensure written observations produced in the initial stages of archaeological investigations are highly detailed; however, as confidence in my ability as an archaeologist develops relative to my connection with the 'archaeology', the form of these observations becomes less detailed (see Figures 5.51 and 5.52). This finding is comparable to Van Reybrouck and Jacobs (2006), who compare the observations produced by experienced archaeologists and students. In doing so, Van Reybrouck and Jacobs (2006:42) note more

experienced and confident archaeologists tend to be casual in their production of observations; whereas if an in-experienced student took such an approach it would confirm their incompetency. In short, the form, detail and amount of observations produced are directly linked to my connection with the ‘archaeology’.

Lastly, as the connection between archaeologist and ‘archaeology’ develops, a sense of affectional attachment develops with particular Old People’s places and belongings; an attachment mediated by observations that reflect and privilege the interests of archaeology and archaeologist. Specifically, stone artefacts of a particular form and/or with retouch capture or “captivate” (cf. Harrison 2006) my attention, resulting in a “singling out” and “privileging” of the rare and exotic that hark back to activities of amateur collectors (cf. Brown 2016:16). The emphasis placed upon particular stone artefacts reflects the cultural practice of archaeology rather than their significance to Ngarrindjeri people. For example, during the detailed recording emphasis is placed upon stone artefacts with retouch or those that can be classified as formal ‘tool’ types, with the assumption an analysis of their attributes will provide a better understanding of the role they played within Ngarrindjeri lifeways. Furthermore, the raw material and size of particular stone artefacts also produces a sense of excitement. As a result, I am filled with an infatuation for these stone artefacts and a (slightly perverted) desire to touch, admire and photograph them from many angles; however, the emotions experienced during archaeological investigations become marginalised in the name of assembling archaeological knowledges.

Assembling Archaeological Knowledge

The third theme that emerges during this research is how the process of literary transcription assembles numerous heterogeneous actants in order to produce archaeological knowledge; a process discussed in light of the production of two archaeological reports as described within the auto-ethnography (see Wiltshire 2009a, 2010; see Appendices 3 and 4).

Firstly, the process of literary transcription commences by assembling text-based knowledges to form a literature review; assembling that relies mostly upon knowledges produced from previous archaeological investigations along the Murray River (Hale and Tindale 1930; Mulvaney 1960; Mulvaney et al. 1964) and the *Kurangk* (Luebbers 1981, 1982). The form and focus of these knowledges—including the historical context in which these archaeological investigations were carried out—is not taken into consideration; rather, these knowledges are conceived as a stable, self-evident and objective entity or “box” (Latour

1987). As outlined in the previous section, these text-based knowledges assembled and mobilised specific representations of Ngarrindjeri lifeways that became ingrained within the literature, partly due to the lack of archaeological investigations carried out in the region. Specifically, technological and economic focused representations of Ngarrindjeri lifeways that reflect the interest of archaeology and archaeologists became “black boxed” (Latour 1987, 1999). The agency of these representations inhibits understandings of the complexity of Ngarrindjeri lifeways, including the ongoing connection to and management of *Yarluwar-Ruwe* beyond technological and economic means. As a result, the agency of text-based knowledges not only influences my connection with the ‘archaeology’, but results in a literature review that—for the most part—continues to reinforce technological and economic representations of Ngarrindjeri lifeways (see Wiltshire 2009a:16-19).

Secondly, the process of literary transcription assembles a description of the methods used during the archaeological surveys (see Wiltshire 2009a:30-31) and the detailed recording (see Wiltshire 2010i:14-19). The methods are represented as an objective process of data collection with a clear direction developed prior to undertaking the surveys, supported by the use of technical terminology. In doing so, the process of literary transcription misrepresents archaeological practice as a sterile and linear process, where the subjective nature of archaeological practice remains mostly constrained and concealed; however, ignoring the subjective complexity of archaeological practice—particularly experiences resulting in emotions such as frustration or anxiety that can impact on practice—ignores an important actant within the assemblage that comprises the reality of archaeological practice. Despite this, the lack of confidence in my ability to identify stone artefacts is *alluded to* in the methods of the reports for those that seek to read between the lines. For example, the nature of my observations are described as “preliminary” (Wiltshire 2009a:32; see Appendix 1), whilst my “limited experience” (Wiltshire 2010i:16; see Appendix 4) as an archaeologist is also mentioned—all the while obscuring my lack of confidence in stone artefact identification. A similar approach is taken to my lack of confidence in raw material identification. In this instance, the large variety of stone artefact raw materials and the subsequent method of establishing a reference collection in order to provide “positive identification” (Wiltshire 2010i:16) of these raw materials, thoroughly conceals my lack of confidence in raw material identification. Indeed, the lack of confidence in my ability as an archaeologist ensures the literary transcription produced is objective enough to defeat any forthcoming criticisms from colleagues (cf. Latour and Woolgar 1982:53). Furthermore, the

process of literary transcription focuses upon objective “decisive factors” (Wiltshire 2009a:30) such as occupation patterns and site preservation playing an influential role—or actant—in the archaeological methods. Similarly, time constraints are represented as playing a key role during the detailed recording, obscuring my underestimation regarding the level of work and time required to undertake a grid survey of the entire blowout as originally planned. Lastly, Roger Luebbers’ influence on archaeological investigations is both acknowledged and obscured within the report. For example, Roger’s influence on the subsequent size of the grid used to undertake detailed recording is acknowledged, but his influence in setting up a grid running east-west to record the dense area of stone artefacts becomes concealed completely. Rather, the presence of dense areas of stone artefacts simply “became obvious” (Wiltshire 2010i:18), marginalising and silencing Roger’s contribution in this aspect of the archaeological investigations (cf. Lucas 2001:13, 2012:239).

Thirdly, the process of literary transcription assembles the results of the archaeological investigations (see Wiltshire 2009a:33-89; 2010i:20-47). This process involves reassembling an assemblage of written and photographic observations about Old People’s places and belongings. To begin with, the written observations assembled tend to focus upon the attributes of Old People’s belongings rather than the Old People and/or cultural context that produced them, reminiscent of the amateur collectors the discipline of archaeology has sought to distance itself from (cf. Griffiths 1998:56). These observations rely upon exclusive archaeological terminology that privilege the interests of archaeology and archaeologists in order to further describe and categorise these belongings and places. This is despite the use of terminology such as ‘knowledge’ instead of ‘data’, ‘Old People’ instead of ‘human remains’ and ‘heritage’ instead of ‘artefacts’ and/or ‘sites’ as a means to privilege Ngarrindjeri interests and understandings (see Wiltshire 2006c:13). This exclusive archaeological terminology conceals the connection, familiarity and in some cases, emotional involvement I develop with certain stone artefacts. These emotions are reduced to attempts at objective observation that rely on archaeologically exclusive terms such as ‘lateral margin’, ‘ventral’ and ‘dorsal’; terms that are artefacts of archaeological practice. On the other hand, the photographic observations are assembled to illustrate and strengthen the written observations; however, there is a conscious choice to include photographic observations of stone artefacts I find particularly “captivating” (cf. Harrison 2006) based on their form or their presence of retouch. Therefore, it seems elements of both the written and photographic observations hark back to the activities of amateur collectors. This is particularly evident by my description and

repeated inclusion of one stone artefact in particular—a unifacial or ‘pirri’ point (see Figure 5.22); included not for what this Old People’s belonging contributes to understandings of Ngarrindjeri lifeways, but rather its impressive, aesthetically pleasing form. Overall, written and photographic observations about Old People’s places and belongings assembled in the process of literary transcription no-longer represent Ngarrindjeri or Aboriginal culture (even though the cultural practice of archaeology believes they do); these observations instead represent the cultural practice of archaeology. The cultural practice of archaeology conceives these observations as self-evident and their assembled nature remains unchallenged. As Holtorf (2002:54) points out, “...the possibility that the material properties, or identity, of a thing are being renegotiated in different social circumstances has not normally been allowed...their material identity was deemed to remain unchangeable and continuous all along”.

Fourthly, the process of literary transcription assembles preliminary interpretations of archaeological investigations; a process that involves creating alliances between observations and text-based knowledges in order to produce confident statements about Ngarrindjeri lifeways at Waltowa Wetland. For example, in producing the second report the process of literary transcription assembles observations and text-based knowledges to claim: “(areas) recorded during the field-work with a high density of stone artefacts are therefore quite unique or rare within this region...indicating the unique potential...to add knowledge about stone artefact traditions within the southeast” (Wiltshire 2010i:48,50; also see Wiltshire 2009a:96). The connection between my observations and text-based knowledges have become stronger, allowing for confident statements that create the basis for the production of archaeological knowledges. This report also assembles observations and text-based knowledges to produce a confident interpretation regarding the variety of stone artefact raw materials. In doing so, the report claims:

The wide varieties of raw materials observed at the site indicate that Ngarrindjeri people who inhabited or used these areas had established trading networks with neighbouring cultural groups...[with] granite is the only raw material encountered during the survey which has a relatively close source (Wiltshire 2010i:49).

In some cases, however, the connections between observations and text-based knowledges resist the production of knowledge, with the report indicating further research is required in order to produce such knowledge. For example, the connection between observed stone artefacts with resin and existing knowledges is not strong enough to confidently claim these stone artefacts are evidence of the manufacture and use of death spears at Waltowa Wetland

(see Wiltshire 2010i:44). As a result, the report concludes, “(without) further research it is not possible to say whether these artefacts indicate this specific weapon” (Wiltshire 2010i:44). Thus, further research is required to strengthen these connections and in turn to confidently produce archaeological knowledge.

Overall, text-based knowledges from previous archaeological investigations continue to “define and confine” (cf. Griffiths 1998:55) the form of preliminary interpretations, which continue to focus upon technological and economic aspects of Ngarrindjeri lifeways that reflect the interest of archaeology and archaeologists. Specifically, the preliminary interpretations and significance ascribed to Waltowa Wetland focuses upon the attributes and manufacture techniques of stone artefacts, with minor references to chronological context and function. The preliminary interpretations of archaeological investigations produced as a result of the process of literary transcription continue to limit and inhibit understandings of the complexity of Ngarrindjeri lifeways beyond a technological means.

Despite this distinct focus upon technological and economic issues, the agency of the Ngarrindjeri Nation re-emerges during the process of literary transcription in a number of ways to challenge these pre-existing and ingrained understandings of Ngarrindjeri lifeways. For example, granite pieces are recorded and included within the subsequent reports as a result of the knowledge shared with me by Ngarrindjeri colleague Chris Wilson, who tells me granite outcrops near *Murrundi* are associated with Ngarrindjeri dreaming ancestor *Ngurunderi* (Chris Wilson, Pers. Comm., 2008; see also Berndt et al. 1993:352-3; Wilson 2017); knowledge gained from his Ngarrindjeri Elders. Likewise, the inclusion of historical Old People’s belongings is the result of knowledge shared by Ngarrindjeri Elder Uncle Neville Gollan during the archaeological surveys (see Figure 5.24). This agency is, however, marginalised within the process of literary transcription and no reference is made to this knowledge for the inclusion of these Old People’s belongings. Lastly, references to the gendered nature of Waltowa Wetland emerge from knowledges developed as a result of my connection with the Ngarrindjeri Nation, as well as Ngarrindjeri agency present within text-based knowledges. For example, the process of literary transcription makes reference to knowledge shared between Ngarrindjeri Elder Milerum and Norman Tindale regarding the gendered nature of stone artefacts (see Tindale 1968; Wiltshire 2009a:93). Thus, the agency of the Ngarrindjeri Nation contained within text-based knowledges continues to exercise influence, no matter how old or distant these texts are from where they were constructed (cf. Latour 1987:227).

Overall, the process of literary transcription reassembles an assemblage of observations, photographs and text-based knowledges in order to produce confident and sterile statements or facts, which are accompanied by figures and tables that come to represent the archaeological nature of Waltowa Wetland. With the completion of the reports, the successful and unsuccessful connections that enacted the reality of archaeological investigations are soon forgotten, with focus directed towards these seemingly stable and self-evident facts, figures and tables that have become “black boxed” (Latour 1987, 1999). In this form, these facts, figures and tables are durable and transportable assemblages with agency, providing evidence that can be communicated, “mobilised” and scrutinised for their significance (cf. Latour 1987:234; Latour and Woolgar 1986:50). Simultaneously, this process of literary transcription produces something that did not exist prior: the archaeology of Waltowa Wetland (cf. Bennett 2007b:11); not the Old People’s places and belongings that exist independent of archaeological practice, but the knowledges that come to represent them. In other words, literary transcription is the key point where archaeological knowledge is produced. Prior to this, actants produced as a result of archaeological investigations exist as an archaeological archive; a “messy” assemblage of subjective observations that exist between ‘site’ and knowledge production (cf. Baird and McFadyen 2014:15). As Latour and Woolgar (1986:47) argue, actants such as notebooks and other forms of observation “(constitute) what is yet to be processed and manufactured”. Thus, the process of literary transcription tames and conceals the complex assemblage of successful and unsuccessful connections that enact the reality of the archaeological investigations at Waltowa Wetland; that is, the process of literary transcription conceals the “messy reality” (cf. Edgeworth 1991; Latour 1987, 1999; Law 2004; Lynch 1993) of archaeological practice—as evidenced by the distinctly messy feel left when the final archaeological report is never finalised (see Wiltshire 2011). Consequently, the process of literary transcription runs the risk of perpetuating archaeological practice as an objective and linear process, which only tells part of the story of what undertaking archaeological practice really entails. Therefore, the process of literary transcription may not accurately represent—or even obscure—the reality of archaeological practice.

Chapter 7 – Conclusion

...indigenous research is a humble and humbling activity.
(L.T. Smith 1999:5).

This thesis set out to present an auto-ethnography of archaeological practice to describe the everyday activities, interactions and connections often marginalised in the production of archaeological knowledges. In light of this, this chapter discusses how the key findings presented in the previous chapter address the research question, how they compare and contrast with existing sociologies of scientific practice and ethnographies of archaeological practice literature, and how they contribute to the archaeological discipline more broadly. This chapter concludes by outlining the limitations of this study and proposing recommendations for future research.

7.1 Discussion of Key Findings

Addressing the Objective, Aims and Question

The main objective of this research was to reconceptualise archaeological investigations at Waltowa Wetland as an assemblage, in order to describe and discuss the often marginalised activities, interactions and connections of archaeological practice. In doing so, this thesis sought to address the following research question:

Is disassembling archaeological practice the first step towards challenging the privileged position of archaeological practice and the knowledges it maintains?

In addressing the research question, Chapter 6 discussed and further disassembled the everyday activities, interactions and connections that comprise archaeological practice. In describing these phenomena, this research highlights how the connection between the Ngarrindjeri Nation and the researcher contributed to the initiation and conclusion of archaeological investigations. Furthermore, this research describes how the Ngarrindjeri Nation have simultaneously engaged with and resisted archaeology for decades in order to reassemble its associated practices. As a result of the agency of the Ngarrindjeri Nation exercised via the connections developed with archaeologists, archaeological practice in *Yarlumar-Ruwe* is continually shifting and being actively *reassembled*, creating assemblages that enact new archaeological practices, people and knowledges. Thus, the development of collaborative working relationships with archaeologists provides an important first step

towards challenging the privileged position of archaeological practice and the knowledges it maintains. In other words, these relationships or connections are foremost in reassembling archaeological practice, challenging Harrison's (2013a:32; 2015:37) assertion that description is the first step towards reassembling practice. In fact, the development of such relationships occurs *long before* the description or disassembling of archaeological practice. By maintaining that reassembling will only occur by actively describing and disassembling such practice, is akin to claiming that "(Indigenous) involvement and control of archaeological projects is occurring because archaeologists have allowed it to take place" (McNiven and Russell 2005:234); neither claim recognises the ongoing resistance, engagement, influence and—importantly—agency of Indigenous peoples. At the same time, the long-term engagement between the Ngarrindjeri Nation and archaeology also demonstrates that reassembling takes time, decades even. Overall, describing or disassembling is far from being the first step to reassembling archaeological practice, but such description makes an important contribution to better understanding the activities, interactions and connections often marginalised in the production of archaeological knowledges.

Developing relationships as a means to reassemble existing assemblages of asymmetrical power and authority is not exclusive to archaeological practice, but has been part of a broader strategy of the Ngarrindjeri Nation since the outcomes of Hindmarsh Island Royal Commission (HIRC). For example, the development of KNYAs and a Ngarrindjeri governance structure in the form of the NRA provided strategic and theorised mechanisms to reassemble the relationship between the Ngarrindjeri Nation and government, allowing for the privileging of the Ngarrindjeri philosophy of *Ruwe/Ruwar* in the ongoing management of *Yarluwar-Ruwe* (Hemming et al. 2016). In short, the Ngarrindjeri Nation is actively developing new connections in order to reassemble existing assemblages in the form of governments, institutions and disciplines; my role as an archaeologist and the focus of this PhD research are both products of this reassembling.

In addition to addressing this research question, this research sought to achieve the following three aims:

1. Use key metaphor and concepts from ANT to reconceptualise archaeological investigations focused on Waltowa Wetland as an assemblage.

2. Use the methods of ANT to describe archaeological investigations focused on Waltowa Wetland, including the everyday activities, interactions and connections that occur beyond the boundaries of 'site' based field-work.
3. Discuss the ways in which reconceptualising and describing the everyday activities, interactions and connections allows for a better understanding of archaeological practice and the knowledges it produces.

In addressing the first aim, Chapter 2 provided a detailed description of the metaphor and concepts of ANT used to reconceptualise archaeological practice as an assemblage. This included the key metaphor of *assemblage* as well as the concepts of *symmetry*, *translation*, *black boxing* and *literary transcription*. Specifically, the metaphor of *assemblage* provided a means to understand the mutually constitutive agency that exists in the connections between humans and non-humans that form the assemblage of archaeological practice. In using this metaphor, this thesis also adopted the term *actant* to describe humans and non-humans democratically, as well as draw attention to the often marginalised or silenced agency of non-humans in-line with ANT's concept of *symmetry*. In applying this metaphor and associated concepts, Chapter 5 highlighted the mutually constitutive agency that exists between the archaeologist and 'archaeology' that contributed to my development as an archaeologist, whilst simultaneously producing the archaeology of Waltowa Wetland.

In addition to this, the concept of *translation* provided a means to identify, consider and describe how connections between actants assemble, shift and fell-apart over the course of archaeological investigations at Waltowa Wetland. For example, Chapter 5 highlighted how the agency of the Ngarrindjeri Nation resulted in a process of translation, ultimately influencing the development of the researcher's role as an archaeologist. In addition to this, Chapter 5 also described successful and unsuccessful instances of translation that resulted in the initiation and conclusion of archaeological investigations at Waltowa Wetland. Specifically, this chapter describes how the connection between the Ngarrindjeri Nation and the researcher allowed for the initiation of archaeological investigations at Waltowa Wetland, whilst the nature of this connection including the agency of gender contributed to the conclusion of archaeological investigations. On the other hand, the concept of *black boxing* provided a means to identify, consider and describe how successful and unsuccessful instances of translation became concealed, particularly during the process of *literary transcription*. Chapter 5 highlighted how emotions such as uncertainty and excitement became concealed in the process of literary transcription.

In addressing the second aim, Chapter 2 provided a detailed description of the ANT methods used to describe archaeological investigations at Waltowa Wetland. This included the inductive method of *ethnomethodology* used to produce unrestrictive auto-ethnographic descriptions, which focus on everyday activities, interactions and connections that occur outside a given context. In the context of this research, ethnomethodology allowed for the description of activities and interactions that occurred beyond the boundaries of ‘site’ based archaeological investigations. For example, Chapter 5 focused on describing the connection between the researcher and the Ngarrindjeri Nation as well as the process of literary transcription; interactions and activities that both occur beyond the boundaries of ‘site’ based field-work.

In simultaneously addressing the third aim, Chapter 6 discussed and further disassembled the everyday activities, interactions and connections that comprise archaeological practice. Chapter 6 discussed how the process of literary transcription is the key point in archaeological practice where knowledge is produced. In doing so, this chapter highlighted how the assembling of archaeological knowledges does not exclusively occur in the field—or at the “trowel’s edge” (Hodder 1997:694)—but occurs beyond the boundaries of an archaeological site. Thus, ANT not only offered a method in order to identify the everyday activities, interactions and connections that contribute to the assembling of archaeological knowledge, but the metaphor and key concepts of ANT also provided a means to describe these activities and interactions; activities and interactions that may have otherwise remained obscured. In short, the metaphor, key concepts and methods of ANT allowed for a better understanding of the everyday activities, interactions and connections often marginalised in production of archaeological knowledges.

Comparison to Existing Literature

This research has contributed to existing literature regarding sociologies of scientific practice and ethnographies of archaeological practice in a number of ways. Firstly, by describing the everyday activities and interactions beyond the boundaries of an archaeological ‘site’, this research contrasts with classic sociologies of scientific practice as well as ethnographies of archaeological practice more generally. Specifically, classic sociologies of scientific practice focus on practices within a laboratory environment, where ethnographies of archaeological practice have a tendency to focus on practices undertaken during field-work, particularly excavation (see Carman 2006; Edgeworth 1991, 2003; Van Reybrouck and Jacobs 2006). The findings of this research are, however, consistent with sociologies of scientific practice

literature regarding the process of literary transcription. As Latour and Woolgar (1979, 1986) argue, these transcriptions are the key product of scientific practice and significant in the construction of scientific facts. On the other hand, very few ethnographies of archaeological practice literature consider the process of literary transcription that is responsible for producing ‘artefacts’ such as reports, articles and books; ‘artefacts’ mostly produced beyond the boundaries of ‘site’ based field-work. Despite this, the process of literary transcription has been considered outside of ethnographies of archaeological practice literature. For example, Joyce’s (2008b) *The Languages of Archaeology* provides an in-depth analysis of the process of literary transcription and draws attention to the assembling of statements, figures and tables, which “are conjoined to produce an aura of factuality about archaeological interpretation” (Joyce 2008b:2). Drawing upon structuration theory, Joyce (2008b:1) also argues the products of literary transcription creates, binds and sustains the archaeological discipline. More recently, Hodder (2015) has briefly discussed how various disciplinary experts interpret ‘data’ based on their experiences and disciplinary theories, but does not describe the ways in which archaeological knowledges are assembled in any great detail. Thus, the lack of consideration of literary transcription in ethnographies of archaeological practice literature is a notable absence considering archaeology is, after all, “(a) textual practice from the field through the lab and into all forms of dissemination” (Joyce 2008b:2).

By describing the ways in which the assembling of knowledge occurs beyond the boundaries of ‘site’ based field-work, this research challenges the inherent assumptions of ethnographies of archaeological practice literature that seem to assume excavation is the key context in which knowledge is produced. This research also demonstrates the importance considering these everyday activities, interactions and connections in understanding the assembling of archaeological knowledge. In describing these phenomena, this research also highlights how the connection between the Ngarrindjeri Nation and the researcher contributed to the initiation and conclusion of archaeological investigations. In doing so, this research contrasts with a majority of ethnographies of archaeological practice literature, which fail to describe the ways in which relationships with Indigenous people influence archaeological practice (for exception, see Gnomes 2006).

In describing the connection between the Ngarrindjeri Nation and the researcher, this research also highlights the ways in which this connection contributed to my development as an archaeologist. This research did not consider my role as an archaeologist as pre-determined nor self-evident but rather as a product of this connection. Whilst a majority of

ethnographies of archaeology literature have failed to problematise the self-evident nature of an archaeologist's role, sociologist David Van Reybrouck and archaeologist Dirk Jacobs (2006:37) describe the mutually constitutive connection that simultaneously enacts the reality of the archaeology and the archaeologist during archaeological excavation:

What takes place at an archaeological excavation is not an objective empirical reality, but the mutual constitution of actors and facts. These entities, regardless of whether they are postholes or prehistorians, are interrelated in a network. Only by allying themselves to each other can they become powerful nodes in the network. Powerful nodes are those that gain reality, that is, those that are recognized as being real. A discolouration in the sand becomes a true posthole through association with a reliable undergraduate student. An undergraduate student becomes a reliable observer at a dig through association with a clearly delineated posthole. They mutually articulate each other; they emerge simultaneously from actual practice.

In another example of the “mutual constitution of actors and facts”, Van Reybrouck and Jacobs (2006:37) describe:

The ceramic expert...[where] the continuous feed of potsherds reproduced her status as a competent ceramic expert. The sherds needed her, for sure, but she needed the sherds as well. Take the sherds away and her professional status would rapidly dwindle.

Despite this, Van Reybrouck and Jacobs (2006:37) contend “more attention has been given to the social construction of facts than to the factual construction of social actors”. Thus the findings of this research contribute to this limited body of literature by describing how my connection with Old People's belongings contributed to my development as an archaeologist, whilst simultaneously transforming these belongings into the archaeology of Waltowa Wetland.

Interestingly, the approach and key findings of this research are also comparable with phenomenological literature, which framed earlier iterations of this research but was subsequently abandoned. Specifically, phenomenology “(does) not attempt to speak about things, but...about the way they manifest themselves...” (Lewis and Staehler 2010:1). Thus, by describing the connections between heterogeneous actants and how they manifest themselves, ANT can be considered phenomenological in nature (Hodder 2012:9; also see Olsen 2007, 2010). Similar to the ANT metaphor of assemblage, interpretative approaches to phenomenology also consider the reciprocal nature of such connections (Olsen 2010:26). Lastly, phenomenology is a form of hermeneutical excavation that allows for the historical layers that constitute human understandings to be revealed and understood (Heidegger 1962:51; Lewis and Staehler 2010:68; Thomas 2006:47). As such, describing how my

previous experiences influence and confines my role as an archaeologist draws upon similar themes.

Contribution to Archaeological Discipline

The findings of this research contribute to the archaeological discipline in several ways. Firstly, preliminary results of archaeological investigations at Waltowa Wetland contrast with “generally accepted hypotheses” (cf. Wood 1993:9) of Ngarrindjeri lifeways. For example, results from archaeological investigations demonstrate an abundance of stone artefacts, challenging historical and archaeological misrepresentations regarding the paucity of stone artefact manufacture and use within the region. Preliminary results of archaeological investigations also demonstrate high densities of Old People’s belongings adjacent to the wetland shore indicating Waltowa Wetland was a focus of Ngarrindjeri lifeways. In doing so, these results contrast with previous archaeological investigations within the region, which have focused upon rock shelters and coastal middens reflecting the interests of archaeology and archaeologists despite the importance of wetlands for Ngarrindjeri lifeways (see Trevorrow and Rigney in Bjornsson 2005:22).

A lack of archaeological investigations of wetlands is a trend that is repeated Australia wide, with some notable exceptions in the Northern Territory, New South Wales and Victoria (see Brockwell 2013 for recent synopsis). Wetlands are, however, recognised as a transitional environment between terrestrial and more permanent water resources, which usually have a high productivity of seasonal resources as well as a dependable water source. Therefore, wetlands offer considerable potential to understand Aboriginal lifeways in response to localised and small-scale environmental changes as a result of El Nino-Southern Oscillation (ENSO) climate and sea level fluctuations (Bernick 1998:27; Hope et al. 2007:258; Menotti and O’Sullivan 2013:2; Nicholas 2007:54,57, 2013:763); however, such research continues to be economically focused. Similarly, on an international level the field of wetland archaeology has until recently focused on water-logged sites that investigate the relationship between artefacts and their preservation context, with little focus on the relationship between people and wetland environments (Edgeworth 2011:26-27; Menotti 2012:13-14; Nicholas 2001:264; 2007a:245; 2007b:57, 2013:763). As a result, archaeological investigations of wetlands have been theoretically marginalised and overlooked for archaeological investigation within mainstream archaeological discipline (Menotti 2012; Menotti and O’Sullivan 2013; Nicholas 2013; Van de Noort and O’Sullivan 2006). Therefore, the findings of this research contribute to mainstream archaeological debates on an international level, by better understanding the

complex connection between the Ngarrindjeri Nation and Waltowa Wetland; a connection that moves beyond the technological and economic interpretations which continue to characterise archaeological research more broadly.

This research also highlights how gender-based divisions, knowledges and areas that exist as part of the Ngarrindjeri philosophy of *Ruwe/Ruwar* continue to play an important role in Ngarrindjeri connection to and management of *Yarluwar-Ruwe*; a “gendered world” (Bell 1998:599) that ultimately contributed to the conclusion of archaeological investigations at Waltowa Wetland. Whilst the nature of this gendered world has been discussed at length in light of the HIRC (see Bell 1998; Hemming 1999; Simons 2002), considerations of gender-based divisions, knowledges and areas continue to be marginalised in the ongoing management of *Yarluwar-Ruwe* (see Luebbers 1981 for notable exception). Furthermore, the ways in which gender may influence archaeological practice undertaken within the region has also not been considered; a possible symptom of a lack of archaeological research in the region more broadly.

The lack of consideration of gender reflects trends more broadly, where archaeological literature with a distinct gender focus is limited due to the often under-theorised, processual and androcentric nature of Australian archaeology (De Leiuén 2014). Furthermore, research around gender in archaeology remains the pursuit of female archaeologists rather than an approach that has been integrated much more broadly within the discipline (Meskell 2002:283). In addition to this, literature regarding gender in Australian archaeology tends to focus either upon *women* in the archaeological record or their role in archaeological practice, rather than taking into account the roles of *both* genders in relation to one another (for notable exception, see Bowdler 1976). As Joyce (2008a:24) points out, most of this literature “assumed that the activities of these two sexes, at least in part, would have been segregated.” Thus a Western feminist framework that emphasises the role of women and their activities as exclusive to men rather than considering the relational nature of both genders, may not necessarily reflect the culturally specific philosophy in which such gender-based roles are situated (cf. Joyce 2008a:42-43); such an approach may be just as problematic or informed by the same assumptions as the androcentric approach that has come to characterise Australian archaeology. Therefore, the findings of this research demonstrate a need for greater consideration of how the relational nature of gendered philosophies may manifest themselves archaeologically, but also how they are maintained and the ways in which they come to

influence contemporary archaeological practice. Only then will we be in a position to better understand the complexity of Indigenous lifeways,

7.2 Limitations

The findings of this research—like archaeological knowledges more broadly—are the product of and thus limited by the temporal and spatial context in which they were carried out. In addition to this, knowledges produced by auto-ethnography will always emphasise the position of the researcher, which—in this case—privileges a Western perspective. As a result, the auto-ethnography does not emphasise a Ngarrindjeri perspective; however, drawing upon ANT metaphors and concepts to further disassemble the auto-ethnography allows for the agency of the Ngarrindjeri Nation to be highlighted; an agency that—in some cases—remains obscured using an auto-ethnographic method alone. This is despite criticisms regarding the potentially demunanising effects of utilising ANT concepts, metaphors and vocabulary, particularly those relating to *symmetry* (Jackson 2015:37-8; McLean and Hassard 2004:503-4; Vandenberghe 2002). On the contrary, ANT metaphors and concepts allowed for the agency of the Ngarrindjeri Nation to be recognised. Therefore, the use of ANT metaphors and concepts was essential in highlighting this agency and allowing these other, often obscured actants to “speak” (cf. Alvesson and Sköldberg 2009:33).

Whilst one of the key aims of this research was to use the methods of ANT to describe the activities, interactions and connections that occur beyond the boundaries of an archaeological ‘site’, much of the auto-ethnography is still centred around ‘site’ based field-work. At the same time, this research also sought to highlight the messy reality of archaeological practice; however, the auto-ethnography reflects an overall linear narrative, perhaps partly due to the retrospective nature in which the auto-ethnography was produced. In addition to this, the auto-ethnography relied upon ‘artefacts’ produced as part of archaeological practice, including field notes, reports, databases and photographs; artefacts that—by their very nature—tend to represent archaeological practice as a linear process. Therefore, an auto-ethnography produced as archaeological investigations unfolded rather than retrospectively may have highlighted activities and interactions obscured from such linear accounts, in turn producing more detailed and complex descriptions.

7.3 Further Research

Firstly, this thesis set out to ethnographically describe archaeological practice and the knowledges it produces, in order to inform the development of transformation strategies to

challenge the hegemonic and privileged position of archaeological knowledges. Therefore, the development of such strategies—which have included agreement making and capacity building—is beyond the scope of this research; however, this research has provided further theorisation towards their development. In doing so, this thesis contributes to an active program of research that seeks to further theorise and challenge the ongoing marginalisation of Ngarrindjeri rights, responsibilities and interests. In particular, the findings complement recent research by Hemming (2014) and Wilson (2017) in allowing for a thorough theorisation of archaeology’s “knowledge place” (Law 2011) within Ngarrindjeri *Yarluwar-Ruwe*. These case study based research projects provide a theorisation of the inputs and outputs of archaeological practice, including the ways in which such practice may be reassembled to privilege contemporary Ngarrindjeri rights, responsibilities and interests. In other words, considering the ways in which archaeological practice can be reassembled for the production of new or alternative past, present and future “ontologies” (cf. Bennet 2013:2; Harrison 2015:24,28).

Secondly, the outcomes of this research provides a small picture of the complexity of Ngarrindjeri lifeways in relation to Waltowa Wetland, including the Ngarrindjeri Nation’s ongoing connection to this wetland that is maintained through their knowledges and concerns relating to its formation and contemporary nature that exist exclusive of archaeological understandings; however, archaeological investigations do provided a starting point from which to better understand the complexity of Ngarrindjeri lifeways at Waltowa Wetland, which may include the future analysis of detailed recording results, artefacts with resin and potential gun ports. At the very least, such research should continue to privilege the Ngarrindjeri philosophy of *Ruwe/Ruwar* to emphasise the ongoing connection to and management of *Yarluwar-Ruwe* beyond a past-oriented technological and economic understanding. Such research will continue to refine knowledges produced by previous archaeological investigations, allowing for more complex understandings of Ngarrindjeri lifeways within the region. Lastly, any research of this kind will continue to be with and for the Ngarrindjeri Nation.

7.4 Conclusion

Overall, this research set out to present an auto-ethnography of archaeological practice to describe the practices and often marginalised connections that influence the production of archaeological knowledges. In particular, describing the nature of the connection resulting in the conclusion of archaeological investigations demonstrates the continued existence and

agency of Ngarrindjeri gender-based divisions, knowledges and areas. In doing so, the findings of this research challenge the outcomes of the HIRC from which this research emerged, demonstrating the Ngarrindjeri gendered world is not fabricated and continues to play an important role in the ongoing management of *Yarluwar-Ruwe*; an outcome of this research that was neither planned nor anticipated. As a result, this research journey has—like the distinct weave of Ngarrindjeri basketry—travelled full-circle to return to where this research emerged, demonstrating all things are connected.

Stitch by Stitch, Circle by Circle,
weaving is like the creation of life,
all things are connected.

(E. Trevorrow 2005 in Ngarrindjeri Nation 2006:51)

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Appendices

Appendix 1: Tatiara Station Survey Report

Document has been removed due to confidentiality.

Appendix 2: PhD Research Proposal

Research Proposal:

“Connection and Continuation - Investigating Ngarrindjeri land use of Waltowa Wetland”
(working title)

Background

Waltowa Wetland is located approximately 10km north of Meningie, on the eastern shore of Lake Albert (see Figure 1). In June this year, pedestrian surveys were carried out around Waltowa Wetland with the aim to record Ngarrindjeri cultural heritage within the area (see Wiltshire 2009a, 2009b, 2009c). This work was carried out under the Ngarrindjeri Caring for Country Heritage Project (NCCHP) developed by Ngarrindjeri Land and Progress Association Inc. (NLPA), Ngarrindjeri Heritage Committee (NHC) and Steve Hemming (Lecturer, Australian Studies). The NCCHP is aimed at developing management planning through case studies and research. As a result of this work further research has been recommended, including the development of a PhD project as part of a long-term management plan for the area.

This project emerges from collaborative partnerships with NLPA, NHC and Ngarrindjeri Regional Authority (NRA). Collaborative partnerships provide a unique opportunity to better understand the continued connection Ngarrindjeri people have with their pasts and their Ruwe (country). This research is part of an existing program of research developed between Ngarrindjeri leaders and researchers such as Steve Hemming, Daryle Rigney (Associate Professor, Yunggoendi First Nations Centre) and Christopher Wilson (Associate Lecturer, Yunggoendi First Nations Centre; see for example Hemming and Rigney 2008, Hemming, Rigney and Wilson 2008; Hemming et al. 2007). Christopher Wilson's PhD research is also part of this collaborative program.

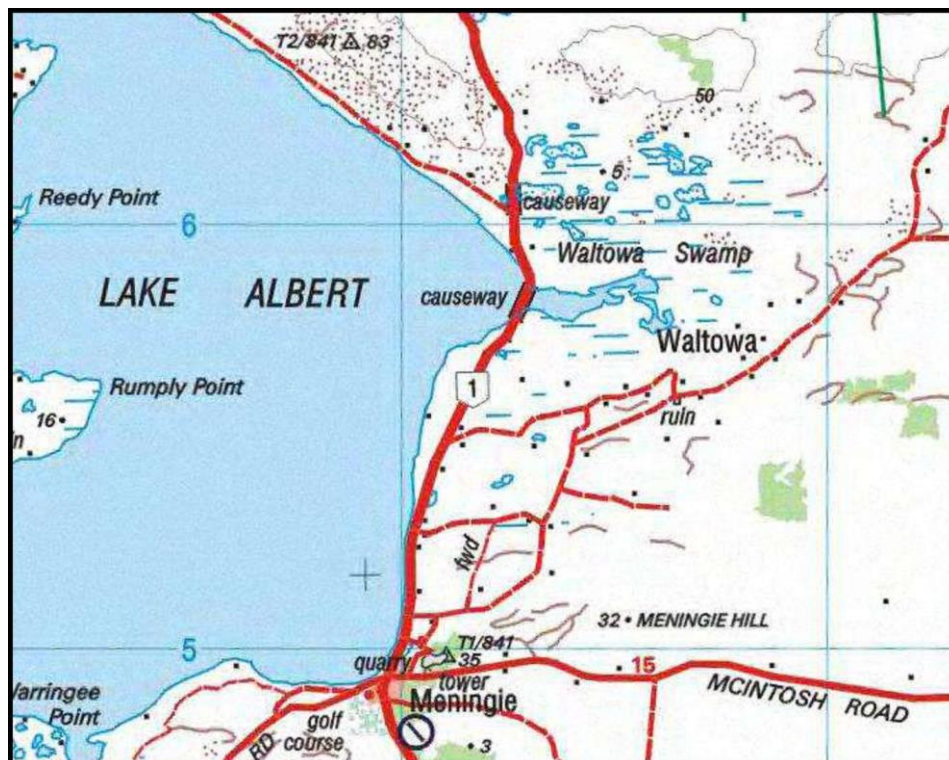


Figure 1. Map showing location of Waltowa Wetland

Research Questions

The research underpinning this project is designed to contribute a detailed understanding of Ngarrindjeri land use of Waltowa Wetland. The shores of Lake Albert and Waltowa Wetland have always been culturally important to Ngarrindjeri people and they continue to a close connection with the area through cultural and spiritually histories.

Preliminary observations during pedestrian surveys indicate Waltowa Wetland was the focus of Ngarrindjeri activity prior to European contact. Specifically, areas within close proximity to the wetland were observed to have a high density of stone artefacts and appear to be focus of activity. Previously, several researchers (Hale and Tindale 1930; Tindale 1957; Mulvaney 1960; Luebbers 1981) have argued stone artefacts were a minor component of the local tool kit, with Ngarrindjeri people using mussel shell, reeds, bone and wooden artefacts rather than stone artefacts. Therefore, areas with a high density of stone artefacts are rarely encountered and recorded within this region.

Less intense but still important, similar activities appear to be taking place in areas further inland, which are reflected by the small stone artefact and cooking rock scatters recorded. Areas located further inland are likely to represent small camps that were occupied briefly by people who were moving through the area, possibly in the winter time. These areas are also a little-studied and recorded aspect of the complex land use patterns of Ngarrindjeri people within this region.

The main aim of this project is to develop a better understanding of Ngarrindjeri adaptation to, and use of, freshwater lake and wetland environments. Specifically, detailed stone tool analysis will assist in developing a more detailed knowledge of Ngarrindjeri stone tool technology and use, thereby building upon previous knowledge of the Ngarrindjeri tool kit.

Methodology

In order to contribute knowledge to Ngarrindjeri history of the region, this project proposes to undertake further research of Waltowa Wetland through a combination of:

1. Detailed background research including ethnographic documents archived within the South Australian Museum and present day Ngarrindjeri knowledge's and personal histories;
2. Archaeological investigations including further surveys of Waltowa Wetland, detailed stone artefact analysis and surface sampling of mussel shell fragments to establish a minimum land use date.

Anticipated Resources

At this stage, two weeks of pedestrian survey has already been carried out under grant funding received from the Federal Government's 2008/2009 Indigenous Heritage Program (IHP), which has produced a significant amount of information about the area. As a result, a further two weeks of field work has been proposed to carry out detailed analysis of artefact scatters recorded during this initial survey. It is anticipated that costs associated with this field work will be covered by a further \$22,000 in grant funding recently received in the 2009/2010 IHP funding round and carried out in early 2010.

In addition to the detailed analysis of stone artefact scatters, a further two weeks of pedestrian survey is also planned. It is anticipated that costs associated with this field work will be cover by either an Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS) research grant (in preparation, application due January 11th 2010) or future IHP funding (application due February 2010).

At this stage, this project does not plan to undertake any excavation and all artefact analysis will be undertaken in the field, leaving all cultural materials in situ. Therefore, laboratory space and storage for this project will not be required.

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Wiltshire, K. 2009c. Lower Lakes Survey, Waltowa Wetland, Meningie – Report 3 of 3: Tatiara Station Homestead Collection. Confidential report prepared for the Ngarrindjeri Land and Progress Association (NLPA).

Flinders University PhD scholarship application
Kelly D. Wiltshire

Research Experience

Since late 2005, I have been working with members the Ngarrindjeri Aboriginal community based at Camp Coorong, Meningie on heritage related matters. In November 2006 I completed a First Class honours degree entitled *Unfinished Business: The "Lower Murray Lakes Archaeological Study" within an historical and political context* (Wiltshire 2006d). This thesis examined heritage regimes in South Australia through a case study – the Lower Murray Lakes Archaeological Study (LMLAS) - and what the current outcomes are for the Ngarrindjeri community. As a result of this research, several outcomes have been achieved including one major publication based on one of the thesis chapters (see Wiltshire and Wallis 2008), publication of the thesis abstract in *Australian Archaeology* (see Wiltshire 2008c), an international conference presentation in Canada (see Wiltshire and Trevorrow 2006), presentation of thesis results (see Wiltshire 2006b, 2006c) and the production of posters based on thesis results (see Wiltshire 2007a, 2007c). Additionally, I am currently working on second publication based on the ethics process of the thesis research (see Wiltshire *in prep.*).

Since completing my Honours degree I have maintained close contacts with members of the Ngarrindjeri community through ongoing research and employment (see Wiltshire 2007b, 2007-2009, 2009e, 2009f, 2009g; Wiltshire and Wilson 2008a). As a result of this ongoing relationship, I successfully applied to undertake PhD research through Monash University examining excavated collections from the LMLAS. This PhD research included the presentation of my research proposal (see Wiltshire 2008a, 2008b). Unfortunately, due to research conflict with the archaeologist who had originally excavated the collect in the mid-1980s the project had to be shelved and I withdrew from the PhD.

Despite this setback, Christopher Wilson (Department of Archaeology PhD candidate; Yunggorendi Associate Lecturer) and I successfully applied for a \$95,000 funding grant through the Federal Government's Indigenous Heritage Program (IHP) (see Wiltshire and Wilson 2008b). The aim of this grant was to develop management planning through case studies and research. One of the major case studies was a directed research project around Waltowa Wetland, which included pedestrian surveys with an aim to record Ngarrindjeri cultural heritage. These surveys were carried out in June this year and resulted the productions of several reports (see Wiltshire 2009a, 2009b, 2009c, 2009d). As a result of these reports further research within Waltowa Wetland has been recommended, including the proposal to develop this research into a PhD project as part of a long-term management plan for the area. Additionally, I am currently drafting a conference paper based on the Waltowa Wetland research to be presented in a session organised by Steve Hemming (Senior Lecturer / Director of Studies, Australian Studies), Christopher Wilson and myself (see Wiltshire and NLPA *in prep.*). More recently, Steve Hemming and I have successfully applied for an \$88,000 funding grant through the Indigenous Heritage Program (IHP), in which \$22,000 has been allocated for Waltowa Wetland research (see Wiltshire and Hemming 2009).

Employment Experience

Since completion of my Honours degree in November 2006 I have been contract employed in various roles relevant to the proposed research project, including heritage consultancy work as an archaeologist (see 'Archaeology Employment Experience'). This role has involved carrying out archaeological surveys, identification of cultural artefacts, excavation, laboratory processing, site plans and report writing. Furthermore, I have also been employed by Flinders

University in several roles, including research assistant, student ambassador, tutor, demonstrator and teaching assistant (see 'University Employment Experience'), and have carried out presentations/lectures for the Department of Archaeology (see Wiltshire 2006a; Wiltshire and Wilson 2008-2009). In addition to my employment experience, I have many hours of voluntary experience on various archaeological research projects (see 'Voluntary Experience').

Additional Training and Development

As part of my ongoing training and development as an archaeologist, I have also completed several workshops relevant to the proposed research project (see 'Training and Development Workshops').

Archaeological Employment Experience

April 2009

Employer: Luebbers and Associates (SA)

Position: Assistant Archaeologist

Duration: Two weeks (contract)

Job Functions: Salvage excavation and laboratory processing of Ngarrindjeri cultural site, identification of human remains, faunal remains, and stone artefacts.

July 2008 – December 2008

Employer: Archaeological Risk Assessment Services (NSW)

Position: Assistant Archaeologist

Duration: Contract

Job Functions: Terrestrial surveys, identification of stone tools, test pit and hand excavation, recording archaeological field data, drawing site and feature plans, setting out surface collection grids, entering field data into an Excel spreadsheet, compiling weekly reports.

June 2008

Employer: Paul Irish, Consultant Archaeologist (NSW)

Position: Assistant Archaeologist

Duration: Two weeks (contract)

Job Functions: Salvage excavation and laboratory processing of midden material from Cooks Stream, Botany Bay, including: identification of shell and fauna remains, identification of shell fish hooks, and identification of stone tools.

March – April 2007

Employer: Comber Consultants Pty Ltd (NSW)

Position: Archaeologist (Trainee Position)

Duration: One month full time

Job Functions: Terrestrial survey, identification of cultural sites, library research, report writing.

University Employment Experience

July – Present 2009

Employer: Yunggorendi First Nations Centre, Flinders University (SA)

Position: Teaching Assistant

Duration: Four months casual

Job Functions: Running tutorial group for first year Introduction to Aboriginal Studies (AUST 1004) students (approx. 20), marking first year essays and other assignments.

April 2008

Employer: Archaeology Department, Flinders University (SA)

Position: Demonstrator

Duration: 10 days (contract)

Job Functions: Demonstrating use of archaeological equipment, supervising archaeological field survey, excavation and lab analysis at the Archaeological Field Methods (Version 1 – Coorong) Field School (ARCH8305).

March – June 2008

Employer: Yunggorendi First Nations Centre, Flinders University (SA)

Position: Tutor

Job Functions: Tutoring first year Introduction to Archaeology (ARCH1001) Aboriginal student.

August 2006

Employer: Flinders University (SA)

Position: Student Ambassador

Duration: Two days (contract)

Job Functions: Tour guide, information and archaeology student representative at Course and Careers Open Days 2006.

February 2006 – August 2006

Employer: Lynley Wallis, Archaeology Department, Flinders University (SA)

Position: Research Assistant

Duration: Six months casual

Job Functions: Library research and office related tasks such as filing and photocopying.

Voluntary Experience

October 2008

Project Title: Lower Murray Archaeological Study PhD Research, SA

Researcher: Christopher Wilson, Archaeology Department, Flinders University.

Duration: Two weeks

Duties: Survey, identification, recording and excavation of shell midden sites.

September 2008

Project Title: Flinders Rangers PhD Research Project, SA

Researcher: Giles Hamm, Archaeology Program, La Trobe University

Duration: 10 days

Duties: Excavation of open artefact scatter site.

January 2007 - July 2008

Project Title: Lower Murray Lakes Archaeological Study (LMLAS) PhD Research, SA

Duties: Supervision of undergraduate and high school students in sieving, wet sieving, sorting and identification of highly fragmented shell midden materials.

April 2008

Project Title: Lake Condah, VIC

Researcher: Dr Ian McNiven, School of Geography and Environmental Science, Monash University, VIC

Duration: Five days

Duties: Archaeological excavation, sieving, bagging and labelling of archaeological materials; recording excavation process using a dumpy levels and photography; use of Munsell Soil Colour Chart and Soil PH Test Kit.

November 2007

Project Title: Lower Murray Archaeological Study PhD Research, SA

Researcher: Christopher Wilson, Archaeology Department, Flinders University.

Duration: One Week

Duties: Total Station set up and operation; dumpy set up and operation; archaeological level excavation, sieving, sorting, bagging and labelling of archaeological materials; recording the excavation process using excavation forms, dumpy levels, and photography; use of Munsell Soil Colour Chart and Soil PH Test Kit.

October 2007

Project Title: Lower Murray Archaeological Study PhD Research, SA

Researcher: Christopher Wilson, Archaeology Department, Flinders University.

Duration: Nine days

Duties: Terrestrial survey; identifying and recording of midden sites and canoe trees along Lower Murray.

July 2007

Project Title: WWII Air Raid Shelter Project, Repat Hospital, SA

Researcher: Dr Alice Gorman, Archaeology Department, Flinders University.

Duration: 2 days

Duties: Drawing site plan of buildings and infrastructure; using geophysical equipment under supervision.

November 2006

Project Title: WWII Air Raid Shelter Project, Repat Hospital, SA

Researchers: Dr Heather Burke, Dr Alice Gorman and Dr Lynley Wallis, Archaeology Department, Flinders University; Ian Moffat, Ecophyte Technologies.

Duration: One day

Duties: Geophysical survey and using geophysical equipment under supervision.

June 2006

Project Title: Gledswood Rock Shelter, NW QLD

Researchers: Dr Lynley Wallis, Archaeology Department; Flinders University.

Duration: Two weeks

Duties: Archaeological excavation, sieving, sorting, bagging and labelling of archaeological materials; recording the excavation process using excavation forms, dumpy levels, photography and section illustration; use of Munsell Soil Colour Chart and Soil PH Test Kit; sorting and identification of highly fragmented materials including charcoal and stone artefacts.

September 2005

Project Title: Warnung (Hacks Point), SA

Researchers: Dr Lynley Wallis, Dr Alice Gorman and Chris Wilson, Archaeology Department, and Steve Hemming, Australian Studies Department, Flinders University; Ngarrindjeri Heritage Committee (NHC) Inc.

Duration: Two weeks

Duties: Terrestrial survey; stone artefact analysis and recording.

August 2005

Project Title: Camp Noonameena, SA

Researchers: Dr Lynley Wallis, Archaeology Department, Flinders University; Ian Moffat, Ecophyte Technologies; Ngarrindjeri Heritage Committee (NHC).

Duration: One day

Duties: Geophysical survey and using geophysical equipment under supervision.

Training and Development Workshops

April 2008

Geochronology for Archaeologists

Developed and offered by Dr Alistair Pike (Bristol University, UK) through the Department of Archaeology, Flinders University.

November 2007

Stone Artefact Workshop

Developed and offered by Dr Peter Hiscock (Australian National University, ACT) through the Department of Archaeology, Flinders University

October 2005

Race Relations and Cultural Awareness Weekend, Camp Coorong, SA.

Developed and offered by Dr Lynley Wallis (Flinders University, SA) and the Ngarrindjeri Heritage Committee (NHC) through the Department of Archaeology, Flinders University.

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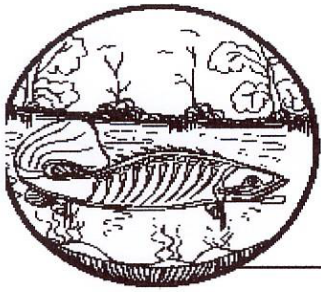
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Appendix 3: Letter of Ngarrindjeri Community Support



Ngarrindjeri Heritage Committee Inc.

*C/O NLPA PO Box 126 Meningie SA, 5264
Ph (08) 85751557 Fax (08) 85751448
e-mail nlpa@bigpond.com*

15th of July 2010

To whom it may concern

Re: Letter of Ngarrindjeri Community Support

This letter is to confirm that PhD research student Kelly Wiltshire has consulted with members of the Ngarrindjeri Nation, who are the traditional owners and Native Title claimants of the Lower Murray, Lakes and Coorong areas of South Australia, about the research project focused on Waltowa Wetland archaeological sites that she wishes to conduct with Ngarrindjeri in 2010-2013.

The project was developed in collaborative partnership with the Ngarrindjeri Heritage Committee, Ngarrindjeri Land and Progress Association and Ngarrindjeri Regional Authority, and is part of an existing program of research developed between Ngarrindjeri leaders and Flinders University researchers (Steve Hemming, Daryle Rigney and Christopher Wilson). Kelly has engaged in discussions with Tom Trevorow (Chair, Ngarrindjeri Heritage Committee), Luke Trevorow (Ngarrindjeri Ruwe Contracting), George Trevorow (Chair, Ngarrindjeri Regional Authority) and Matt Rigney (Ngarrindjeri Native Title Management Committee).

On behalf of the Ngarrindjeri Nation we confirm that Kelly has consulted with members of the Ngarrindjeri community and there is community support for this project. We are aware this project will involve survey, recording and possible excavation of Ngarrindjeri sites, as well as access to records and archival materials as is relevant to her research. We support this research project providing archaeological work and access to research materials is subject to ongoing community consultation throughout all stages of research.

If there are any queries regarding this research please feel free to contact the Ngarrindjeri Heritage Committee on (08) 8575 1557.


Mr Tom Trevorow
Chairperson, Ngarrindjeri Heritage Committee (Inc)

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Appendix 4: Fieldwork Summary Report

Document has been removed due to confidentiality.

Appendix 5: Site Recording Form

AARD Site A Card and B Archaeological Card

Archaeological Survey – Site Recording Form

Project Name: Wetland Research Project Date: 14.4.2010

Survey Team: K. Wiltshire, S. Smith, M. Slizankiewicz Recorder: K. Wiltshire

GPS Co-ordinates:

(WWRP EC4 1) N 0355241/6061632 E 0355225/6061541 (WWRP EC4 2)
 WWRP EC4 4 S 0355109/6061458 W 0355132/6061610 (WWRP EC4 2)
 C 0355186/6061562

Photographs: Yes / No

Proforma Sheet Ref. Nos:

Sketch Map: Yes / No

Journal Name / Page No:

Other: Refer to Aboriginal Heritage Branch Site Card A

Land Unit / Element Type: (Percentage 5%, 25%, 50%, 75%, 100%)

Ridge Crest (%)

Drainage Channel (%)

Flat (%)

Hillock (%)

Ridge Slope (✓ %)

Spur (%)

Closed depression (wetland) (%)

Slope

Flat (<2°)

Gentle (2-5°)

Moderate (5-10°)

Steep (>10°)

Ground Surface Visibility (Amount of soil or outcrop exposed)

0-25%

25-50%

50-75%

75-100%

100%

Ground Surface Feature - Dune Blowout

Bare Soil Patch

Gully / Channel

Rock Outcrop (.....)

Overhang / Shelter* (..... / Length x Width x Depth)

*Shelter depth = drip-line to back. Shelter height = drip line to floor.

Land Use

Cleared for cattle grazing

Ploughed field

Vehicle Track

Farm Dam

Cattle Track

Mined Landscape

Natural bushland (untouched)

Drainage Type

Channel

Creek

Waterhole

Wetland

Spring

Archaeological Survey – Site Recording Form

Cultural Evidence Present*

Isolated Find	Yes / No	Rock Engravings	Yes / No
Artefacts	<input checked="" type="radio"/> Yes / No	Paintings	Yes / No
Quarry	Yes / No	Hearth	<input checked="" type="radio"/> Yes / No
Scar Tree	Yes / No	Stone Arrangement	Yes / No
Carved Tree	Yes / No	Grinding Groove	Yes / No
Rock Shelter	Yes / No	Archaeological Deposit	Yes / No
Midden	Yes / No	Post-contact	<input checked="" type="radio"/> Yes / No
Burial / Human Remains	Yes / No	Cultural / Dreaming	Yes / No

*Refer to appropriate Aboriginal Heritage Branch Site Card B

Notes

200m / 100m

1x pre-mussel shell

lots of granite (scattered)

several green glass

cooking stones - some concentration

- not circular

some retouched artefacts

2x cores

1x pre-print

old dune - east dune

adjoining dune blown out yet to be recorded

Barren right next to wetland

A CARD	SOUTH AUSTRALIAN ABORIGINAL SITE CARD
---------------	--

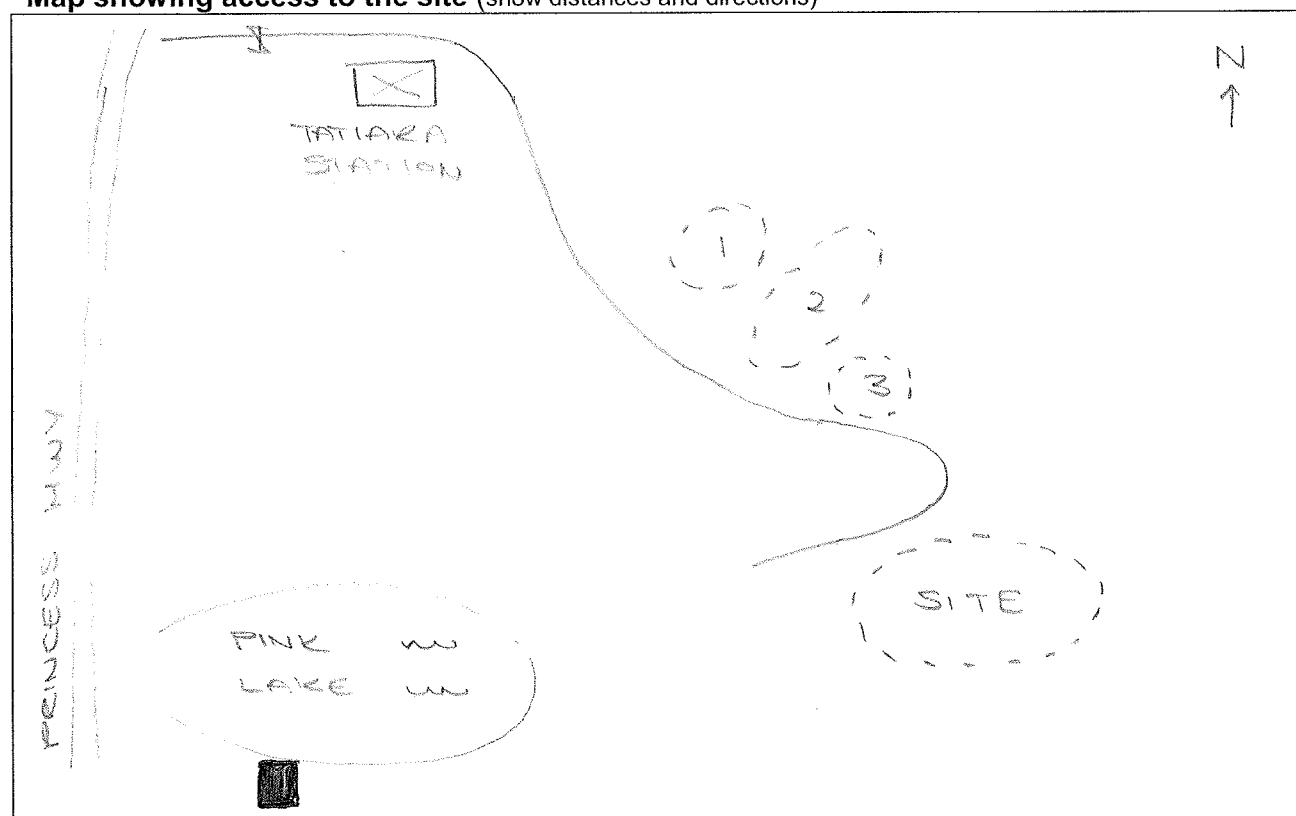
Site Register Number	Office use		
Site Name	BLOWOUT 4 / DUNE COMPLEX 2		
Other Name			
Registration date	Office use		
Are there any restrictions for accessing this site information? (yes or no)		<input type="radio"/> Yes <input checked="" type="radio"/> No	Please specify (i.e. gender, age)

Site is significant to – tick more than one category if appropriate, use a separate "B" card for each site type			
Aboriginal archaeology	<input checked="" type="checkbox"/>	Aboriginal anthropology	<input checked="" type="checkbox"/>
Aboriginal history	<input checked="" type="checkbox"/>	Aboriginal tradition	<input checked="" type="checkbox"/>

Map reference				
Map sheet name:	Number:	Scale:		
Grid reference: (please supply at least 5 grid references 4 boundary points and 1 midpoint)				
Datum used (please circle)	GDA94	WGS 84	AGD 84	AGD 66

Cadastral information	Hundred	Section	Block
Land tenure (please circle)	Freehold	Leasehold	Crown
Property name	TATIARA STATION		
Title or leaseholder	B & P M. CLURE		Phone:
Address	PRINCESS HWY		

Map showing access to the site (show distances and directions)



Written description of access to the site (direction & distance)			
Special access requirements (please tick)			
4 Wheel Drive	<input checked="" type="checkbox"/>	Boat	Other (please specify)

Accompanying documentation (please tick)			
Photographs	<input checked="" type="checkbox"/>	Notes	<input checked="" type="checkbox"/>
Tape recordings		References / reports	
Drawings		Aerial photograph	
Computer disk/CD		Other	
Reports & references:			
Where else are copies of this documentation held?			

Recommendations for site preservation and management

Statement of significance according to Aboriginal archaeology, anthropology, history and/or Aboriginal tradition.

Traditional Owner:			
Address:			
Were Aboriginal people involved in the site recording? (circle yes or no)	Yes	No	
Name/s:			
Affiliation (i.e. Native Title claimant, local Aboriginal heritage committee member)			
Site Recorder:			
Address:			
Date of recording:			

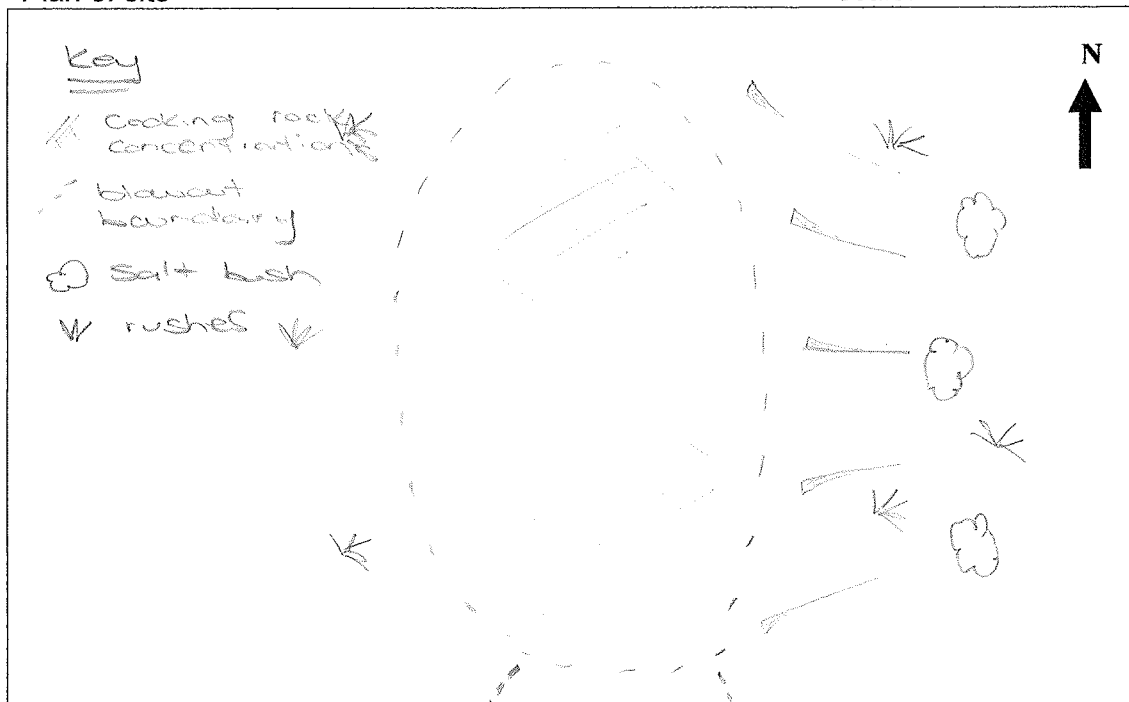
B CARD	Archaeological
---------------	-----------------------

Site number

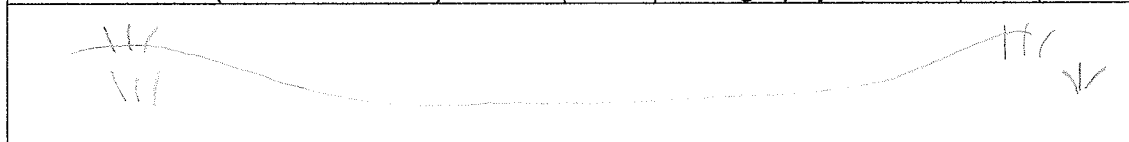
Site name

Plan of site

scale:



Cross section (do not excavate)	Stratigraphy visible	Yes	No
---------------------------------	----------------------	-----	----



Site contents	Clustered/clumped	Scattered	
Faunal remains	Fish bone	Animal bone	Shell
	Bird bone	Reptile bone	Crustacea
Plant remains	Seed	Wood	
Human remains	Yes	(No)	(see burial card)
Dating	Radio carbon	Other	

Stone artefacts

Density per metre ²	Max no.	Min. No.	Total number	Approx	Absolute
Flint	✓	10	✓	✓	✓
Chert	✓	7	✓	✓	✓
Jasper	✓	✓	✓	✓	✓
	Quartz	✓	Silcrete	✓	Glass
	Quartzite		Volcanic		Other
	Chalcedony		Sandstone		

Stone artefact types	Production method	Flaked	Ground	Quarried	
Core	Retouch	Y / N	Grindstone		
Flakes	Y / N	Y / N	Hammerstone		
Blade	Y / N	Y / N	Anvil		
Scraper	Y / N	Y / N	Axe		
Tula	Y / N	Y / N	Other		Retouched flakes

Pirri Prints

Description of site (attach extra sheets if necessary)
Site dimensions (visible)
Photograph details

Site environment

River valley		Creek gully		Estuary		Cliff line		Dune	
Lake edge		Water hole		Swamp	✓	Claypan		Gibber	

other:

Distance to water source	✓	Permanent		Temporary/seasonal		Unknown	
--------------------------	---	-----------	--	--------------------	--	---------	--

Description of natural environment

Vegetation (major species):
Present land use: <i>Cattle grazing</i>
Adjacent sites: <i>Blacks T, 2, 3</i>

Causes of site damage

Natural erosion	✓	Vandalism		Camping	
Vehicle traffic		Animal	✓	Urban rural /development	
Foot traffic	✓	Pastoral	✓	Mining /extractive	

Vegetation cover	Majority	Partial	None
Soil exposure	Majority	Partial	None
Site preservation	Good	Fair	Poor

Description of site condition

Have items been collected from the site?	Yes	No	Unknown
Name of collector			
Location of collection			

Appendix 6: Detailed Recording Forms

Photographic Proforma

STONE ARTEFACT RECORDING FORM
GRID SQUARE: 1000 1000

Waltowa Wetland / Blowout 3
Date: 13.4.2010

FORM.....of.....

No.	x	y	TYPE	RAW MATERIAL	L cm	W cm	T cm	CORTEX %	PLATFORM Surface / Sz	TERMINATION Notes
M4 1	45	70	FP	Q	1cm	1cm	0.5cm	-		Ref Coll 23
M5 2	25	30	FP	C	0.35cm	1cm	0.5cm			Ref Coll 23
M6 1	70	35	FP	C	0.5cm	0.5cm	0.25cm			Ref 17
L16 1	85	50	FP	C	1.5	1.0	0.5			Ref 17
L15 1	70	80	FP	Q	1.5	1.0	0.5			
L14 2	15	90	FP	Q	1.0	1.0	0.5			
L14 1	55	70	FP	Q	1.5	1.0	0.5			Ref Coll 24
L13 3	5	60	FP	Q	1.5	0.75	0.25			"
L12 1	50	80	FP	Q	1.0	2.0	0.5			
L11 1	55	95	FP	Q	1.5	1.5	0.5			
SHOW * L10 1	50	60	FP	Q	0.98	0.59	0.2	30.1.?	N / 8.13	Ref Coll 25
ROGGE 2	75	75	FP	C	1.0	0.5	0.25			Ref 3
L8 3	35	85	FP	Q	1.0	1.5	0.5			
L8 1	65	60	FP	Q	1.0	0.5	0.5			
L7 1	45	30	FP	Q	2.5	1.0	0.5			
L7 2	65	75	FP	Q	1.0	1.0	0.5			
L7 3	35	85	FP	C	2.0	1.0	0.5			Ref 17
L6 4	35	85	FP	C	1.0	1.0	0.5			"
L6 1	30	30	BEN	Q	1.5	1.0	0.5			
SHOW * L4 1	65	25	REFGM	C	1.17	0.72	0.21	-		Ref Coll 26
ROGGE * L3 2	70	90	FP	?	2.0	1.5	0.5			Ref 14
L3 1	20	45	REFS	C	2.02	1.44	0.4	-		Ref Coll 27
L2 1	55	80	FP	Q	1.5	1.0	0.5			
L2 2	50	90	FP	Q	1.0	0.5	0.25			
L1 1	70	10	BED	Q	1.0	1.5	0.75	-		
F - Flake										
FP - Flake Piece										
RF - Retouched Flake										
BF - Broken Flake										
C - Core										
P - Proximal										
M - Medial										
D - Distal										
Q - Quartz										
S - Silcrete										
C - Chert										
G - Granite										
D - Diatomite										
QZ - Quartzite										

Researcher: K. Wiltshire

REMEMBER: Photograph 1 example of each type of artefact per day!

Cortex or residue?

* not artefact?

FORM.....of.....

[illegible]

Work
done

COOKING ROCK RECORDING FORM
GRID SQUARE: M370000

Waltowa Wetland / Blowout 3
Date: 13.4.2010

FORM.....1.....of.....

No.	x	y	RAW MATERIAL	L cm	W cm	T cm	BURNING %	BURNING Direction	OTHER
M2	1	15	50				—		NO SITE
	2	5	15				—		" "
	3	28	85				"		"
	4	40	90				"		"
	5	25	15				"		"
M4	6	45	25				"		"
	7	20	40				"		"
	8	40	45				"		"
	9	85	50				"		"
	10	15	60				"		NO SITE
	11	50	65				"		NO SITE
	12	80	65				"		NO SITE
	13	50	75				"		"
	14	90	70				—		NO SITE
	15	5	80				100		"
M5	16	10	85				"		"
	17	40	80				"		"
	18	10	90				"		"
	19	95	90				"		"
	20	70	80				"		"
	1	55	10				"		"
	2	55	30				"		"
	3	85	40				"		"
	4	80	50				"		"
	5	15	90				"		"
M6	1	85	70				"		"
	2	90	90				"		"
	1	10	55				"		"
	2	5	80				"		"
	3	20	85				"		"
M7	4	25	90				"		"
	5	65	80				"		"
	6	10	100				"		"
	7	25	95				"		"
	1	25	80				"		"
M8	1	25	80				"		"

Researcher: K. Wiltshire

REMEMBER: Photograph 1 example of each type of artefact per day!

GRANITE
HAMMERSTONE / GRINDSTONE RECORDING FORM
~~GRINDSTONE RECORDING FORM~~

Waltowa Wetland / Blowout 3
Date: 13/4/10 -

FORM.....of.....

Gr. Sq.	No.	x	y	HS / GS	RAW MATERIAL	L	W	T	OTHER	PHOTO No.
L10	1	80	65		GRANITE	1.0	1.5	0.5	GREY GRANITE	-
K4	1	SS	SS		Granite	-	-	-	in situ	
K11	1	SS	QS		Gra/Pink	2.97	2.2	1.24	-	
J11	1	20	15		Gra/pink	5.03	3.26	1.44	-	
	2	SS	20		Gra	3	2.14	1.09	-	
T4	1	30	45		Gra/Pink	2	1.8	1.6		
J20	1	10	10		Pink	1.5	1.1	0.7		
G5	1	60	100		P/STONE	2.1	1.9	0.4	-	22/23
G6	1	65	10		Gra	2.3	1.5	0.5	-	
G11	1	75	10		Orange granite	2.1	1.3	1.3	-	
G19	1	45	10		Gra/pink	3.7	3.3	1.7	-	
F16	1	40	15		G/p	3.3	2.7	1.5	-	

13.4.10
14.4.10
16.4.10
17/4/10

Waltowa Wetland / Blowout 3

GRID SQUARE: 14110000

Date: 13/4/10

[illegible]
$$\frac{1}{\omega} \frac{d}{dt} \frac{1}{\omega}$$

16/4/10
17/4/10

Light Green.

Waltowa Wetland / Blowout 3

Date: 14.4.2010

FORM.....of.....

GRE. SQ.	No.	x	y	SHELL / BONE	SPECIES	L	W	T	DISINTEGRATE %	OTHER	PHOTO No.
J 19	81	85	85	✓	?					Bagged B1	
I 19	51	45	55	✓	Mussel	C.B	0.7	0.3	Poor	Collected	
H 16	52.	5	75	✓	"					Calified ?	
G6	1	90	50	✓	"				50%	Grey Hinder	24/75
G16	1	15	100	✓	Bone?	1.6	.8	~3	poor	Bone 2C14?	—

Researcher: K. Wiltshire

Waltowa Wetland / Blowout 3

FORM.....of.....

Date: 7-4-2010

Photo No.	No.	GRID SQ.	ACTION	SITE	DIRECTION	ARTEFACT	TYPE	RAW MATERIAL	VENTRAL	DORSAL	OTHER
1			✓		-						Cc Smoking.
2			✓		-						" "
3			✓		-						" "
4			✓		-						" "
5			✓		South,						Pis Flaking
6			✓		South east						" "
7			✓		South east						" "
8			✓		east						" "
9			✓		North East.						'Pithing's Sandman Stone
10			✓		NE						" "
11			✓		West.						Setting up base line
12			✓		SW						" "
13			✓		West.						" "
14			✓		North.						Setting up 2nd base line
15			✓		NORTH						" "
16			✓		north						" "
17			✓		North.						" "
18			✓		NE						" "
19			✓		NORTH.						Thompson
20			✓		North.						Setting up baseline 2nd base line
21			✓		North.						Collecting raw material from cave
22			✓		North						Girdling 13/20 Kawg
23			✓		East						Girdling 13/20 SW
24			✓		N/E						Girdling 18/20 SW
25			✓		West						collective reference drill
											Kawg line 08/22-13/10/24
	F - Flake	BF - Broken Flake	P - Proximal M - Medial D - Distal	HS - Hammerstone GS - Grindstone	S - Shell H - Historical CR - Cooking Rock	Q - Quartz S - Silcrete C - Chert	G - Granite D - Diatomite QZ - Quartzite				

PHOTOGRAPH PROFORMA

Waltowa Wetland / Blowout 3
Date: 13.4.2010

FORM 1 of 2

PHOTO No.	No.	GRID SQ.	ACTION	SITE	DIRECTION	ARTEFACT	TYPE	RAW MATERIAL	VENTRAL	DORSAL	OTHER
1				✓	SW						SITE
2				✓	SW						"
3				✓	SSW						"
4				✓	SSW						"
5				✓	SSW						"
6				✓	S						"
7				✓	S						"
8				✓	SSE						"
9				✓	SSE						"
10				✓	SE						"
11				✓	SE						"
12				✓	E						"
13			✓								GRID CLEAN
14			✓								GRID CLEAN
15			✓								GRID CLEAN
16			✓								GRID CLEAN
17			✓								GRID CLEAN
18			✓								GRID CLEAN
19											GRID CLEAN
20		M2									GRID CLEAN
21		"									GRID CLEAN
22		"									GRID CLEAN
23			✓								GRID CLEAN
24			✓								GRID CLEAN
25			✓								GRID CLEAN
26			✓								GRID CLEAN
27			✓								GRID CLEAN
28			✓								GRID CLEAN
29											GRID CLEAN
30		M3		✓	N						GRID CLEAN
31		M4		✓	N						GRID CLEAN
32		M4	✓		W						GRID CLEAN

F - Flake
FP - Flake Piece
RF - Retouched Flake

BF - Broken Flake
C - Core

P - Proximal
M - Medial
D - Distal

HS - Hammerstone
GS - Grindstone
CR - Cooking Rock

S - Shell
H - Historical
Q - Quartz
S - Silcrete
C - Chert

G - Granite
D - Diatomite
QZ - Quartzite

Appendix 7: Application for Excavation Permit

PhD Research Project Design

“Connection and Continuity: Ngarrindjeri lifeways at Waltowa Wetland”

Kelly D. Wiltshire

PhD Candidate, Department of Archaeology, Flinders University

Casual Heritage Specialist, Ngarrindjeri Regional Authority (NRA) Inc.

Introduction

Overall, this research project will combine archaeological research with contemporary Ngarrindjeri knowledge to develop a collaboratively constructed understanding of Ngarrindjeri connections, significance and life ways associated with Waltowa Wetland. As such, this project aims to produce a long-term and in-depth assessment of the importance of freshwater wetland ecosystems for Ngarrindjeri people. Previous archaeological research within the region has had a limited focus on wetland environments, indicating the Ngarrindjeri use and significance of areas such as Waltowa Wetland are an under studied and poorly understood aspect of the complex occupation patterns of the Ngarrindjeri within this region. As such, the archaeological investigations at Waltowa Wetland aim to understand the timing and nature of Ngarrindjeri lifeways within a freshwater wetland ecosystem, which will be set within the context of broader questions around regional models within Lower Lakes and the regional more generally.

Background

This project was initially developed as part of the Ngarrindjeri Caring for Country Heritage Program (NCCHP) funded through the Federal Government’s *Indigenous Heritage Program* (IHP) grant scheme, with an initial aim to “identify and record an Indigenous place/s and/or the Indigenous heritage values of a place/s...” (DSEWPC 2012:4; NLPA 2008). Therefore, the initial aims of the research project were to undertake pedestrian surveys to locate, identify and record any Ngarrindjeri cultural materials in order to better understand the Ngarrindjeri significance of Waltowa Wetland. Kelly Wiltshire was employed to undertake a these pedestrian surveys, which have to date identified numerous areas containing Ngarrindjeri cultural materials (see Wiltshire 2009, 2010, 2011). In line the aspirations of Ngarrindjeri organisations¹ who initiated the project and employed Kelly Wiltshire, the registration of any areas within Waltowa Wetland will occur at the discretion of and in collaboration with those Ngarrindjeri organisations under Section 20(2)² of *Aboriginal Heritage Act 1988*.

From these initial pedestrian surveys a PhD research project was developed focusing on developing a better understanding of Ngarrindjeri connections, significance and life ways associated with Waltowa Wetland. By aiming to produce a long-term and in-depth assessment of the importance of Waltowa Wetland for Ngarrindjeri people, this PhD research project addresses the original aims of the NCCHP by assisting with management planning, long-term water reform and policy decision making for freshwater wetland ecosystems within the region.

¹ Ngarrindjeri Heritage Committee Inc. (NHC) and Ngarrindjeri Land and Progress Association Inc. (NLPA).

² The reporting to the Minister of an Aboriginal ‘site’ or ‘object’ “(does) not apply to the traditional owner of the site or object or to an employee or agent of the traditional owner”.

Excavation Aims

Given the initial aims of the project, the majority of the field work for this project has focused on recording Ngarrindjeri cultural materials through pedestrian surveys. As a result, these pedestrian surveys have recorded a high density of stone artefacts and hearths adjacent to the wetland and freshwater soaks, indicating the freshwater ecosystem of Waltowa Wetland was a focus of Ngarrindjeri lifeways prior to colonisation (Wiltshire 2009, 2010, 2011). Additionally, variability of stone artefacts and hearths observed during pedestrian surveys also indicate a variety of activities were occurring within adjacent areas (Wiltshire 2009, 2010). However, there is a distinct lack of marine and terrestrial fauna remains recorded during pedestrian surveys, which may reflect Ngarrindjeri lifeways or be the result of taphonomic processes (Wiltshire 2009, 2010, 2011). Furthermore, in-situ cultural materials at Waltowa Wetland appear to be centrally concentrated within a stratigraphic A Horizon unit, indicating the timing of Ngarrindjeri lifeways may occur within chronologically distinct time-period (Mitchell pers. comm. in Wiltshire 2012). In spite of these preliminary observations and interpretations, the Waltowa Wetland landscape is characterised by an aeolian dune complex that range from active blowouts to more stable grassed surfaces subject to pastoral use. Aeolian dunes and associated erosion are usually responsible for a lack of surface integrity, resulting in the problematic nature of cultural material variability used to construct preliminary interpretations (Ashmore and Griffiths 2011:5; Holdaway *et al.* 2008; Rick 2002). As such, this project proposes to undertake archaeological excavation to obtain in-situ data in order to provide stratigraphic and chronological context for cultural material variability observed during pedestrian surveys.

In total, **three excavation locations** have been selected in collaboration with NHC and NRA (see Figure 1; also see Appendix 1). The selection of these particular locations is the result of a long process of discussion and negotiation regarding the appropriateness of undertaking archaeological excavations on Ngarrindjeri cultural heritage. Given archaeological excavation is a destructive process, the decision to excavate Ngarrindjeri cultural heritage is a decision neither the researcher, NHC and/or NRA take lightly. As such, the locations selected for archaeological excavation are areas that contain in-situ Ngarrindjeri cultural materials that have been exposed within the steep internal sides of the dune blowouts and are under threat from further erosion. Therefore, these locations have been selected in order to gain knowledge about Ngarrindjeri lifeways at Waltowa Wetland before these locations are further impacted by erosion. Following excavations, short-term and long-term dune stabilisation will be undertaken to avoid any further erosion and help preserve undisturbed Ngarrindjeri cultural heritage.

Overall, there are several aims of archaeological excavations. Firstly, results from archaeological excavation aim to further contribute to an understanding of the nature of Ngarrindjeri life ways at Waltowa Wetland. In particular, excavations aim to clarify observations of cultural material variability observed during pedestrian surveys, particularly whether the lack of faunal remains is cultural or taphonomic. Secondly, results from archaeological excavations aim to obtain datable materials in order to develop a basic understanding of the timing of Ngarrindjeri life ways at Waltowa Wetland, which will also contribute to the development of regional models within this landscape and the region more broadly. Specifically, excavations aim to clarify whether the timing of Ngarrindjeri lifeways may occur within chronologically distinct time-period as observed during pedestrian surveys. Thirdly, results from archaeological excavations will be used to construct a basic understanding of the Waltowa Wetland stratigraphy, in order to place cultural materials within a meaningful paleo-environmental and geomorphic context. Specifically, excavations

aim to clarify the connection between climate change, sea level rise, dune formation and Ngarrindjeri lifeways at Waltowa Wetland. Lastly, given the collaborative nature of this PhD research project, archaeological excavations also aim to provide an opportunity for Ngarrindjeri organisations, elders and individuals to critically reflect on the excavation process and resulting data in better understanding of Ngarrindjeri life ways associated with Waltowa Wetland. As such, these critical reflections will assist in determining the appropriateness of future archaeological excavations within the region.

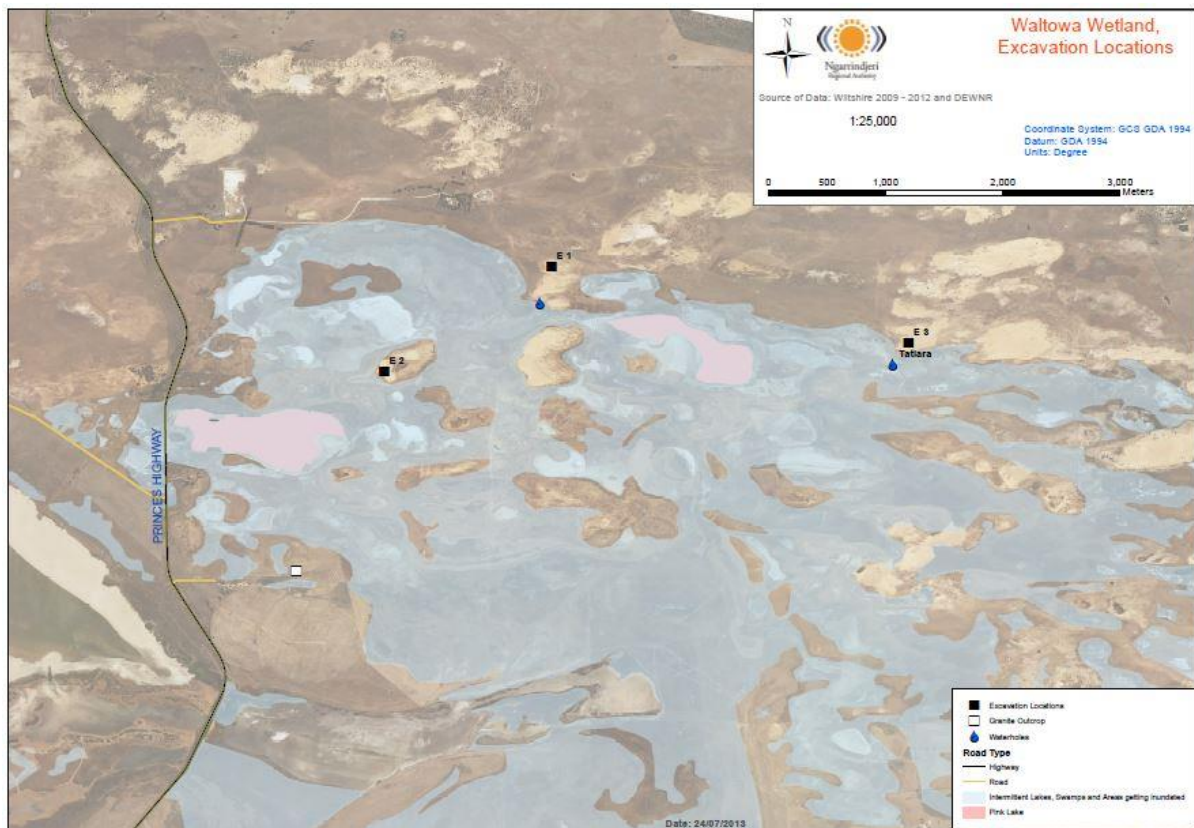


Figure 1. Map showing excavations locations (NRA 2013)

In addition to the three excavation locations, **up to 13 surface sampling locations** have also been selected (see Figure 2; also see Appendix 2). Aeolian erosion has provided the main means of identifying these surface sampling locations, which have exposed in-situ shell and charcoal suitable for radiocarbon dating. There are two aims of surface sampling. Firstly, surface sampling will collect samples for radiocarbon dating in order to obtain a broader understanding of intra-site chronology across the landscape and develop a more detailed understanding of the timing of Ngarrindjeri lifeways at Waltowa Wetland. Secondly, surface sampling will be used to record the broader stratigraphy across the Waltowa Wetland landscape in order to contextualise excavation results further.

To date, no burials have been recorded within the Waltowa Wetland landscape and it is anticipated that archaeological excavation and/or surface sampling will not disturb any burials. However, within the region burials are known to occur within dune landscapes. Therefore, in the event a burial is disturbed, archaeological excavation and/or surface sampling will cease, appropriate Ngarrindjeri organisations and elders will be contacted

immediately (if not already present), appropriate authorities will be notified in line with the *Aboriginal Heritage Act 1988* and *Coroners Act 2003*, appropriate ceremonies/actions will be undertaken, and area will be backfilled/rehabilitated appropriately.

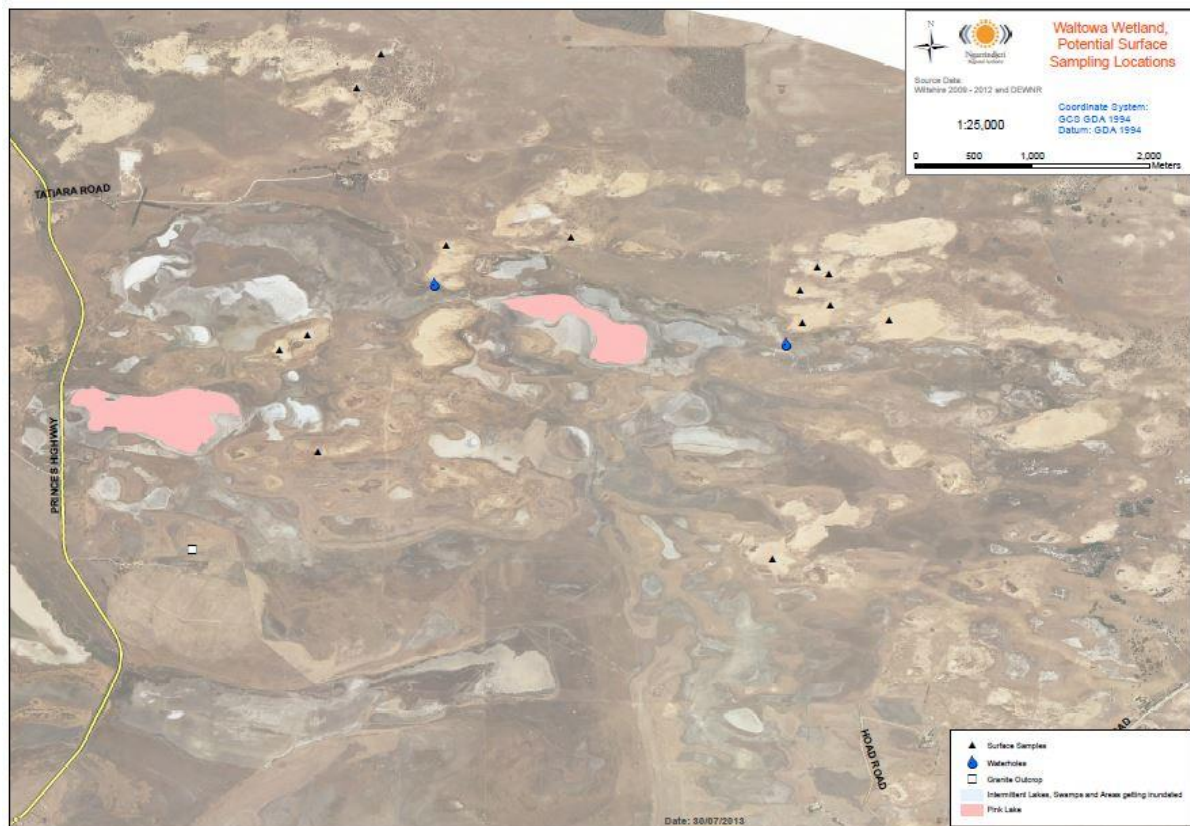


Figure 2. Map showing potential surface samples locations (NRA 2013)

Location

Waitowa Wetland is located on the eastern shore of Lake Albert, south-east South Australia and is comprised of two environmental contexts; firstly, an 821ha east-west wetland corridor situated within a low-lying depression situated on the eastern shore of Lake Albert; secondly, an aeolian dune landscape comprising a continuous series of lunettes, blowouts and sand sheets that extends east towards Bordertown. These dune features have been the focus of field work related to this project. Given the extent these features, field work was limited to dune features located on Tatiara Station, which is owned by Barry and Trisha McClure and is approximately 3,500 hectares. Within these dune features three locations have been identified in collaboration with the NHC and the NRA for excavation (see Figure 1; also see Appendix 1). These locations are detailed below:

Excavation Location 1 (E 1)

Context – Dune blowout approximately 60m x 80m with high density of heat fractured rocks eroding from the northern internal, windward side (A Horizon unit). No clear hearth features were visible due to high density of heat fractured rocks. Low densities of stone artefacts manufactured from quartz and chert, as well as granite manuports are present.

Location - Excavation will be carried out within the northern internal side of the blowout where in-situ and/or eroding Ngarrindjeri cultural materials are visible (see Figures 3 and 4).

GPS Co-ordinate – 335259E 6062242N



Figure 3. Excavation Location 1 (indicated by arrow; facing east).



Figure 4. Excavation Location 1 close-up showing in-situ hearth stones.

Excavation Location 2 (E 2)

Context – Dune blowout approximately 70m x 150m with <10 stone artefacts including one core and two hammerstones. Heat fractured rock, baked clay and charcoal is eroding from south eastern internal side of dune blowout (A Horizon unit).

Location - Excavation will be carried out within the south eastern internal side of the blowout where in-situ and/or eroding Ngarrindjeri cultural materials are visible (see Figure 5 and 6).

GPS Co-ordinate – 354131E 6061284N

Excavation Location 3 (E 3)

Context – Dune blowout approximately 200m x 300m with a high density of stone artefacts manufactured from quartz and chert, a high density of granite manuports, eight quartzite hammerstones, as well as numerous highly eroded fragments of faunal bone and shell. Whilst no heath features are visible within this blowout, there is a high density concentration of heat fractured rock eroding from north eastern internal side of dune blowout (A Horizon unit).

Location - Excavation will be carried out within the north eastern internal side of the blowout where in-situ and/or eroding Ngarrindjeri cultural materials are visible (see Figures 7 and 8).

GPS Co-ordinate – 357641E 6061521N



Figure 5. Excavation Location 2 (indicated by arrow; facing south).



Figure 6. *Excavation Location 2 close-up showing in-situ hearth stones.*



Figure 7. *Excavation Location 3 (indicated by arrow; facing east).*

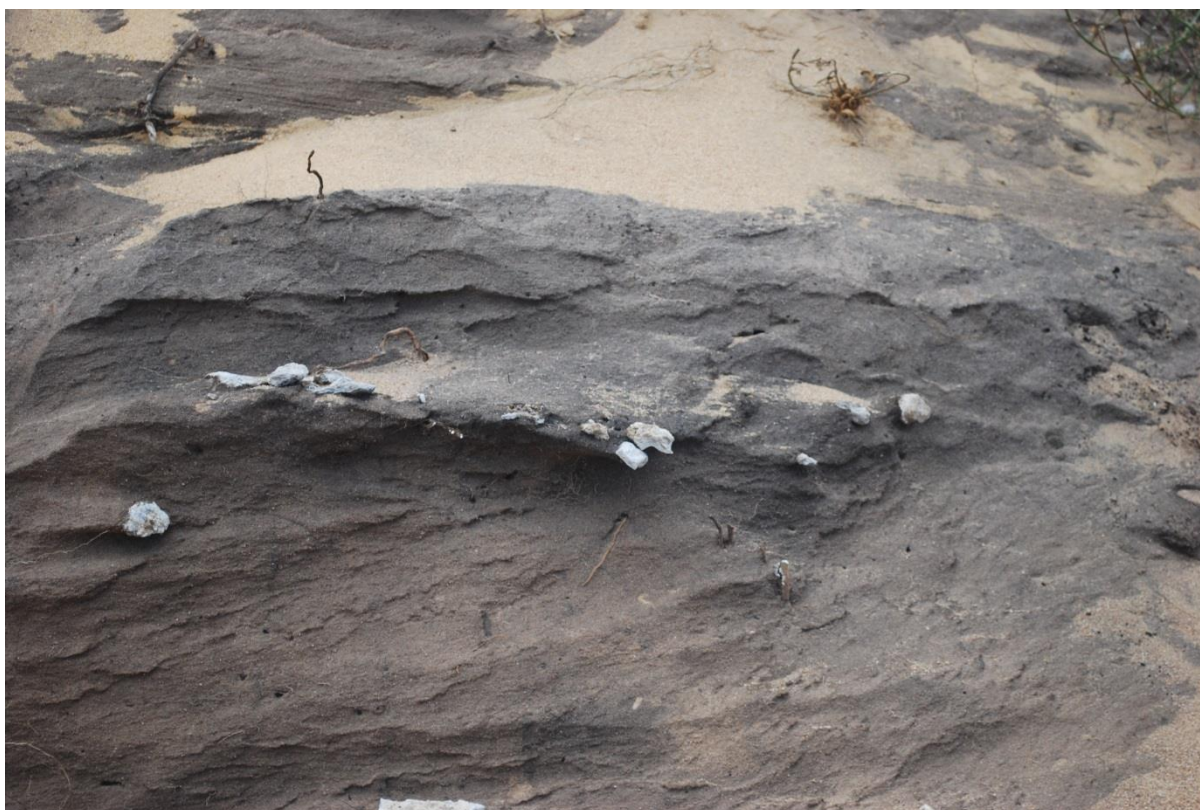


Figure 8. Excavation Location 3 close-up showing in-situ hearth stones.

Excavation Methods

Given the impact of aeolian erosion on nature of in-situ Ngarrindjeri cultural materials within the Waltowa Wetland landscape, excavation techniques for this project have been specifically designed for potential geomorphic issues associated with such a landscape. Firstly, areas higher in the topography have been targeted for archaeological excavation in order to increase likelihood of obtaining in-situ cultural materials and stratigraphic control. This methodology of undertaking excavation in relatively intact deposits either on top of dunes or within the steep internal sides of dune blowouts has been successfully employed in similar dune landscapes (McNiven 1992:2-5; Rick 2002:818, 830). Secondly, traditional excavation squares ('telephone box') will be used to undertake archaeological excavations. However, given these excavations will be undertaken within the steep internal sides of dune blowouts, one face of the area to be excavated will be exposed. In order still use the traditional 'telephone box' method, wood or metal stakes³ will be used instead of tent pegs on the exposed side in order to string up excavation squares (see Figure 9). Furthermore, the eroding top soil (O Horizon) on this exposed face will be removed using brushes prior to excavation in order to limit sedimentary contamination between the stratigraphic units.

Traditionally, archaeological excavations utilise a standard 1m x 1m excavation square or trench. However, this research project anticipates that in-situ cultural materials targeted for excavation will most likely reveal a hearth feature. Hearth features observed within the Waltowa Wetland landscape during pedestrian surveys have generally measured less than 1m in diameter. Therefore, the *x* axis of the excavation square will be a maximum of 2m in order

³ Wood stakes are the preferred option. However, it is important that the stakes are sturdy & do not move. If the wood stakes are found not to be sturdy enough when stringing up the excavation square, then metal star dropper will be used.

to allow for the full width of the hearth feature and associated cultural materials to be excavated and analysed (see Figure 9). In contrast, the y axis will be 50cm in breadth in order to limit the impact of excavation, whilst still allowing for sufficient features and cultural materials to be excavated to ensure meaningful analysis (see Figure 9). Therefore, the total size of the excavation squares will be 2m x 50cm with a total area of 1m² (see Figure 9). However, there will be an option to expand the y axis square to 1m with an adjoining 1m x 50cm square. This will allow for the full breadth of the hearth feature and associated cultural materials to be excavated and analysed if deemed necessary following the excavation of the initial square size. This option will be undertaken in discussion and collaboration with Ngarrindjeri elders and individuals present during excavations. Therefore, the maximum area to be excavated within each excavation location will be no more than 2m².

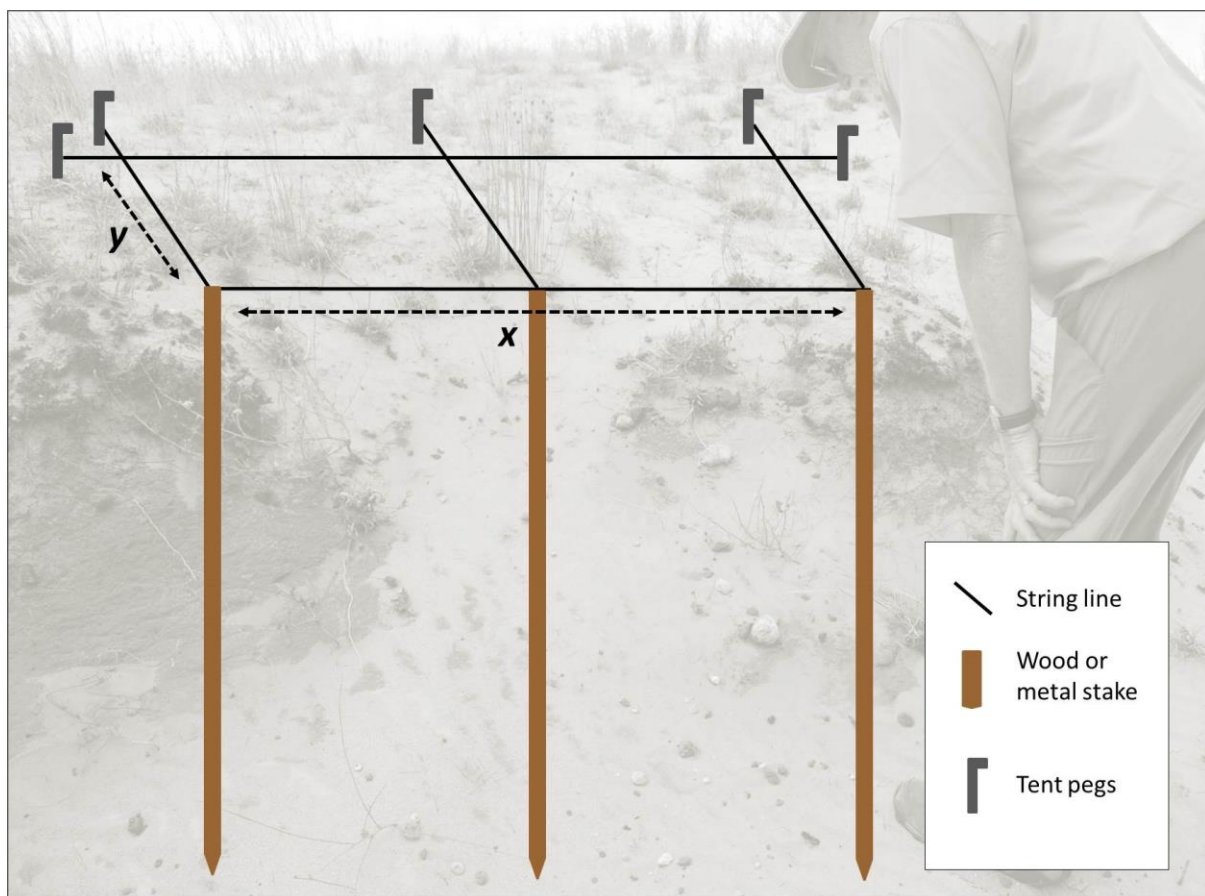


Figure 9. Diagram showing string up of excavation square.

Given the difficulty of identifying separate stratigraphic layers that may be similar in colour and texture, excavation squares will be excavated by hand trowel in arbitrary excavation units (XU) of equal depth (cf. Balme and Paterson 2006:104). Given Waltowa Wetland's dune landscape is more susceptible to erosion and may potentially result in mere centimetres within the stratigraphy representing vast periods of time, XUs 3cm in depth will be used. The use of arbitrary measured XUs is justified due to the ability to correlate measured depths of XUs with stratigraphy/soil horizons once section drawings have been completed (Balme and Paterson 2006:104). Features such as hearths will still be excavated using XUs. However, hearth features will be excavated as a separate unit within each XU, as it is likely these

features will be composed of different sediments that are likely to be a different age to the surrounding sediments (Balme and Paterson 2006:104; see Figure 10).

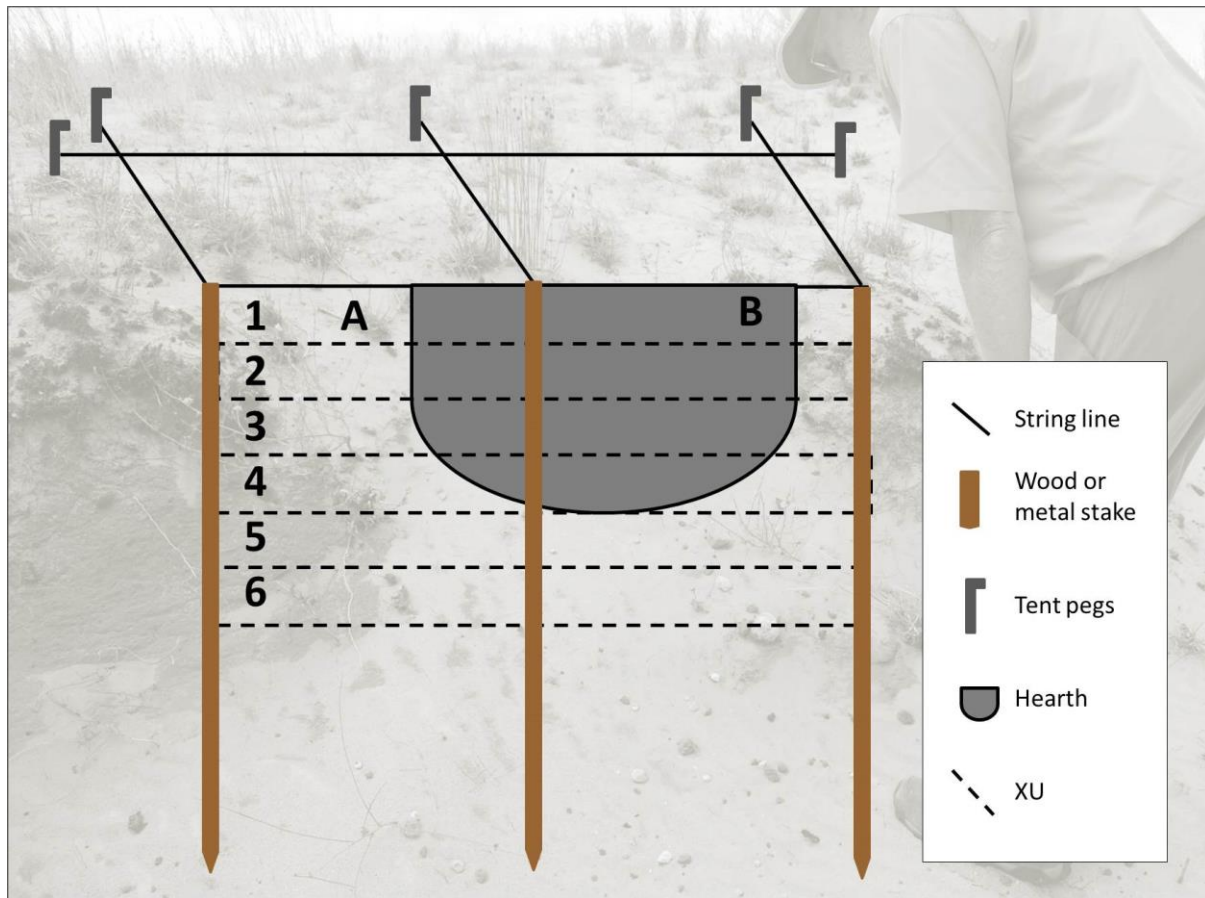


Figure 10. Diagram showing example of feature excavation.

Five elevation points⁴ will be recorded for every XU using a dumpy and stadia rod. In order to plot features and cultural materials larger than 2cm three-dimensionally, the south-west or southern corner of each excavation square will be used as a reference point for the x and y axis as well as a dumpy and stadia rod used to record the z axis. Features and cultural materials larger than 2cm will also be photographed in situ with an appropriate photographic scale. Bulk soil samples will be taken for every excavation unit from the north-west or northern quadrant of the excavation square, which will be subject to dry grain-size, pH and Munsell Soil Color® Chart analysis completed in the field. Where possible, samples of charcoal or shellfish will also be recovered from the same quadrant for the purposes of radiocarbon dating. The volume of each excavation unit will be determined by weighing buckets of excavated sediment using a spring balance to the nearest 0.1kg. Excavated sediments will be dry-sieved in the field through a 2mm mesh size sieve in order to maximise cultural materials obtained, whilst reducing excavated sample mass. All materials recovered through sieving will be bagged and labelled according to their excavation location, allocated square code⁵ and

⁴ Four corner points and a centre point.

⁵ Each excavation square will be labelled SQ A, SQ B, etc. in order to record and identify the excavation location (EL), square (SQ) and excavation unit (UX) during excavation (i.e. EL 1, SQ A, XU 1).

XU (see Appendix 3 for Excavation Labels). Locations will be excavated until cultural material ceased to be present. All excavation data including XUs, soil sample analysis, bucket weights, and photograph details of each excavation unit will be recorded using specifically designed excavation recording proformas (see Appendix 4). The beginning and end of each XU will also be recorded using photography.

In addition to recording data onto excavation proformas, a Harris Matrix⁶ will be drafted during each excavation in order to further document, illustrate and understand the stratigraphic and cultural history of Waltowa Wetland. Most importantly, utilising a Harris Matrix allows for a detailed and clear understanding of Waltowa Wetland's stratigraphic history beyond that illustrated through detailed, yet subjective, stratigraphic drawings. Following the completion of each excavation, stratigraphic drawings and photographs will be used to record the wall of each excavation square. Where possible, samples of charcoal and shellfish for radiocarbon dating will be removed from sections of the excavation square wall and mapped on the stratigraphic drawings.

In order to further understand Waltowa Wetland's stratigraphic history, careful observations and detailed notes on stratigraphic units and patterning, as well as concentrations of cultural materials will also be recorded in a field journal during excavations. As such, careful scrutiny is required during excavation within dune landscapes to observe patterning that indicate distinct geomorphic processes. For example, air pockets may indicate disturbance caused by aeolian erosion (Rick 2002). Concentrations of shellfish, heavy mammal bones and stone artefacts as well as the displacement of light fish bones may also be associated with loss of sediment caused by aeolian erosion (Rick 2002). Lastly, aeolian erosion may also cause post-depositional vertical movement of stone artefacts, which can be detected by observing patterns of in-situ weathering or the presence of conjoining artefacts throughout the stratigraphy (Hoffman 1986; Hiscock 1985:93-94; Hiscock 1993). Therefore, careful scrutiny of stratigraphic units and concentrations of cultural materials is vital in order to identify intra-site geomorphic variability that may otherwise be interpreted as cultural.

Surface Sampling Methods

Following excavations, surface samples will be collected from up to 13 potential locations identified during pedestrian surveys in which exposed in-situ shell and charcoal suitable for radiocarbon dating have been recorded. All 13 of these potential locations will be revisited to determine locations are still suitable for radiocarbon sampling (i.e. in-situ deposit is still intact). Using a small hand trowel and tweezers, charcoal and/or shell samples weighing 100mg will be collected. It is anticipated these process will disturb at area no greater than 10cm².

Overall, surface samples in association with Ngarrindjeri cultural materials are desirable in terms of better understanding the timing of Ngarrindjeri lifeways. However, samples collected in no direct association with cultural materials will still be useful in better understanding the geomorphic chronology of Waltowa Wetland. To ensure surface samples can be utilised to analyse intra-site continuities and disjunctions in chronology, careful scrutiny is required to accurately identify the soil horizon or stratigraphic unit associated with each surface sample. As such, it is anticipated that the process of archaeological excavations will assist in identifying a basic stratigraphic sequence for Waltowa Wetland; knowledge that

⁶ All stratigraphic units, features and cultural materials are assigned a number, which is used to create a matrix or flow chart to illustrate how each feature relates to the other.

will assist in identifying the soil horizon or stratigraphic unit associated with each surface samples. Hence, it is important that surface sampling occur following excavation in order to construct a better understanding of the Waltowa Wetland stratigraphy that can be applied during the surface sampling process. Information regarding the stratigraphic/horizon and/or cultural material association of surface samples will be recorded on a specifically designed proformas (see Appendix 5).

Site Rehabilitation Plan

Following the completed excavation of each area, excavation squares will be backfilled with sieved sediment and top soil (O Horizon) in order to stabilize the excavation area. However, to avoid excavation triggering further erosion, short-term stabilization will be undertaken using sandbags (see Figure 11). Long-term stabilization will be undertaken through revegetation of native species in collaboration with the McClures, NRA, and Department of Water and Natural Resources (DEWNR)⁷. Specifically, this will involve on site discussions with the McClures, NRA and DEWNR during excavations or shortly following to determine the species and quantity of native plants required to rehabilitate each excavation location. Native seed will then be collected by NRA staff between October 2013 and January 2014 to be propagated at one of NRA's nurseries either at Meningie or Murray Bridge. Following successful plant propagation, re-vegetation will occur between April and June 2014 (see Figure 12).



Figure 11. Example of sandbagging of partially exposed burial to avoid further erosion (NRA 2011).

⁷ Collaboration with the McClures, NRA and DEWNR has already resulted the fencing of three areas at Waltowa Wetland that contain Ngarrindjeri cultural heritage, two of which contain excavation location 1 and 2 respectfully.



Figure 12. Screen shots of “Ngarrindjeri Ruwe Working on Country” documentary showing seed collection, propagation and revegetation process as carried out by NRA staff (Change Media 2012).

Laboratory Analysis

All excavated materials and surface samples will be transported to facilities at Camp Coorong Race Relations Centre for laboratory analysis under controlled conditions. This location adheres to Ngarrindjeri cultural protocols ensuring cultural materials recovered during archaeological excavations remained within Ngarrindjeri country. As such, the only cultural materials removed from Ngarrindjeri country will be samples sent to the Australian National University in Canberra for radiocarbon dating.

One hundred percent of the 2mm excavation sieve residues will be sorted using tweezers into the following categories: stone artefacts, heat fractured rocks, charcoal, shellfish, marine fauna, terrestrial fauna, historic materials, organic material and non-artefactual stone. Materials in each category will be weighed to the nearest 0.1g using digital scales in order to quantify cultural materials. Following sorting, stone artefact will be analysed and their attributes will be recorded including type⁸, raw material, midpoint dimensions, cortex percentage, platform surface, platform size, and flake termination⁹, as well as retouch type¹⁰, retouch location¹¹ and retouch percentage for stone artefacts with retouch. In order to identify number of identified species (NISP), shellfish will be sorted into species and weighed per taxon in order to characterise shellfish abundance. In order to estimate minimum number of individuals (MNI) present per species, hinge and umbo fragments of shellfish will be counted. If present, otoliths will be used to determine NISP and MNI for marine faunal. Lastly, analysis of terrestrial fauna will be carried out with assistance from Roger Luebbbers and Chris Wilson, which will also be macro-analysed in order to identify any bone tools that are known to have been used within the region (Angas 1847; Berndt *et al.* 1993; Hale and

⁸ Flake, core, flake piece, scraper, etc.

⁹ Feather, plunge, step, or hinge.

¹⁰ Stepped, scalar, invasive, or serrated.

¹¹ Dorsal, ventral, or margins.

Tindale 1929; Mulvaney 1960, Mulvaney *et al.* 1964; Walshe 2008). The condition of all stone artefacts, shellfish, marine and terrestrial fauna will also be macro-analysed in order further understand geomorphic processes, which may suggest stratigraphic integrity of cultural materials have been compromised due to disturbance. Specifically, evidence of weathering, abrasion, sand blasting and polishing will be recorded, which may indicate disturbance caused by aeolian erosion (Claassen 1998:58-59; Hiscock 1985; Lyman 1994:382; McNiven 1990; Rick 2002). Additionally, evidence of heated induced fracturing and potlids in stone artefacts will also be recorded, which may indicate stone artefact deposited near a living surface have been impacted by cultural activities involving fire and/or hearth (Hughes and Lampert 1977). Lastly, the number of broken versus complete stone artefacts will also be recorded, as a higher rate of transverse snapping amongst stone artefacts may indicate a high level of trampling particularly associated with post-contact pastoral activities (Hiscock 1985:85).

In order to analyse patterning such as intra-site continuities and disjunctions within cultural features excavated, all data will be entered into an excel electronic database. This data will be then imported into NVivo in order to produce graphs and tables for purposes of analysis. All electronic data gathered throughout this research project will be keep in the possession of the researcher including copies at Flinders University in order to adhere with this projects ethics approval, with backups located at the NRA head office at Murray Bridge.

Radiocarbon Dating Sampling & Dating

Systematic radiocarbon dating of charcoal and shellfish samples will be undertaken to order to establish a chronology of Ngarrindjeri lifeways at Waltowa Wetland. Radiocarbon dating of features and materials within excavation locations and those collected from surface sample locations will be utilised to place intra-site continuities and disjunctions within a chronological context. As such, radiocarbon dating samples weighing up 100mg will be recovered from both excavation and surface sampling locations. All radiocarbon dating samples will be collected using tweezers, placed in a resealable plastic sample bag, labelled appropriately and kept out of direct sunlight. Select radiocarbon samples weighing up to 50mg will be sent to the Australian National University to be dated using Single Stage Accelerator Mass Spectrometry (SSAMS). As radiocarbon dating is a destructive process, samples sent to be dated will not be returned. However, only half of each sample recovered will sent away for dating, allowing for further radiocarbon dating in the future if desired by Ngarrindjeri organisations.

Storage

During and following laboratory analysis, all materials recovered during excavation will be stored in archive boxes within the Ngarrindjeri Nation's Keeping Place located at Camp Coorong, Meningie.

Repatriation / Reburial

Following laboratory analysis, all cultural materials recovered during excavation will be returned to their location of origin prior to revegetation. However, some materials may be retained at the discretion of Ngarrindjeri organisations for the purposes of museum display and/or education.

Reporting

As has been the case throughout the overall PhD research project, a detail presentation and report has been presented to NHC and NRA following every stage of research. As such, a detailed presentation and report will be presented to NHC and NRA following excavation and laboratory analysis.

Miscellaneous

Contributors

In addition to the collaborative involvement of Ngarrindjeri organisations as outlined above, other contributors include Steve Hemming. Hemming, who worked with NLPA and NHC to initially develop the project and fulfils an academic supervisory role for the project. Dr Mick Morrison is the primary supervisor for the project and as a full member of the Australian Association of Consulting Archaeologists Inc. (AACAI) will be directly involved in the supervision of the excavations, as specified by Aboriginals Affairs and Reconciliation Division (AARD). Other individuals involved in excavation field work include Dr Roger Luebbers, who has carried out extensive archaeological excavations along the Coorong and around Lake Alexandrina and will fulfil a support role during excavations. PhD candidate Chris Wilson will also support the excavations in order to further his training, education and expertise as a Ngarrindjeri archaeologist, in line with the NRARPPU's research objects. Lastly, NRA Heritage Co-ordinator Luke Trevorow, Cultural Rangers Laurie Rankine Jnr. and Candice Hartman, and Heritage Specialists Michael Diplock and Amy Della-Sale will also assist during excavations in order to furthering their training, education and expertise in CHM as well as critically reflect on the excavation process. In addition to the individuals specified above, this project aims to provide the opportunity to engage other Ngarrindjeri elders, individuals and youth in the project in order to support Ngarrindjeri education in CHM as well as inter-generational knowledge exchange within the wider Ngarrindjeri community. These elders, individuals and youth will be identified and contacted through NHC and/or NRA.

Smoking Ceremonies

Smoking ceremonies will be carried out by Ngarrindjeri elders and individuals during archaeological excavations to ensure such excavations are carried out within a culturally respectful way. Smoking ceremonies will observe and adhere to state fire bans. Despite permission being previously given by the landholder (see Wiltshire 2010, 2011), smoking ceremonies undertaken at Waltowa Wetland as part of archaeological excavations will still seek verbal permission from the landholder prior to them taking place.

Dates

Archaeological excavations are scheduled to occur between 2nd December 2013 and 21st December 2013. The exact dates of excavations within this period are pending the availability of Mick Morrison, Roger Luebbers and Chris Wilson. If excavations cannot be undertaken during this period due to delays caused by permit application processing, excavation dates will be shifted to January/February.

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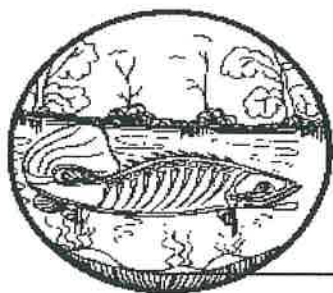
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Appendix 8: Letter of Cultural Activities at Waltowa Wetland



Ngarrindjeri Heritage Committee Inc.

C/O NLPA PO Box 126 Meningie SA, 5264
Ph (08) 85751557 Fax (08) 85751448
e-mail nlpa@bigpond.com

9th of January 2014

Re: cultural activities at Waltowa Wetland

Dear Roger,

The elected heritage organisation of the Ngarrindjeri Nation, the Ngarrindjeri Heritage Committee Inc. (NHC), will be undertaking cultural activities at Waltowa Wetland in March 2014. These activities are also supported by the Ngarrindjeri Nation's elected governing body, the Ngarrindjeri Regional Authority Inc. (NRA). As such, these cultural activities are part of a long-term research project initiated, authorised and managed by these elected Ngarrindjeri organisations.

Cultural activities at Waltowa Wetland will include Ngarrindjeri people directly interacting with the physical traces of their heritage. Some of these interactions will include the physical 'excavation' (previously referred to as archaeological excavations) of this heritage, which will be undertaken respectively by Ngarrindjeri individuals and managed appropriately by NHC and NRA in order to adhere to Ngarrindjeri cultural protocols and fulfil Ngarrindjeri research objectives. As such, some of the knowledge gained during this cultural activity will contribute to Kelly Wiltshire's PhD research, which is being undertaken in collaboration with NHC and NRA. As a result, Kelly will contribute to and assist with this specific cultural activity as directed by NHC, NRA and Ngarrindjeri individuals.

Cultural activities are part of a long-term project focusing on Waltowa Wetland, which has been initiated, authorised and managed by Ngarrindjeri organisations. Any perceived risks have been addressed by following long established Ngarrindjeri cultural protocols (see attached). As such, from a Ngarrindjeri perspective there are no perceived risks associated with the interaction between Ngarrindjeri people and the physical traces of their heritage as a result of these cultural activities. Any such interaction will continue to be managed respectfully by NHC and NRA on the behalf of the Ngarrindjeri Nation in accordance with previously mentioned Ngarrindjeri cultural protocols. Ngarrindjeri reserve the right to interact with and manage their heritage at their own discretion, in line with Section 37 of the *Aboriginal Heritage Act 1988*¹. Therefore, this letter is a gesture of goodwill on behalf of NHC in order to notify Aboriginal Affairs and Reconciliation Division (AARD) of NHC's intention to undertake these cultural activities.

Yours sincerely,

Cyril Karpanty (Chair, Ngarrindjeri Heritage Committee)

¹ Section 37 states: *Nothing in this Act prevents Aboriginal people from doing anything in relation to Aboriginal sites, objects or remains in accordance with Aboriginal tradition.*

Waltowa Wetland cultural protocols and risk management processes for cultural activities

For proposed cultural activities that involve Ngarrindjeri people interacting with the physical traces of their heritage and include the physical 'excavation' of this heritage within the Ngarrindjeri and Others Native Title area, the following cultural protocols and risk management processes have been undertaken.

1. Cultural activities are part of a long-term project initiated, authorised and are managed by NHC and supported by NRA, which address Ngarrindjeri aspirations regarding heritage management at Waltowa Wetland.
2. Extensive and long-term internal NHC meetings discussing cultural activities have been undertaken. These meetings have also discussed in detail the most culturally appropriate areas and methods to undertake these cultural activities.
3. As a result of these meetings, NHC authorised cultural activities to be undertaken at Waltowa Wetland.
4. Results of these meetings have been presented to a NRA Yarluwar-Ruwe meetings and NRA support NHC decision to authorise these activities.
5. Formal letters supporting cultural activities have been authorised by both NHC and NRA, which have been forwarded to AARD together with a Section 6 application in September 2013.

The following cultural protocols and risk management processes will be undertaken in order to continually manage the project respectively during cultural activities.

1. Ngarrindjeri individuals and Elders will manage, direct and be present during all cultural activities.
2. Ngarrindjeri people will directly interact with the physical traces, including the physical 'excavation' of this heritage. Ngarrindjeri people may direct Kelly Wiltshire to contribute and assist with this process.
3. If during this process any issues arise (i.e. exposure of Ngarrindjeri Old People), NHC will deal with them respectfully and appropriately adhering to Ngarrindjeri protocols.
4. Cultural activities may cease at any time under the discretion and guidance of Ngarrindjeri individuals and Elders directing the cultural activities.
5. Following cultural activities, areas requiring short-term stabilisation will be sand-bagged to ensure short-term protection of heritage.
6. Any materials removed from Waltowa Wetland will be stored at Camp Coorong for use in further cultural activities, including laboratory analysis.
7. Any radiocarbon dating undertaken will be subject to further extensive and long-term internal discussions with NHC regarding the benefits of such processes and most appropriate samples/materials to undertake this analysis on.
8. All materials removed from Waltowa Wetland (except radiocarbon samples) will be repatriated and reburied with associated appropriate cultural ceremonies.
9. Area will be revegetated in collaboration with NHC, NRA and Department of Environment, Water and Natural Resources (DEWNR) to ensure the long-term protection of heritage within the area.
10. Results from cultural activities will be formerly presented to NHC and NRA in the form of a power-point presentation and short report.