

The Wetj Boya (Wedge Island) Aboriginal Sites: An Action Plan.



By Brendan Moore, September 2007.

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¹ *Yued* is the northern most group of *Noongar* people of the South West of Western Australia ((WA). *Noongar* people occupied the South West of WA west of a line roughly from Leeman on the West coast to Young River on the South coast of WA.

Abbreviations.

AHA	Aboriginal Heritage Act (1972).
AMG	Australian Map Grid.
AP	Action Plan.
BOM	Bureau of Meteorology.
bp	Before Present.
CALM	Conservation and Land Management.
DEC	Department of Environment and Conservation, formerly Conservation and Land Management (CALM).
DIA	Department of Indigenous Affairs.
IBRA	Interim Biogeographic Regionalisation for Australia.
KMWIAC	Kwelena Mambakort Wedge Island Aboriginal Corporation
Km	Kilometre.
mm	Millimetre.
MRWA	Main Roads Western Australia.
NACC	Northern Agricultural Catchments Council.
NHT	Natural Heritage Trust.
NPNCA	National Parks and Nature Conservation Agency.
NRM	Natural resource Management.
SNC	Single Noongar Claim.
SWALSC	South West Aboriginal Land and Sea Council.
WA	Western Australia.
WIPA	Wedge Island Protection Association.
YNRMAG	Yued Natural Resource Management Advisory Group.

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Executive summary.

The Action Plan (AP) for the *Yued* sites at *Wetj Boya*² (Emu Rock), commonly known as Wedge Island was commissioned by the Northern Agricultural Catchments Council (NACC) in 2006 from Natural Heritage Trust (NHT) funding. It is the first of a number of AP's completed by the South West Land and Sea Council (SWALSC) with *Yued* people on registered Aboriginal sites under the *Yued* Heritage Sites Environmental and Cultural Audit Project. As part of the NHT funded Project the YNRMAG selected the *Wetj Boya* sites as priority for which an action plan is to be prepared.

While all *Yued* sites are protected under the Aboriginal Heritage Act (AHA) (1972), and administered by the Department of Indigenous Affairs (DIA), not all midden sites on the central west coast of Western Australia (WA) have been registered. The three registered sites at *Wetj Boya* considered in this plan form part of a collection of midden sites used by traditional *Yued* people on the south west coast of WA. These sites are unique in terms of their location, threats from development and heritage to the *Yued* people.

The sites are located among bushland adjacent professional fisherman's shacks at Wedge on an unclassified, unvested Reserve (43283), currently managed by Department of Environment and Conservation (DEC). While they have been well preserved owing to the general underdevelopment of the area increasing pressure from development and recreation, particularly the new coastal highway or 'Indian Ocean Drive Project', threatens the future quality and value of the sites and artifacts contained within these sites. This is why the YNRMAG selected the *Wetj Boya* sites as priority.

Throughout this AP *Yued* names will appear in italics. *Noongar* communication was one of spoken language where the spoken word was used not written words. The variability of English spelling of some *Noongar* words, for example, *Yued*, *Yuat*, *Yuad* and *Juat* reflects variability in the English language to identify slightly different pronunciation of the same group of people.

² *Wetj Boya* is the *Yued* name for Emu Rock, but commonly known as Wedge and Wedge Island.

INTRODUCTION.

This AP is divided into five sections:

1. Introduction.
2. Background.
3. Site Analysis and Assessment.
4. Implementation.
5. References and Attachments.

Section 1 is an introduction it explains the purpose and objectives of the AP followed by section 2 that provides a background with some of the traditions of *Yued* people. It sets the scene for the traditional and contemporary *Yued* people, particularly their location, food, hunting and gathering techniques.

Section 3 is an analysis and assessment of the *Wetj Boya* sites. It provides a description and location, natural environment, current use and heritage values of the site. It includes threats as well as the custodians and caretakers for the site. Section 4 outlines the implementation that includes an action plan and provides a framework for engagement, management, monitoring and review.

Section 5 includes references and attachments that connect and support this document to the research and enables the reader to follow up where interested.

1.1. Purpose and Objectives.

This AP serves multi-purposes. It is the first time involvement in an AP of this type for the *Yued* people, who as traditional owners occupy a unique position in NRM. Through their stake an opportunity exists for further understanding of Aboriginal culture in a direction towards reconciliation. By taking a holistic view of Natural Resource

Management (NRM) this AP provides accounts of *Yued* people beliefs, traditions and ancient land management practices.

The arrival of and conflict with Europeans in WA since 1829 as described by Austen (1998) has had enormous social and cultural upheavals within the *Yued* people, which persists in issues such as the health status of the *Yued* people today. Many *Yued* people believe that when important sites and their ancestors contained within this land is not cared for their health will suffer. This AP is an opportunity for the *Yued* people to restore connections, care for country and in doing so care for their ancestors.

Whilst some ancient stories and Aboriginal land management practices have been passed down for thousands of years and recorded by Rooney (2002)³, many others must have sadly, gone unrecorded and others claim are facing an escalating extinction phase (Horstman and Wightman 2001)⁴. This AP will establish an important link between the traditional past and future protection that has been afforded to them as registered sites under the AHA (1972).

It is foreseen that the traditional owners will take on active roles in management at *Wetj Boya* and maintain the ancient *Yued* cultural links, which despite systemic interference from Europeans has continued to exist for thousands of years. The timing of this AP is important to the *Yued* people as they and other Noongars of the South West of WA will hear the outcome of the Single Noongar Claim Full Court Appeal within the next six to eighteen months. Despite an urban myth that native title threatens backyards, freehold land extinguishes native title and instead *Yued* people are seeking recognition as traditional owners, the right to be consulted and the right to negotiate.

³ See “The Legacy of the Late Edward Mippy: An ethnographic Biography”. Father Bernard Rooney, (2002). Available from website: adt.curtin.edu.au/theses/available/adt-WCU20040517.143912/unrestricted.

⁴ Horstman and Wightman (2001) claim traditional biological knowledge from people of the more recently settled northern Australia is suffering an escalating extinction phase.

Regardless of the legal outcome of the Single Noongar Claim (SNC) the *Yued* people know that this land is *Yued boodja*⁵, always was, and always will be. The AP will help protect the site and retain traditional *Yued* heritage by identifying, documenting and reviewing traditional land management and cultural ties to the middens. It encourages *Yued* engagement and addresses marginalisation in current management of the area that is felt by the *Yued* people through inclusion in a prescriptive action plan for the *Wetj Boya* sites.

The objectives of this AP are;

- To provide background and traditions of *Yued* people.
- Analyse and assess the *Wetj Boya* sites to help protect them.
- To ensure *Yued* intellectual property rights are protected.
- To identify and include *Yued* heritage values of *Wetj Boya*.
- To assist the *Yued* people to care for country through an Action Plan.
- To provide a monitoring and review framework for *Wetj Boya* sites.

BACKGROUND

Early explorers to *Yued boodja* include Grey (1841), Moore (1884) and the missionary Salvado (1851), but others such as Nind (1831), a medical officer based at Albany in 1827 provide an insight into the *Yued* people and valuable information on the wider group of *Noongar* people during contact era. When Sir George Grey and his crew were ship wrecked in March 1838 near Gantheaume Bay WA, he and his crew were forced to make their way south overland through *Yued boodja* his *Journals* were later published in 1841⁶. Equally, George Fletcher Moore's *Diary of Ten Years of Eventual Life of an Early Settler in Western Australia* (1884) and the *Memorie Storiche dell' Australia* (1851) by

⁵ *Boodja* is the *Noongar* term for country.

⁶ Journals of Two Expeditions of Discovery in North-West and Western Australia, during the Years 1837, 38 and 39, Under the Authority of Her Majesty's Government describing Many Newly Discovered, Important and Fertile Districts, with Observations on the Moral and Physical Condition of the Aboriginal inhabitants, &c.&c by George Grey, ESQ. Governor of South Australia ; Late Captain of the Eighty-third Regiment. In Two Volumes. Vol. II. London : T. and W. Boone, 29, New Bond Street. 1841.

Bishop Salvado, a missionary at New Norcia, which was later translated into English in 1977, also provide accounts of *Yued* people soon after European settlement.

On the ground where European land use practices have taken their toll on *Yued boodja*, *Yued* people can help towards healing the land. During the past 178 years since settlement biodiversity loss, land degradation and salinity have altered the ecological balance and continue to threaten natural resources in the Northern Agricultural Region (Hunt and Patterson 2004). At this time the need for engagement of Indigenous Australians in land management has become apparent at all levels of Government, by Corporations and from within the community.

This AP reviews existing plans particularly the Nambung National Park Management Plan (1998-2008) and the Master plan for Wedge and Grey (2000) both produced by DEC and where possible adds to this effort. Neither of the plans identifies nor protects the *Wetj Boya* Aboriginal sites, since they were completed before the sites were registered. However, in the way that the Wedge and Grey Master plan form an amendment to the Nambung Plan this AP can compliment the DEC and the National Parks and Nature Conservation Authority (NPNCA) management of Wedge and adjacent reserves.

2.1 Yued Traditions.

Contact-era *Yued* people followed a system of land management according to the seasons, which weren't compartmentalised or based on the arithmetical calendar with strict months of the year. *Yued* seasons were flexible and the concept of time as we know it today was redundant, instead it was regulated by natural processes, reliant on reading ecological indicators, the moon and stars to dictate their movements and subsequent land use. The advantage of a flexible system is the ability to adjust to nature, for example, a lower than average rainfall year would have meant an earlier than normal inland departure as water sources dried and earlier flowering of the *Mooja* or Christmas tree (*Nyutsia Floribunda*) signaled it was time to return to the coast (Nind 1831).

According to Salvado (1851) *Yued* people pick out the approach of seasons by appearance of certain stars, for example, when *Danacat* (Pleiades) appear on the horizon at the break of dawn, this was a sign *Cielba* or grass season (autumn) was near. *Mocor* (winter) coincided with a time when *Kuljak* (Black Swans) or *Cygnus atratus* began molting and as they were unable to fly they made easy prey (Bindoon and Walley 1992). According to Le Soueff (1993) movements, hunting, fishing and gathering were guided not only by environmental conditions such as rain, winds or flowering plants but also cultural and social obligations (Le Soueff 1993).

While Salvado (1851 English translation 1977 pp. 131) recognised that some ‘natives divide the year into six seasons’ he also recorded ‘many others divided it into four’, others such as Nind (1831) and Moore (1884) assert that the *Noongar* people identified six seasons. Whether *Yued* people used four seasons, six seasons or both, their movements, location, as well as the food, hunting and gathering methods were flexible to mimic the environment. The most important concept relating to seasons is not how many the *Yued* people lived by but that there were no time constraints on them, instead they moved where natural resources supported them.

Table 1. below shows *Yued* seasons based on Nind (1831), Salvado (1851), Moore (1884) and Le Soueff (1993) showing location, some foods available and methods of hunting and gathering. While it shows some common food sources available to the *Yued* people during seasons it is not an exclusive or complete list, so many foods may have been hunted and gathered outside of the season depending on demand and supply. The main point is that the *Yued* diet was balanced and flexible, this meant plants and animals may never be overexploited to levels that would be detrimental to the survival of that species.

Table 1. The *Yued* Calendar with location, food, hunting and gathering methods.

Season	<i>Yued</i> Season	Location	Some common seasonal foods.	Hunting and Gathering Method used.
Summer	Pirok	Coast in large groups.	Fish, whale, seal, crayfish, <i>yuccan</i> (turtle), <i>yerderap</i> (waterfowl), mullet, buff bream, shellfish, (not freshwater mollusc), whale, seal, sea lion, <i>Yun-jid</i> (bulrush) and <i>wetj</i> (emu).	<i>Gidji</i> (spearing), stone fish trap, night fishing, weirs, gathering, <i>dowack</i> (short heavy stick), <i>wanna</i> (digging stick) and burning.
	Burnuru	Moving Inland		
Autumn	Cielba	Pleiades appears on horizon.	<i>Yonga</i> (kangaroo), <i>yuccan</i> , <i>nyingarn</i> (echidna), <i>kardar</i> , <i>yoran</i> and <i>bungarra</i> (lizards), frogs, <i>wocal</i> (snake) and <i>by-yu</i> (zamia nuts).	<i>Dowack</i> , <i>wanna</i> , gathering, firing and <i>gidji</i> , <i>durt</i> (dingo), <i>kyli</i> (boomerang), fish traps - mullet, fire drive and smoking possum from trees.
	Mocor	Inland dispersed in small groups	Frogs, <i>yuccan</i> , <i>yonga</i> , wallaby, <i>goomal</i> (possum), <i>quokka</i> , <i>quenda</i> (bandicoot), <i>wetj</i> , <i>kuljak</i> (swan) <i>djubak</i> (potato), <i>nyingarn</i> , <i>yun-jid</i> , and freshwater fish.	<i>Gidji</i> , <i>dowack</i> , gathering, <i>kyli</i> , <i>wanna</i> , fire drive and surrounding and spearing by <i>gidji</i> .
Winter	Ponar	<i>Kuljak</i> (swan) molting.		
	Kambar-ang	Moving to Coast Mooja flowering of <i>Nyutsia floribunda</i>	<i>Djubak</i> , <i>durt</i> , <i>woorine</i> (native yam), Acacia seeds, young birds, bird eggs, <i>djike</i> (gilgies), fish and <i>yun-jid</i> .	<i>Gidji</i> , stone fish trap, nets, night fishing, weirs, gathering, <i>dowack</i> , <i>wanna</i> and burning.

Source: Adapted from Salvado (1851), Nind (1831), Moore (1884) and Le Soueff (1993).

“Quondong”

Santalum Acuminatum (Native Peach).



Photo: Brendan Moore 20th June 2007, Greenhead.

“Yonga”

Macropus fuliginosus (Western Grey Kangaroo).



Photo: <http://naracoortcaves.sa.gov.au/biodiversity/kangaroo.html>

“Yun jid” *Typha orientalis* (Broadleaf Bulrush).



Photo: <http://florabase.calm.wa.gov.au/browse/flora?f=020&level=s&id=99>

“Nyingarn” *Tachyglossus aculeatus* (Short-beaked Echidna).



Photo : Brendan Moore.

SITE ANALYSIS AND ASSESSMENT

3. Location and Description.

The *Wetj Boya* sites are situated in the South West of WA near the coast at Wedge Island, within the Dandaragan Shire; see Hill River Map Sheet SH 5009. The sites are located within a 213 hectare unvested, unclassified Reserve 43283, (colloquially known as Wedge), hence the area has strategic importance to the *Yued* people (see Attachment 2.). Map 1. below shows the location of the sites in relation to Lancelin and Cervantes.

Map 1. Location of *Wetj Boya*.



Source: <http://www.dia.wa.gov.au/Heritage/Inquiry/Default.aspx> (23/3/07).

The Master plan was completed for the Wedge Reserve 43283 in 2000 by DEC, formerly known as Conservation and Land Management (CALM). This Reserve was gazetted in 1995 for the purposes of parkland, recreation and letting of cottages (CALM 2004).

Wedge is adjacent the Wanagarren Nature Reserve 31675, which is listed on the National

Estate register and Wedge Island an “A” class Nature Reserve 29254, which is gazetted to the low water mark and situated within the Jurien Bay Marine Park (CALM 2004).

The *Wetj Boya* sites were only recently registered. Information on the three sites at *Wetj Boya* is available from the DIA website (<http://www.dia.wa.gov.au/Heritage/Inquiry/>). This available information describes how the sites were important as ceremonial grounds, meeting places, camp grounds and hunting place. They contain archeological deposits such as scattered artifacts, shellfish middens including bones, grinding patches and grooves as well as being a rock-shelter and water source. An explanation of how and why these sites are significant to *Yued* people will be discussed in more detail later.

4. Natural Environment.

The natural environment is considered to be the combination of elements that together support life. For the purpose of this plan the natural environment will be the climate, temperature and rainfall, wind, landscape and soil, hydrology, flora and fauna. In a broad context the area is located within the Swan Coastal Plain under the Interim Biogeographic Regionalisation for Australia (IBRA).

4.1. Climate, Temperature and Rainfall.

Western Australia is expected to become warmer and drier. Temperatures are expected to rise by up to 2 °C by 2030 and up to 6 °C by 2070 and rainfall predicted to decline from autumn to Spring by 20% (Foster 2002). The climate of Wedge is Mediterranean, with hot dry summers and cool, wet winters.

Table 2 below from the Bureau of Meteorology (BOM) shows average temperature and rainfall data for Lancelin, the nearest data recording site to Wedge Island, for the past thirty years (1965 to 2006). The average maximum temperature is 23.9°C with hottest month February, the coolest July and August. The highest rainfall is recorded during June and the lowest in December and the annual average rainfall is 586 millimetres (mm).

Table 2. Temperature and rainfall statistics for Lancelin.

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual	Years	Plot	Map	
Temperature																	
Mean maximum temperature (°C)	28.9	29.7	28.3	25.3	22.5	20.1	19.1	19.1	20.3	22.3	24.6	27.1	23.9	42	1965 2006		
Mean minimum temperature (°C)	17.4	17.9	16.7	14.5	12.5	10.9	10.0	9.9	10.5	11.8	14.1	16.2	13.5	42	1965 2006		
Rainfall																	
Mean rainfall (mm)	9.5	11.4	13.8	31.0	88.5	127.0	124.7	94.0	57.3	30.2	20.8	6.2	586.1	43	1965 2007		
Decile 5 (median) rainfall (mm)	1.5	3.8	9.8	30.4	81.5	130.3	114.3	95.3	55.6	23.6	13.4	3.8	620.9	43	1965 2007		
Mean number of days of rain ≥ 1 mm	1.2	1.3	2.1	4.8	10.1	14.0	14.4	12.6	9.6	5.9	3.9	1.7	81.6	43	1965 2007		

red = highest value blue = lowest value

Source: http://www.bom.gov.au/climate/averages/tables/cw_009114.shtml (21/3/07).

4.2. Wind.

Rose of wind direction versus wind speed in Km per hour have been produced for Lancelin by the BOM from thirty years of data (1965 to 2006) http://www.bom.gov.au/climate/averages/tables/cw_009114.shtml. These indicate strong South to South-Westerly sea breezes blow for about 60% of the year. Winter winds are moderate, predominately from the East and North-Easterly in mornings swinging to South to South-Easterly by afternoon. Summer winds are also moderate in mornings with hot Easterly winds predominating but shifting to strong South to South-Westerly by afternoon. These summer wind conditions increase the threat of bushfires particularly when the coastal heath vegetation is dry.

4.3. Landscape and Soil.

The *Wetj Boya* sites are located within the Perth Coastal Zone, a strip of land stretching from Bunbury to Jurien Bay (Schoknect, N. et.al. 2004). The geology of this zone consists of a mantle of Quaternary sediments, less than 2 million years old, some redeposited by a receding sea some 6,000 years ago (Tinley 1992). The geological sediments have been deposited in layers over time so that the youngest units are nearer

the coast. Reaching farthest inland are Bassendean sands of late Pleistocene 1.5 million years, Tamala limestone of middle to late Pleistocene 1.5 million to 10,000 years and Safety Bay sands of Holocene less than 10,000 years ago, which represent the youngest unit closest to the coast (Lowry 1974).

The Safety Bay sands have a comparable soil/landform unit namely the Quindalup Dunes, which are predominant in the area at *Wetj Boya*. The main landforms are dune ridges associated with low lying areas or swales located between the ridges. The soils are alkaline, calcareous and siliceous sands (limey sand) as well as calcarenite. This calcarenite or limestone is Aeolian in origin, formed on land by solution and redeposition of calcium carbonate in the coastal dune sands. Shell middens along the coastline can be associated with outcrops of calcarenite.

There are large, mobile sand dunes free of vegetation located north and east of Wedge Island, which appear to be moving north, with some seasonal variation, due to the effect of south westerly onshore sea breeze, (see map 2 below). These sand dunes are very fragile and with strong ocean breezes they are particularly vulnerable to disturbance, although as they move north the southern edges are colonised by plants (CALM 2000).

Map 2. Wetj Boya showing sand dunes and the tracks servicing shacks on the mainland.



Source: www.google.com. 15/5/07.

4.4. Hydrology.

Regional surface drainage from the Dandaragan Plateau and Gingin Escarpment collects in a series of wetlands within a coastal back plain or sump land. A connection between land and sea occurs when the mouth of the Hill and Moore River breach at high rainfall and runoff events during winter. These wetlands may be permanent and intermittent, they include small creeks, swamps, lakes, lagoons and dunal damp lands, which act as a buffer between the farmland and coast. During flood these waters are filtered into the karst⁷ aquifer then into the sea via underground channels (CALM 1998).

The surface and groundwater systems are closely interconnected at *Wetj Boya*. Large shallow groundwater occurs in superficial sands and limestone between Gingin and Cervantes. Shallow interdunal swamps near the coast indicate high water table, which poses difficulties for effluent disposal (CALM 2000). Fresh groundwater occurs in deep aquifers along the coast from Guilderton to Wedge Island (CALM 1998). The area immediately around wedge has high water table and experiences intermittent flooding particularly during winter months.

4.5. Flora.

Beard (1979) mapped the vegetation at 1:250,000, which consists of heath dominated by *Acacia lasiocarpa* and *Maleleuca acerosa* with patches of thicket of the Guilderton System on recent dunes and sand dunes near the coast. Griffin (1993) provided detailed floristic information from plots of Holocene surfaces within nearby reserves, but not at *Wetj Boya*. Biological surveys have been done by Halper, Glick and Maunsell (2000) and O'Dwyer (2003) on the Wedge reserve. Another account provided by Wilcox et. al. (1996) provides a list of tree and shrub species found on the fore dune soils between Lancelin to Dongara, these are provided in Table 3 below.

⁷ Redistribution of calcium carbonate has created the karst landscape of features including caverns, tunnels, dolines, sinkholes, residual cone hills, pavements, depressions, solution pipes, limestone pillars and root concretions. Wind erosion has revealed many of these features, for example, the pinnacles. (CALM 1998).

Table 3. Trees and shrubs of the coastal fore dunes from Lancelin to Dongara.

SOIL	<i>Limey Sand</i>	
	Scientific name	Common name
TREES	<i>Acacia cyclops</i>	Red-eye wattle
SHRUBS	<i>Atriplex cinerea</i>	Grey saltbush
	<i>Atriplex isatidea</i>	Coastal saltbush
	<i>Calocephalus brownie</i>	Cushion bush
	<i>Olearia axillaris</i>	Coastal daisy bush
	<i>Scaevola crassifolia</i>	Thick-leaved fan flower
	<i>Spinifex longifolius</i>	Beach spinifex
	<i>Tetragonia decumbens</i>	Sea spinach

Source: Wilcox, D.G., Lefroy, E.C., Stoneham, T.C., Schoknect, N.R., and Griffin, E.A. (1996) "Trees and Shrubs for the Midlands and Northern Wheat belt".

Owing to the windswept coast most vegetation is low lying and fragile, but among micro-climates near sheltered inter-dune areas are small thickets of tall shrubs and trees.

According to CALM (2000), a parallel suite of plant communities occupy the seaward margin on the coastal plain. Beginning with sand-fixing pioneers on the littoral, perennial grass and low heath occupy the fore-dunes and on the more sheltered and stable dunes are denser thickets and open shrub-land. A healthy stand of *Yun jid* or *Typha. spp.* (Bulrush) used by the *Yued* people occurs within the site on a permanent water source.

No plants declared rare under the Wildlife Conservation Act are known in the Wanagarren Nature Reserve, which is closest to *Wetj Boya* (CALM 1998). A priority 3 species on DEC priority flora list known as *Stylidium maritimum* occurs in two populations near the shack settlement at Grey (CALM 2000). One priority 1 *Conospermum caposum* and two priority 2 species *Macarthuria apetala* and *Hensmania stoniella* have been found outside nearby Nature Reserves (CALM 1998).

At the other end of the spectrum is the opportunist weed spiny rush, *Juncas acutus*, which occupies low lying clearings and disturbed areas particularly near shacks and alongside tracks. This weed is associated with high groundwater tables and presents an immediate problem of 'weed control or at least containment' (CALM 2000 pp. 8.). In addition other introduced species, particularly around shacks include *Eucalypt sp*, Tamarisk, Norfolk Island Pine and lawns such as couch, kikuyu and buffalo (CALM 2000). Some fencing and rehabilitation has occurred in primary dune areas by members of the Wedge community and CALM (CALM 2000).

4.6. Fauna.

According to CALM (2000) a biological survey revealed no fauna of conservation significance. The Dingo *Canis lupus dingo* once roamed around the area but no recent sightings have been recorded. Three specially protected species the carpet python (*Wargul*) *Morelia spilota imbricate*, Lancelin skink *Ctenotus lancelini*, Peregrine falcon *Falco peregrinus*, and one (Priority 3) species the Bush cricket *Austrosaga spinifera* are understood to inhabit the area.

A number of the carpet pythons are believed to inhabit shacks along with seabirds that also roost on shacks. There is a population of birds that nest on Wedge Island; they include the Pied Cormorant (*Phalacrocorax varius*), Pied oystercatcher (*Haematopus longirostris*) and Osprey (*Pandion haliaetus*). According to recent anecdotal evidence the Wedge tailed shearwater (*Puffinus pacificus*) has not been seen nesting on the Island.

Opportunistic foreign species like swallows, mistletoe birds, ravens and silver gulls can be found around the settled area, particularly near shacks and the rubbish tip. The mammal population at '...Wedge is considered to be a depauperate, supporting five native species and four introduced species' (CALM 2000 pp. 9.).

5. The registered Aboriginal sites at *Wetj Boya* (Wedge Island).

There are three registered sites at *Wetj Boya*, these are; *Kwelena Mambakort*, *Yonga Kep Wari* and *Yonga Kep Wari Campground*, see Table 4. All three registered sites are located near water and contain scattered artifacts associated with middens. While they are defined as separated sites although they may be considered as a complex of sites within close proximity to each other, see (Attachment 2). Other Aboriginal sites exist within the larger 20051 and also on Wedge Island itself, which is in the process of being recorded, so it is not yet registered.

Table 4. The DIA Registered Aboriginal Sites at *Wetj Boya*.

<u>Site ID</u>	<u>Name</u>	<u>Status</u> P=Permanent I=Interim	<u>Access</u> C=Closed O=Open	<u>Restriction</u> N=None
20051	Kwelena Mambakort Wedge island	P	C	N
20052	Wedge island Coast sandune Quinilup Springs/Yonga Kep Wari	P	O	N
20053	Wedge island Coast sandune Quinilup Springs/Yonga Kep Wari Camping ground	I	O	N

Source : <http://www.dia.wa.gov.au/Heritage/Inquiry/Default.aspx>. (23/3/07)

Of the three sites, *Kwelena Mambakort* (Dolphin Bay) or site 20051 is recognised on the permanent register and is a closed site, *Yonga Kep Wari* or 20052 is also contained on the permanent register but its' status is open and *Yonga Kep Wari Campground* or 20053 is on the interim register but is open. There is no gender restriction on either of these sites.

5.1. Current Use.

The sites are located on land that is used as a Reserve for the purpose of parkland, recreation and the letting of cottages. According to the Wedge and Grey Master plan squatting is the main land use and there are 370 shacks occupied by professional rock

lobster fishermen, wheat belt farmers and Perth based people seeking holidays. Annual fees are collected from the owners of shacks, some of whom identify through a community association, namely the Wedge Island Protection Association (WIPA). Development has occurred ad-hoc and unrestrained resulting in a duplication of vehicle tracks providing access to shacks, beach and outlying areas (CALM 2000). Damage has occurred to the sites, mainly the removal and destruction of artifacts.

Rubbish tips have been developed by the wedge community and while contained the 'large amount of wrecked vehicles are unsightly and require removal' (CALM 2000 pp. 10.). Many shacks have their water supply piped from windmills to the settlement so that pipelines cross the *Kwelena Mambakort* midden site. None of the sites are protected by fences or signage, consequently vehicles may drive through the sites disturbing and damaging artifacts as they go.

5.2. Yued heritage values and protection.

To the local *Yued* people, the *Wetj Boya* sites are important because the area immediately around the middens were used by their family relatives whom gathered and camped in large groups on the coast during summer. *Yued* elder Charlie Shaw remembers how his mother would hunt, gather and prepare foods like *gilgies*, *kardar* (lizard) and *yerderup* (duck) from the area⁸. Some plants of significance to *Yued* people include *Haemodorum spicatum* (*born*) and *Exocarpos sparteus* (*djuk*). The water source containing *Yun jid* (Bulrush) is used by *Wetj* (Emu) and *Yonga* (Kangaroo) today.

Kwelena Mambakort was a site where ceremonies took place and since it is closed these details are protected as property of the *Yued* people. The other sites *Yonga Kep Wari* are open and were used as meeting place, a hunting place as well as a place for shelter and water. These sites contain artifacts, which include cutting tools, grinding stones, flakes of rocks, shells from abalone, oyster, baler, trochus (some not local to the area) and periwinkles and bones of fish and seal. The amount of artifacts is evidence that

⁸ Notes taken by Tony Doulman from SWALSC in 2000.

large numbers of *Yued* people occupied the sites over several areas and thousands of years. Sites as rich as these are obviously significant for *Yued* people and *Noongar* people but these are important to Australia's heritage.

5.3. Threats to the sites.

There are a number of threats related to the *Wetj Boya* sites ranging from development, lack of the rule of law and removal and damage of artifacts, to pests, weeds, fire, possible groundwater pollution and even climate change. In a holistic view these can not be separated from the threats already identified in the Wedge Grey Master plan (2000). Some threats have been provided from site visits on the 21st March and 5th of December 2006 see notes (Attachment 1.) and Site Audit of 9th of May 2006. While these threats range in scope they can all be framed in scale into imminent or proximate and prioritised from high to low (see Table 5 below).

Table 5. Threats to the *Wetj Boya* sites.

#	Priority	Threats
1	Imminent	Lack of rule of law and understanding of sites and taking artifacts.
2	(High)	Vehicle damage to artifacts.
3		Development, particularly the spur road proposed by MRWA.
4		Lack of recognition of sites in the Wedge-Grey Masterplan (2000).
5		Site 20053 not yet permanently registered.
6	(Lower)	Other sites along the coast, particularly north are not yet registered.
7	Proximate	Unauthorised dumping of rubbish and possible groundwater pollution from designated rubbish tip into the wetland at site 20051.
8		Pipelines traversing the site.
9		Introduced pests like spiny rush, gambezi, cats, rats and foxes.
10		Phytophthora dieback.
11		Fire.
12		Climate change.

During holidays and on summer weekends the population at Wedge swells from the number of holidaymakers. Recently numbers of trail bikers, beach buggies and quad bikers are believed to have increased raising issues of safety, unauthorised camping and environmental destruction. Currently Wedge is reasonably difficult to access, since the main entry road is a sandy 4x4 track that traverses through Department of Defense Training area and on to the beach and takes at least 1 hour from Lancelin. Construction of the Indian Ocean Drive and Wedge Reserve spur road will improve access which may add to the problems experienced at Wedge, although better access will also improve DEC ranger access to better manage these problems.

The spur road itself may cause onsite damage. According to O'Connor (2004) the proposed Wedge Reserve spur road from the proposed Indian Ocean Drive will pass through the *Kwelena Mambakort* site 20051. The report by O'Connor (2004) also states that with the exception of site 20051, the entire Main Roads Western Australia (MRWA) "Project" was clear of areas or sites of Aboriginal significance and that the Aboriginal members approved the "Project". The report recommended an application be made under Section 18 of the AHA (1972) and that it be clearly shown where the spur road may pass through *Kwelena Mambakort* site 20051. It has been suggested by elder Charlie Shaw, that the spur road follow the existing track into Wedge to limit further damage and avoid creation of another road.

5.4. Custodians and caretakers.

Many *Yued* Elders particularly descendants of Olive "Ollie" Delores Nettle and William Warrell (An apical ancestor for many of the *Yued* mob, from approximately 1870) remember coming to the area and nearby Bullfrog Well as youngsters. Charlie Shaw recalls being with his mother, Ruby, using the land and water to gather *dijke* and cook them, the Shaw family live in the area today and run the *Kwelena Mambakort* Wedge Island Aboriginal Corporation (KMWIAC). *Dijke* (Gilgias) or *Cherax quinquecarinatus* are a native WA freshwater crayfish which formed part of the contact-era diet of local Aboriginals (Meagher 1974).

Some the earliest records of *Yued* people in the Wedge Island area come from published books by settlers and their family who took up grazing properties during the nineteenth and twentieth centuries around Wedge Island. These include “Cowalla” by W. de-Burgh and “A Brush with Nature” by B. Wedge (1984). The graziers relied on local Aboriginal knowledge of watering holes for watering of their livestock and areas to avoid because they contained poisonous plants. Nabbit and Leo Websdale are also mentioned as having minded livestock and tracking dingoes in the area (McConnell et.al. 1993).

The Bullfrog “run” according to Wedge (1984), which took in Wedge Island and totaled some 27,200 acres, was transferred from Henry Brockman to Sidney de-Burgh in 1904, then to the Roberts family in 1916. According to Wedge (1984) Billy Warrell minded C.J. Roberts’ cattle on the Bullfrog run up to about 1925 and Billy was then the ‘last royal descendant’ of the local native kingdom in Dandaragan.

Implementation

6. Action plan.

The following plan addresses threats identified in this MP. It provides and recommends actions as well as identifying stakeholders responsible for taking action. There are six imminent threats which have been ranked based on the degree of risk to the sites, they are high priority and recommended for immediate action. The remaining 6 proximate actions have been prioritised to address the medium or low level threats and are less urgent since they were identified as posing less risk.

Table 6. The Action Plan for Wetj Boya sites.

#	<u>Action*</u>	<u>Priority</u>	<u>Key Stakeholders</u>
Imminent threats for immediate action			
1	Employ a ranger to visit Wedge. Identify <i>Yued</i> honorary warden to protect the sites. A community meeting held at Wedge to raise awareness of the	High	DEC, DIA, <i>Yued</i> NRMAG, KMWIAC, WIPA,

	sites located around the settlement and the need for them to be protected. A keeping place established for damaged/important artifacts as well as stories and traditions on <i>Yued</i> culture. An interpretive/ educational centre established aimed at protecting and promoting <i>Yued</i> cultural values.		SWALSC.
2	Construct a three sided plain wire fence around the sites at <i>Kwelena Mambakort</i> subject to the AHA (1972). Erect site signage related to protection under the AHA (1972). There may also be need for a boardwalk trail above the ground near the main midden to control access.	High	DEC, DIA, NACC, SWALSC, KMWIAC and the <i>Yued</i> NRMAG.
3	Pursuant to the established processes the MRWA submit any new Wedge spur road proposal to the DIA under Section 18 of the AHA (1972).	High	MRWA, DEC, DIA, SWALSC, KMWIAC.
4	Ensure development works related to DEC Masterplan that may damage the site be in accordance with traditional owners and legal requirements of Section 18 of the AHA (1972).	High	DEC, DIA, KMWIAC, <i>Yued</i> elders and <i>Yued</i> Working Group.
5	Place site 20053 on the permanent DIA registry.	High	<i>Yued</i> Elders, DIA.
6	Record and register the Aboriginal site on Wedge Island and other sites between Wedge and Grey.	High	<i>Yued</i> Elders, DIA, SWALSC.
Proximate			
7	Car bodies and other rubbish removed from the registered sites.	Medium	DIA, WIPA, DEC and SWALSC.
8	Windmill pipelines relocated from traversing the midden site at <i>Kwelena Mambakort</i> .	Medium	DEC, DIA and WIPA.
9	Control of pests, particularly cats, rats, fox, gambezi and spiney rush invasion.	Medium	DEC, DIA, and <i>Yued</i> custodians.
10	Undertake surveys for dieback (phytophthora)	Medium	DEC, DIA and

	and manage the risk to the sites.		WIPA.
11	<i>Yued</i> people practice traditional fire management on site for management of plants and animals.	Medium	DEC, DIA, <i>Yued</i> custodian/caretaker
12	Investigate the long term effects of climate change on the biota.	Medium	DEC, DIA, <i>Yued</i> Elders, SWALSC.

*In consultation with traditional owners and DEC.

7. Monitoring and Review.

The Implementation of actions may occur over the proposed time period, for monitoring and review.

Table 7. A Five year Monitoring plan for the Wetj Boya sites.

#	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Imminent threats for immediate action					
1	x				
2	x				
3	x				
4	x				
5	x				
6	x				
Proximate threats					
7		x			
8	x				
9		x			
10		x			
11		x			
12	x	x	x	x	x

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9. Attachment 1.

Notes on Sites at Wedge Visited on 21 March 2006

By: Eleanor f Chaos

Present: Charlie Shaw, Brian Blurton, Eleanor f Chaos, Marge Shaw

General notes

- There are shell middens at Green Head, Sandy Point, Sand land Island and Middle Head.
- Captain George Grey was shipwrecked near Kalbarri in 1839 and was assisted by local Aboriginal people in his trek back to Perth.
- There are 2 Aboriginal water holes at Grey (Point?) that William Warrell (deceased) and Mal Ryder know about them.

Baliekart

Baliekart – lookout. Big sand dune. Mentioned in the Captain’s Logbook – he saw Aboriginal people sitting up there. They would sit there on the lookout for whales. When they got one, they would light a big fire (signal fire) and the mob would come in and they’d have a big feed. Timothy, Warrine and Charlie are mentioned (in the log book?) as coming from that area. Robert Shaw did the stock route.

It would be good to register that whole area, from Grey to Wedge Island, to protect from future coastal development.

Wedge Sites

- Shell middens are being damaged by motorcyclists. A lot of motorcyclists are coming to Wedge and buying shacks. People are taking the shells from middens and using the shell grit for making house foundations – mixing it with concrete.
- Tony Doulman, an anthropologist, took away an axe head to get it tested, what happened to it?
- There is a place North of the block the Shaws are trying to get through Indigenous Land Corp. to make a cultural centre. There is an old watering hole there that was used along the Old North Stock Route. Annie Shaw has a map of it. A man from CALM in Moora was helpful, wrote it all up. Annie wrote his name down.
- Mal Ryder came up and did up to Grey with Rory O’Connor.

Site Visit By: Eleanor f Chaos

1 Out Back of Charlie's Place

From out the back of Charlie's and right up to the sand hill there is ridge of limestone caprock. There used to be more vegetation here and there were good camping spots. Fire, vehicles and the Army have got rid of some of the vegetation. People brought food from the ocean, and there are lots of shell middens and stone tools. These sites were shown to Rory. There is some tank damage from the SAS.

2 Unauthorised Clearing

Charlie noted some clearing at the Wedge settlement near his place where there used to be a nice stand of Acacias you could sit under. It looks like someone has cleared it to build a shack.

3 Site Near Golf Course

There's damage here from people coming in to camp, blazing new trails. Fear of damage to the sites. Many stone tools and shell middens, seal bones. Charlie showed us an impression in the sand where the wedges (birds?) dig in for seeds. Charlie showed us a large rock that points inland to where there is a waterhole.

3A (no photos) Site Near the Road

Middens on the caprock, near water soaks. Seal bones. Balga resin – has many uses. Pile of stones – possibly put there as food for the *wagyl*?

3B (no photos) Water Holes

Charlie showed us two water holes that used to have fresh water and gilgies and frogs. Now they have lots of algae, and smell bad. There are gambezi in there. These introduced fish eat mosquito larvae, but also eat the other (native) fish.

Charlie is also concerned about the increasing number of ticks that are harming the roos. He wants to know if any research has been done?

4 Rubbish Tip

Charlie wants the tip to be moved, as he believes the rubbish is contaminating the water, and spoiling the waterholes, and also getting into the soil and sea. He suggests there be large bins (like skip bins), and they be carted away and emptied, as part of CALM's management of Wedge.

5 Sand Dune

There is a great view from this sand dune. To the North you can see Flat Rock. The Army renamed it 'Target Rock' as they used to use it for target practice. It used to be about 1km in diameter. During WWII they shot at it. There is lots of unexploded stuff there. The seals used to gather there.

See also notes about baliekart, above. This sand dune can be seen from the sand dune we were standing on, but takes quite a long time to drive to.

6 Wedge Island

Djilling Island (not sure about spelling), or Wedge Island, joins up with mainland Wedge every 5-7 years. The weather patterns are changing, so it might be less often now, or more often. Not sure how this change will effect it.

Wedge Island itself is a site. Noongar people used to hunt there seasonally for seal, and birds eggs. The white breast eagle nests there on the far side of the island. Charlie talked to Ophelia and Kingsley from SWALSC about this (in connection with the trial).

7 Dijong Well

Brian said he had been out here with Charlie before and taken GPS readings. The well was natural, but was made bigger to water cattle. It's quite large and deep, and it fills up in winter. There used to be lots of artifacts around here. Walking around, we found lots of quartz stone tools. The quartz must have come from a different area.

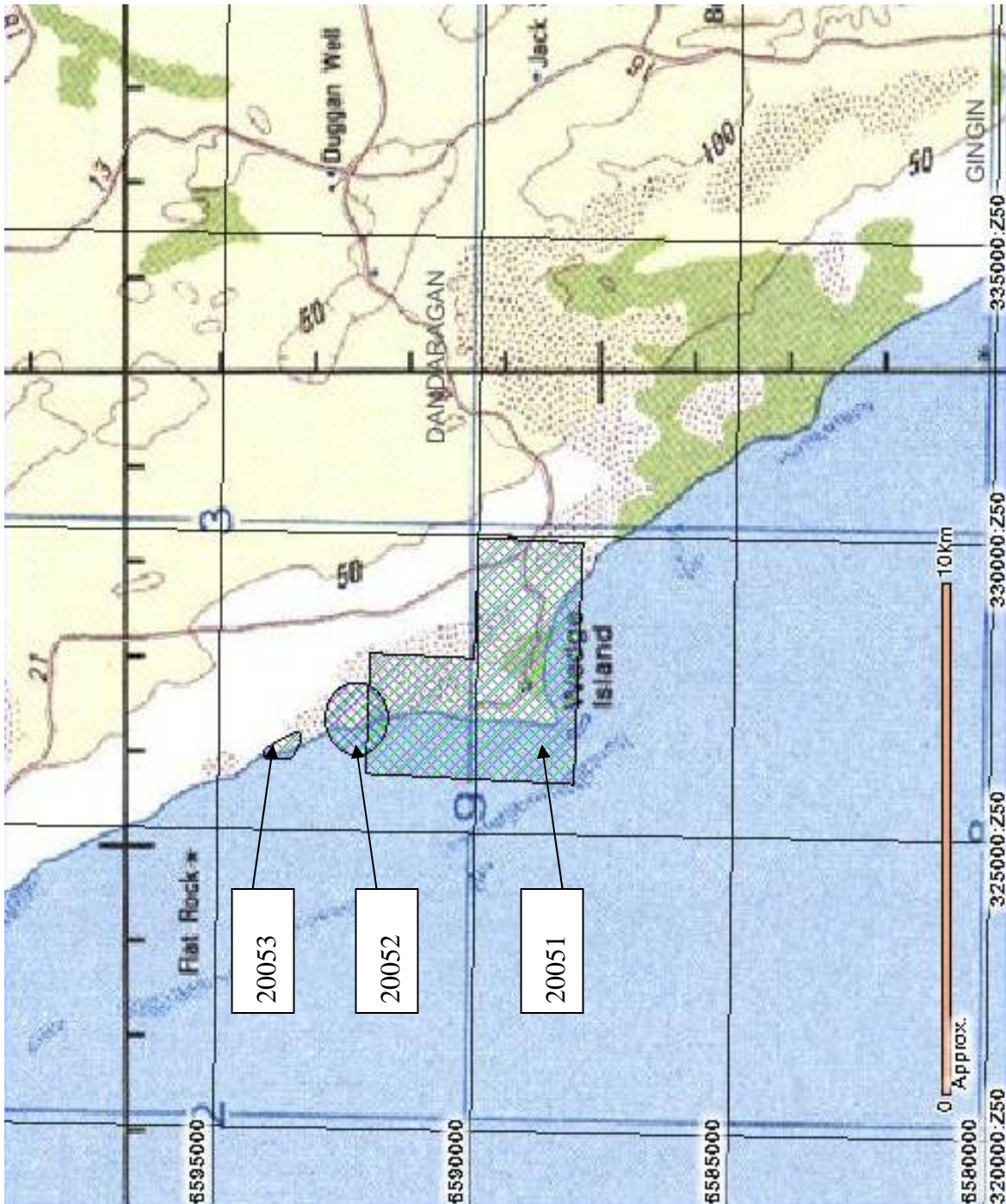
It's on CALM land, Charlie would like to see them clean up the Patterson's Curse and clean up the well.

8 Boodja Balga

Old camping spot. Wadjelas camp here now, and have taken away a lot of the stone artifacts that used to be on the ground. Also damage to some of the balga trees – burnt. There's a soak here that's shallow, but fills up seasonally.

9. Attachment 2.

The location of the Wetj Boya Aboriginal sites; 20051, 20052 and 20053.



Source: Website <http://www.dia.wa.gov.au/Heritage/Inquiry/Default.aspx> (29/5/07).