APPENDIX 3

CULTURAL ENVIRONMENT

Detailed anthropological studies of most Pilbara Aboriginal peoples are, by and large, absent from the vast body of literature about Australian Aboriginal peoples. Early reports (e.g. Clement 1903; Brown 1912; 1913; Yabaroo 1899), more contemporary and quite significant works (e.g. Brandenstein 1967; 1970a; 1970b; 1973; Tindale 1974) and recent Aboriginal remembrances (Guruma Elders Group et al. 2001; Juluwarlu Aboriginal Cooperation 2007; Olive 1997) supply key information that assists when portraying different aspects of the region's Aboriginal peoples. Most recently, development associated with mining and exploration projects creates a need to consult Aboriginal Elders so as to mitigate impact on places of special significance. This has resulted in a considerable number of anthropological reports, although most are unavailable due to a range of restrictions, thereby constituting a body of literature commonly described as grey literature. McDonald (2007) and Goode (2009), both of which are referenced in this study, are representative of this information resource.

The following discussions draw on this material, as well as a scattering of ethnographic observations. In using this information, we frame the following discussions around two purposes. First, we present most of what is publicly known about the Nyiyaparli. Second, we develop an

idea or model about how their social systems and lifeways may have appeared immediately prior to the influx of Europeans during the early 19th century.

NYIYAPARLI LAND AND PEOPLE

COUNTRY

Nyiyaparli lands (Figure 3.13) extend from the Fortescue Marsh area in the north-west to the Western Desert near Jigalong in the south-east. The southern reaches of their country include the Fortescue River headwaters in the Hamersley Range near Newman.

This synthesis of more contemporary research (Berndt 1959; Brandenstein 1967; Dench 1998; Tindale 1974) differs from the situation presented during the early years of inland Pilbara settlement. Clement (1903, Figure 1) was among the first authors to name Pilbara groups. He placed the Balgu in the area roughly attributed to the Nyiyaparli today. Since he traversed the Balgu's northern boundary (p. 1), one would surmise his views are credible. Brown (1912, 143), however, asserted that Clements' article was 'unreliable and contains numerous examples of carelessness and inaccuracy', though Brown's own fieldwork observations were limited to the Pilbara coast and adjacent areas. Brown also noted (1912, 145), without clear attribution to source, the Ngadari living near the Fortescue River headwaters, roughly within contemporary Nyiyaparli territory, and the 'Bailgu' in the same territory as Clement shows (1903, 144).

Tindale's extensive review of the distribution of Australian Aboriginal groups (1974) marked the first step in resolving the Bailgu–Ngadari (or Niabali after Tindale 1974, 252) issue. He assigned their territories as:

> *Bailgu*[1] – upper Fortescue River east of Goodiadarrie Hills; north to the scarp of the Chichester Range and to the Nullagine River divide; at Roy Hill and east to the headwaters of the Oakover and Davis Rivers. In the late precontact times they were being forced east from the

1 Alternative spellings in historical sources Bailgu, Balgu/Balgu, Paljgu and Pulgoe all refer to the contemporary Palyku Aboriginal group.

> Fortescue Salt Marsh area by pressure from the Pandjima. They are still known to western people as the Manggguldulkara or 'Marsh People.' Former presence of the Bailgu farther west is indicated by their continued possession of a cave store for very large ceremonial boards in the Wodgina Hills at a place called Tambira [Tambourah] … The Bailgu are closely related to the Niabali and now mix freely with them. (p. 239)

> *Niabali* – Headwaters of the Oakover and Davis rivers above their junction; middle waters of the Fortescue River; northwest to Roy Hill; on the Weedi [Weeli] Wolli Creek north of the Ophthalmia Range; east to Talawanna. About 1980 pressure by Kartudjara forced the Niabali to retreat from the northern vicinity of Savory Creek to a boundary on the headwaters of the Jiggalong Creek. (p. 252)

Importantly, Tindale raised the matter of the relatedness between the two groups. Brandenstein's 1964 Pilbara fieldwork among the 'Njijapali' found that Paljgu speak the Nyiyaparli language (1967, 2). Therefore, early records of Pulgoe or Balgu/Bailgu territory likely pertained to a distinct group of Nyiyaparli speakers who commonly lived in the northern reaches of Nyiyaparli country.

Later discussions about Nyiyaparli territory (e.g. Berndt 1959) often locate the group at various locations within their territory. These studies mark a time when group displacement and a reduction of group population had had a notable impact on the group. Prolonged contact with the European community, as well as Aboriginal population movements within and into the Pilbara region, produced a distinctly different map of Aboriginal groups than the one that might have been drawn 150–200 years before.

LANGUAGE

Assigning the Nyiyaparli language to a particular linguistic tradition is a controversial issue (e.g. Dench 1998; O'Grady and Laughren 1997). There is general agreement that the Palyku peoples living immediately to the north speak the same dialect. Moreover, Nyiyaparli is strongly linked with, if not in fact a part of, the Pilbara's Ngayarda language group (Dixon 2002, xxvii,

Map 0.1; O'Grady 1966, 74). Nyiyaparli also shares some affinity with the Wati groups living in the Western Desert (Brandenstein 1967, 2; Geytenbeek and Wanga Maya linguists, n.d.).

MYTHOLOGY AND CEREMONY

For the Nyiyaparli all aspects of their life emanate from *Kukutpa* (the Dreamtime), when the ancestors shaped the land and brought forth life during their travels (McDonald and Coldrick in press; Nyiyaparli Community, Bird and McDonald 2015, 4; Stanner 2011). The ancestors also laid down *Mangun* (Law) so that people understood how country came about and what rules they must follow to protect the land.

Nyiyaparli country abounds with places belonging to *Kukutpa*. The Fortescue Marsh (Martuyitha) and adjacent areas contain numerous places holding special significance for the Nyiyaparli people. Brandenstein (1973) lists many of these, which were re-identified during anthropological consultations associated with Fortescue Minerals Group development of the Chichester Range (Goode 2009; McDonald 2007).

The Marsh, the Fortescue River and its tributaries form a life-giving force sustaining the natural environment, for which the Nyiyaparli hold prime responsibility. One senior informant commented: 'The Marsh is very important to the Nyiyaparli people, it is central to our culture and its survival' (Goode 2009, 18).

Moreover, the Marsh has mythological significance to the Nyiyaparli with several places nearby and within it being named in *Kukutpa* stories. The Marsh's creation myth, as it was told to Goode, began when

> yurtupa [snake] come across the Dingo sing out at the side of the river. All the sea water went back and just left the salt what's in the Marsh now. … [and] yurtupa turned to stone … The story comes from past Newman and comes right through the Marsh; it follows the water but is about the land as well. (ibid.)

A mythological songline follows the northern shore of the Marsh and is marked by several freshwater pools, *yinta,* found there. In traditional times,

young men undergoing initiation camped at these places where elders taught them stories about Nyiyaparli country (ibid., 36). Also, the songs sung at the waterholes form a part of rain-making ceremonies for the renewal of Nyiyaparli territory. These include *Ngawarnkuranha*, *Karntama*, *Jitumpulpa*, *Nguwarna* and *Mirrlimpirrinha*. The last named is the most significant *yinta* belonging to the song cycle, and the place from which Warlu, the rainbow serpent, travelled underground to and from Millstream.

Several creek systems draining the southern flanks of the Chichester Range have special, albeit unspecified, significance to the Nyiyaparli (de Gand 2009, 21–24, as cited in Goode 2009, 43). Nine were identified during Goode's fieldwork (2009, Table 1). *Karntama* and *Kakutungutantu* creeks are regarded most highly by the Nyiyaparli (ibid., 43).

Numerous ceremonial sites are recorded for the region (Brandenstein 1972; Green 2004, as cited in Goode 2009, 13; Palmer 1977) including *Djiwirdi*, *Karntama*, *Jubugany* and *Mankarlyirrkurra*. *Djiwirdi* is an increase site for fish, *Karntama* for food resources in general and *Jubugany* for rain.

Mankarlyirrkurra is a law ground for Nyiyaparli, Banjima and Palyku and a place of special importance for the eastern Pilbara region. Brandenstein (1972, 228) described it as:

> a sacred precinct of about 80 square kilometres which was used until recently as an initiation centre. The whole area consists of a high plateau [with] many cliffs and rock noses jagging out into it from all sides [sic] 10 had been chosen to represent the 10 'nations' which form a ritual alliance still adhered to in their [sic] north-west.[2] … The sacred place was used to teach the young initiands the tribal and 'national' geography and history

Recent studies also confirm *Mankarlyirrkurra* as a focal point for significant *Kukutpa* Tracks, as well as special places for men and for women.[2]

NEIGHBOURS

Three groups, in the main, bordered Nyiyaparli lands around the time of first

2 E. McDonald, personal communication, 2016.

European contact. The Palyku, who speak Nyiyaparli, occupied the acacia shrub steppe country to the north. This area included the northern flanks of the Chichester Ranges from the headwaters of the Yule, Shaw and Coongan rivers to Nullagine and on to the Oakover River in the Mount Divide area.

The Banjima peoples, whose language bears close similarities with Nyiyaparli (Dench 1996; O'Grady 1966), mostly inhabited the Hamersley Range tablelands and gorges between Tom Price and the Weeli Wolli Creek. These areas are vegetated with mulga woodlands in the valleys and eucalypt and spinifex steppe elsewhere. Their lands also included parts of Fortescue Marsh and the Fortescue River valley, immediately to the west of the Nyiyaparli. The Banjima shared initiation ceremonies with the Nyiyaparli, as well as maintaining close relations with the Guruma, who inhabited the Hamersley Range to the west (Guruma Elders Group et al. 2001, 6–7, 24).

Western Desert peoples, in particular the Martu, inhabit areas of the Western Desert in the vicinity of Lake Disappointment near the Nyiyaparli's eastern boundary (Tonkinson 1978, 8, Map 2). The region largely consists of sand hills vegetated with spinifex grass steppe broken by tree steppe (*Acacia* spp. and spinifex) in the swales. As mentioned above, there are differences of opinion about the relatedness of Nyiyaparli and Wati, the language spoken by Western Desert peoples. Nevertheless, there must be some degree of mutual intelligibility because the Nyiyaparli claim their language is closely related to that of the Western Desert groups (Geytenbeek and Wangka Maya Linguists n.d.).

ABORIGINAL CULTURE IN THE INLAND PILBARA AND WESTERN DESERT

Neighbouring groups are, by and large, better documented than the Nyiyaparli. The Western Desert Martu peoples, in particular, have been carefully studied. Their social systems (Berndt 1959; Tonkinson 1978, 43–60) share much in common with the groups living in the Pilbara (Dench 1987; Tonkinson 1978, fn. 3 p. 45), and the Martu subsistence patterns (e.g. R.B. Bird and D.W. Bird 2008; Codding 2011; Walsh 2008) are well-understood. Therefore, together the documentary evidence describing neighbouring

groups, when combined with key anthropological studies and other cultural documentation of Pilbara Aboriginal peoples, provides a good foundation from which to create a model of traditional Nyiyaparli culture.

SOCIAL SYSTEM

The Nyiyaparli lived in several local groups, and spoke a dialect of the language shared among peoples living across a vast region extending from the Pilbara coast into the Little Sandy Desert. These peoples maintained communal totemic sites that comprised elements of a far-reaching ritual landscape.

Kinship formed the framework for virtually all interpersonal relationships and was based on the father's line (patrifiliation). There was a strong desire for children to be born near a sacred site or a group of these sites with which their father was closely associated (e.g. Berndt 1959). Boys inherited responsibility to look after these sites and maintain totemic affiliation with them. They would also retain access to the resources found within their father's estate. So, a considerable portion of their lives would have usually been spent in and around their father's estate. Young girls moved to their husband's country after they were married and access to their father's country was often impractical.

It is important to note that, in the Nyiyaparli kinship system, siblings and cousins (mother's sisters' children and father's brothers' children) of the same sex referred to each other as brother and sister. This network of relations extended well beyond the area in which one lived.

The Nyiyaparli had another set of practices as a part of their social system. This was a complex arrangement of intergenerational cohorts now referred to as sections by anthropologists (e.g. Radcliffe-Brown 1930). These were called *Banaka* ('A'), *Karimera* ('B'), *Burung* ('C') and *Palyeri* ('D'). At birth, each child was assigned to one of these 'skin' groups; this was related to their mother's skin group following a prescribed procedure.

These sections, or skin groups, were important to the Nyiyaparli in three regards. First, they were referred to when different local (estate) groups came together for important purposes (Tonkinson 1978, Figures 3–5). When the Nyiyaparli joined other groups at large encampments,

members of sections A and C versus B and D (Nyiyaparli 'patrimoiety groupings') would be isolated from one another. Nyiyaparli gift exchange was also structured according to this social alignment. When the people came together for most important rituals a different configuration – A and B versus C and D ('generational' groupings) – was used. These occasions included secret men's business, ritual performances related to the Dreaming, promotion of solidarity among members of the dialect group, and corroboree dances. Significant events such as initiation and mourning brought groups together in a modified version of generation sections.

Second, section groupings were important in daily life. Individuals were commonly referred to by their section name, rather than by their personal names that were often secret. When visiting a camp belonging to a different estate a person would refer to themselves by their section name. This convention allowed people at the camp to readily know with whom the visitor was likely related. This, in turn, helped to sustain good relations among people. This was essential to eliminating distrust and maintaining strict social conventions imposed by rules within the Nyiyaparli kinship system. These, for example, included making it clear those men or women with whom marriage was impossible and those people who must be avoided, such as one's mother-in-law and other relations.

Finally, the section system created a network of relationships across a wide territory extending well beyond a group's domain. For the Nyiyaparli this encompassed many Pilbara Aboriginal peoples (Brown 1913) and others living in parts of the Western Desert (Dench 1987; Tonkinson 1978, 45 fn. 3, 55–56).

SETTLEMENT PATTERNS

The Nyiyaparli lived in several small bands scattered across their country, and usually focused around prominent waterholes. Each band consisted of six to 30 people belonging to one or more related families (e.g. Peterson 1983; Radcliffe-Brown 1930; Tonkinson 1978, 53). The married women in the group were commonly born and raised elsewhere, often among distant groups who commonly spoke different dialects or even a different language.

A senior male elder led the group, and was patrilineally related to

most men and unmarried women in the group. The core group area, commonly referred to as an estate by anthropologists (e.g. Stanner 1965), included several waterholes, of which at least one was named and well known outside the estate. Totemic sites were also found in the area and initiated men living on the estate regularly conducted prescribed rituals to maintain these sites. Other people would spend short periods at estate camps. Young men often visited while stopping over at key ritual sites nearby, mostly before or after their initiation ceremonies. For the Nyiyaparli, estates would have been the heartland of each of its kinship groups, who felt strong feelings of belonging and ritual attachment to their estate (e.g. Tonkinson 1978, 50).

The Nyiyaparli also accessed tracts of land adjacent to their estate. This area, termed a group's range (e.g. Stanner 1965), was a vital extension to a group's resource procurement strategies. Other estate groups living nearby would likely share this country, which was valuable when the key resources in a particular estate became depleted or when severe climatic conditions prevailed.

Aggregation sites were another type of settlement. Seasonal factors often produced conditions where there was an abundance of food and water. The flooding of the Fortescue Marsh and the arrival of vast numbers of waterbirds is a case in point. Large numbers of Nyiyaparli and their neighbours came together at these times for rituals and other ceremonial activities. When speaking about people living in the Western Desert, Berndt (1959, 103–4, fn. 79), for example, estimated that upwards of possibly 250–300 came together under such favourable economic circumstances. People would congregate at aggregation sites, such as the regional law ground *Mankarlyirrkurra* near the Fortescue Marsh for as long as social relations remained generally friendly and environmental conditions permitted. Male initiation and other men's rituals (e.g. celebration of Dreamtime events associated with the area) often required a large number of participants and were, therefore, common occurrences at these gatherings. Intergroup gift exchange, celebrations and dancing were also important activities.

The settlement pattern followed by the Nyiyaparli and members of

their social network was therefore very fluid. Contrary to what one would interpret from Tindale's work (1974), there was no prescribed or bounded territory where a group enforced restrictions, as opposed to granting access to economic resources. Moreover, the Nyiyaparli and their neighbours were joined, as was the case with many Aboriginal groups (e.g. Stanner 1965, 11) in a network of interdependence through kinship, marriage, friendship, trade, Dreaming narrative and ritual.

PLANT AND ASSOCIATED INSECT FOOD RESOURCES

The Nyiyaparli probably exploited a wide range of plant resources (*marta*) across several environmental zones across their entire country; a complete review is beyond the scope of this study. Therefore, this discussion concentrates on those vegetation communities found in the study area (Figure 3.9).

Tables 3.2 and 3.3 present information about the occurrence of major economic plants found in the study area, as well as their distribution across the primary landforms. While there appears to have been abundant resources, a different picture appears when analysing vegetation quadrat records made during recent environmental impact analyses (FMG 2013, Appendix F and G). These show that only three economic plants – *Acacia aneura, Eucalyptus victrix* and *Ipomea muelleri* – account for at least 10% of the natural vegetation cover noted in the areas sampled. Therefore, key economic resources are on the whole relatively scarce across the area, and where they occur they are very patchy.

Acacia species make up the dominant source of plant and associated insect food in the area (Table 3.2). *Acacia* seeds were probably among the primary sources for starch; they are ready for harvest late spring/early summer (see https://www.ausbushfoods.com/map/resources/seed.htm). It may be the case that seeds from all the eight acacia species were not exploited for starch (e.g. O'Connell and Hawkes 1984). Nevertheless, we may be relatively certain that *Acacia aneura* (mulga – *wirrntamarra*) seeds would have been among the important Nyiyaparli foods in the past. They are widely reported as a food source, and mulga occurs in abundance across more than 50% of the study area, along creek lines in the hills and plains, as well as covering much of the plains (Table 3.3).

Ipomea muelleri is another plant food common in the study area, and is found along creeks and across the adjacent plains. Pilbara Aboriginal peoples and members of nearby Western Desert groups collected tubers from *I. colobra* and *I. costata* to roast in the fire (Bindon 1998, 160–61; Cane 1987; Hayes and Hayes 2007, 18–19; Walsh 2008, Table 5.4). Crawford (1982, 93) reports that *I. muelleri* tubers were similarly used in the Kimberley region. Therefore, it seems likely that *Ipomea* probably was an important source of starch.

Triodia (spinifex) seeds were also sometimes used as a starch resource food in the Pilbara and become ripe in spring. Pittman (2010, 112) suggests that not all *Triodia* species were exploited for food. As well, the occurrence of different species in the study area is poorly understood, and the extent to which the Nyiyaparli may have exploited this resource is uncertain.

Honey (*jantaaru*), gum and lerp (*waranu*) were supplementary foods found across much of the study area (Table 3.3). Eucalypts, especially *E. victrix*, are a major source for these delicacies growing and they commonly grow along creeks in the hills.

Several other important plant foods are found at the Marsh. Species with edible roots, such as the bush onion (*Cyperus bulbosus*), are plentiful. *Typha domingensis* is also found near waterholes along the Marsh's northern shore.[3] If present in sufficient quantity, *Typha* would have been among the staple food resources for the Nyiyaparli (Young and Vitenbergs 2007, 137).

ANIMAL RESOURCES

A wide range of animal species are available in the study area (Table A3.1). The hills and ranges were important Nyiyaparli hunting areas. Euro (*jartunmarra*), spectacled wallaby and northern quoll were among the most sought after game animals. Fire drives were used to concentrate euros at localities where they could be easily dispatched (e.g. Durlacher 2013, 18). They probably also used fire when hunting lizard as did the Martu, their neighbours to the west (e.g. Bird et al. 2013). The Nyiyaparli hunted other game, such as emu, quail and cockatoo, by means of blinds, traps and lures (e.g. Clement 1903; Durlacher 2013, 77).

3 A. Markey personal communication, October 2014.

Fishing in the vicinity of the study area was restricted to times when flood waters covered parts of the Marsh and fish migrated to these waters. Fish (*mirrumayi*) were commonly found among the pools along the Fortescue River further upstream. Netting fish was common, as was the use of fish poison, *Tribulosus suberosus* (Guruma Elders Group et al. 2001, 105; Young and Vitenbergs 2007, 98) to stun fish, which were scooped up from the water (e.g. Clements 1903).

MATERIAL CULTURE

Plants suitable for the production of the Nyiyaparli's primary wooden tools occurred across much of the area. The mulga woodlands on the plains were the best sources for the necessary raw materials (Table 3.2) for the manufacture of different types of spears, spear throwers, boomerangs, clubs, shields, digging sticks and musical instruments. Ceremonial boards (Tindale 1974, 289) and message sticks (Durlacher 2013, 10) were also among the other important wooden items in the inventory of wooden material culture. Eucalypts, which commonly grow along watercourses in the hills, are the source of wood to manufacture *yandi* (long, shallow containers) used as carrying dishes and for winnowing seeds.

Spinifex fibre was collected from the hummock grasslands covering the ranges and used to produce cord for general use and for making bags, as well as nets for fishing and trapping birds (Guruma Elders Group et al. 2001, 96).

The Nyiyaparli also used a variety of flaked stone and ground stone tools (Clement 1903; Guruma Elders Group et al. 2001, 87–88; Nyiyaparli Community, Bird and McDonald 2015). Stone scrapers were often hafted to a spear thrower with spinifex resin. This tool was commonly employed when carving or shaving wood. Their ground stone tools included whetstones and axes, which were used in the manufacture of boomerangs. There were two stones used when grinding seed – millstone and top stone. These were often left in the vicinity of or at campsites, sometimes in close proximity to one another.

Table A3.1: Christmas Creek and environs: common and important native animals (Beesley and Prince 2010; Bell et al. 2014; BIOTA 2003; BirdLife 2015; Coffey Environment 2014; Davis et al. 2005; FMG 2010; 2011b; Johnstone et al. 2013; Kendrick 2002).

Scientific name	Common name	Primary habitat – comments
fish		
Leiopotherapon unicolor	spangled grunter	Fortescue Marsh; also resides in deep, near permanent channels during dry periods; breeding begins with the onset of flooding and continues during summer
Amniataba percoides	barred grunter	still pools and fast flowing streams; probably enters the Fortescue during floods
reptiles and amphibians		
Caimanops amphiboluroides	mulga dragon	mulga woodlands
Carlia munda	shaded-litter rainbow skink	throughout most vegetation communities
Carlia triacantha	desert rainbow skink	throughout most vegetation communities
Ctenotus duricola	Pilbara ctenotus	throughout most vegetation communities
Ctenotus grandis	grand ctenotus	throughout most vegetation communities
Ctenotus aff. helenae	clay-soil ctenotus	mulga woodlands and hummock grasslands
Ctenotus pantherinus	leopard ctenotus	throughout most vegetation communities
Ctenotus saxatilis	stony-soil ctenotus	hummock grasslands, mulga shrublands
Ctenophorus c. caudicinctus	ring-tailed dragon	stony and rocky areas with spinifex understorey
Ctenophorus i. isolepsis	central military dragon	mulga shrubland and woodland; hummock grassland
Ctenophorus nuchalis	central netted dragon	mulga shrubland and woodland; hummock grassland
Cyclorana maini	Main's frog	throughout most vegetation communities
Delma nasuta	sharp-snouted delma	probably throughout most vegetation communities

Table A3.1: *Continued.*

Scientific name	Common name	Primary habitat – comments
reptiles and amphibians (cont.)		
Delma pax	peace delma	throughout most vegetation communities
Delma tincta	excitable delma	throughout most vegetation communities
Demansia psammophis cupreiceps	yellow-faced whipsnake	common in mulga woodlands
Diplodactylus conspicillatus	variable fat-tailed gecko	mulga shrubland and woodland; hummock grassland
Diplodactylus stenodactylus	pale-faced gecko	throughout most vegetation communities
Egernia striata	night skink	mulga woodlands and hummock grasslands
Furina ornata	orange-napped snake	samphire flats and hummock grasslands
Gehyra variegata	tree dtella	common in mulga woodlands; mulga shrublands
Heteronotia binoei	Bynoe's prickly gecko	open eucalypt woodlands near waterways
Lerista bipes	North-western slider	throughout most vegetation communities
Lerista muelleri	wood mulch slider	mulga woodlands
Lialis burtonis	Burton's legless lizard	throughout most vegetation communities
Liasis olivaceus barroni	Pilbara olive python	gorges, caves and waterholes – likely rare nowadays
Limnodynastes spenceri	Spencer's burrowing frog	primarily open eucalypt woodlands near waterways
Litoria rubella	desert tree frog	primarily open eucalypt woodlands near waterways
Menetia greyii	common dwarf skink	throughout most vegetation communities
Nephrurus levis pilbarensis	smooth knob-tail gecko	hummock grasslands
Proablepharus reginae	spinifex snake-eyed skink	probably throughout most vegetation communities
Ramphotyphlops ammodytes	sand-diving blind snake	probably throughout most vegetation communities
Strophurus wellingtonae	spiny-tailed gecko	throughout most vegetation communities

Table A3.1: *Continued.*

Scientific name	Common name	Primary habitat – comments
reptiles and amphibians (cont.)		
Tiliqua multifasciata	blue-tongued skink	probably throughout most vegetation communities
Varanus acanthurus	ridge-tailed monitor	probably throughout most vegetation communities
Varanus brevicauda	short-tailed pigmy monitor	hummock grasslands
Varanus gouldii	Gould's monitor	mulga shrublands
Uperoleia russelli	Russell's toadlet	primarily open eucalypt woodlands near waterways
birds		
Acanthagenys rufogularis	spiny-cheeked honeyeater	mulga woodlands especially near the Fortescue Marsh
Acanthiza robustirostris	slaty-backed thornbill	mulga woodlands – resident population
Acanthiza uropygialis	chestnut-rumped thornbill	mulga woodlands
Amytornis barbatus	grey grass wren	Fortescue Marsh – perhaps endemic during seasonal flooding
Anthus novaeseelandiae	Australasian pipit	samphire flats
Ardea modesta	eastern great egret	Fortescue Marsh – large aggregations noted
Ardea novaehollandiae	white-faced heron	Fortescue Marsh – large numbers noted; breeds at Marsh
Geopelia cuneata	diamond dove	throughout most vegetation communities
Geophaps plumifera	spinifex pigeon	hummock grasslands and plains
Grallina cyanoleuca	magpie lark	mulga woodlands
Haliastur sphenurus	whistling kite	throughout most vegetation communities
Himantopus leucocephalus	white-headed stilt	Fortescue Marsh
Lalage tricolor	white-winged triller	mulga woodlands

Table A3.1: *continued*

Scientific name	Common name	Primary habitat – comments
birds (cont.)		
Lichenostomus penicillatus	white-plumed honeyeater	creek lines in most vegetation communities
Lichenostomus virescens	singing honeyeater	samphire habitats; mulga woodlands
Manorina flavigula	yellow-throated miner	throughout most vegetation communities
Malurus lamberti assimilis	variegated fairy-wren	throughout most vegetation communities
Malurus leucopterus	white-winged fairy-wren	throughout most vegetation communities
Melopsittacus undulatus	budgerigar	throughout most vegetation communities
Mirafra javanica	Horsfield's bushlark	samphire habitats
Neopsephotus bourkii	Bourke's parrot	mulga woodlands – resident
Nycticorax caledonicus hilli	rufous night heron	Fortescue Marsh
Ocyphaps lophotes	crested pigeon	thought most vegetation communities
Oreoica gutturalis	crested bellbird	thought most vegetation communities
Pachycephala rufiventris	rufous whistler	mulga woodlands
Pelecanus conspicillatus	Australian pelican	Fortescue Marsh – breeds in large numbers at Marsh
Petrochelidon ariel	fairy martin	samphire habitats; hummock grasslands
Phalacrocorax sulcirostris	little black cormorant	Fortescue Marsh – large aggregations at Marsh
Plegadis falcinellus	glossy ibis	Fortescue Marsh – large aggregations at Marsh
Poliocephalus poliocephalus	hoary-headed grebe	Fortescue Marsh – large aggregations at Marsh
Rhipidura leucophrys	willie wagtail	samphire habitats; mulga woodlands
Smicrornis brevirostris	weebill	open eucalypt woodlands near waterways
Sterna hybrida javanica	whiskered tern	flooded samphire flats – large numbers during flooding

Table A3.1: *continued*

Scientific name	Common name	Primary habitat – comments
birds (cont.)		
Sterna nilotica macrotarsa	Australian gull-billed tern	Fortescue Marsh – present following widespread flooding
Taeniopygia guttata	zebra finch	thought most vegetation communities
Turnix velox	little button-quail	samphire habitats
mammals		
Dasycercus blythi	mulgara	hummock grasslands
Dasykaluta rosamondae	little red antechinus	throughout most vegetation communities
Dasyurus hallucatus	northern quoll	rocky escarpments
Lagorchestes conspicillatus	spectacled hare-wallaby	hummock grasslands and mulga shrublands
Leggadina lakedownensis	lakeland downs mouse	range of habitats
Macropus robustus	euro	Chichester Range
Macropus rufus	red kangaroo	typically mulga woodlands
Macrotis lagotis	greater bilby	desert sandplains, hummock grasslands
Ningaui timealeyi	Pilbara ningaui	hummock grasslands; mulga shrublands
Petrogale rothschildi	Rothschild's rock-wallaby	in suitable habitat within most vegetation communities
Planigale sp.	planigale	throughout most vegetation communities
Pseudomys chapmani	western pebble-mound mouse	Stony lower slopes and plains
Pseudomys hermannsburgensis	sandy inland mouse	hummock grasslands
Sminthopsis longicaudata	long-tailed dunnart	flat-topped hills, plateaus, rocky scree slopes
bats		
Macroderma gigas	ghost bat	wide range of habitats