

Fleurieu Peninsula Swamps Aboriginal Values References and other resources used in the project

ABG (2020) Aboriginal Plant Use - Primary Years Education Trail – Teacher Resource. Adelaide Botanic Garden

AGSA (2015) Yvonne Koolmatrie, Riverland, Interpretive Guide. Art Gallery of South Australia, Adelaide, Australia. https://agsa-prod.s3.amazonaws.com/media/dd/files/EDU_Resource_TARNANTH15_KOOLMATRIE_Yvonne_Riverland.e76f390.pdf Accessed October 26, 2020.

ANBG (2004) Aboriginal Plant Use in South-eastern Australia. Australian National Botanic Garden, Canberra, Australia. <https://parksaustralia.gov.au/botanic-gardens/pub/aboriginal-plantuse.pdf> Accessed October 26, 2020.

Bickford, S. (2001) A historical perspective on recent landscape transformation: integrating palaeo-ecological, documentary and contemporary evidence for former vegetation patterns and dynamics in the Fleurieu Peninsula, South Australia. Thesis submitted for the degree of Doctor of Philosophy, Department of Geographical and Environmental Studies, Faculty of Arts, University of Adelaide, Adelaide, South Australia.

The roots of the bulrush (*Typha* spp.) are a staple of many southern Aboriginal diets (Clarke, 1988). Ethnographic records indicate that Aborigines burned swamps to facilitate the harvest process. The explorer Edward John Eyre wrote in 1845 that the rhizome was used throughout the year on the lower Murray River, but that it was best "after the floods have retired and the tops have become decayed and been burned off". The early European settler and leader George Angus noted in 1847 that "the staff of their existence is the bulrush root which the women gather amongst the reeds". Little is known of the Aboriginal use of the uplands of the Fleurieu Peninsula (Garra *et al.*, 1999) as little survey or dating of Aboriginal sites in these areas has been undertaken. This is in contrast to coastal areas where many sites have been recorded. The high frequency of coastal sites has led to arguments that the coast was the focus for Aboriginal occupation in the Adelaide region (Clarke, 1996) and the upland forests and scrubs were used for sheltering, firewood collection and hunting primarily in the winter months (Tindale, 1974; Ellis, 1976). The reduced size of the coastal plains, and thus the proximity of the ranges to the coast in the southern Fleurieu Peninsula, might have meant the inland areas were more intensively used after sea levels reached their maximum. [p207]

Bickford S., Gell P. and Hancock G.J. (2008) Wetland and terrestrial vegetation change since European settlement on the Fleurieu Peninsula, South Australia. *The Holocene* 18(3):425-436

Microfossil, sediment and documentary records provide a history of European land use and its impact on the vegetation of the Fleurieu Peninsula, South Australia. Two sedimentary cores were analysed for their fossil pollen and charcoal composition. Chronologies were established using a combination of 210Pb, 14C and microfossil markers. Primary and secondary evidence for the spatial expansion of land uses in the region were compiled providing local-, bioregional- and regional-scaled European settlement histories. The settlement and land-use histories of the major vegetation types in the region were different and were closely determined by the nature of the vegetation itself. The sedimentary and microfossil records indicate that wetland and terrestrial vegetation have undergone sequential changes of composition. There is evidence of a decline in fire-sensitive understorey species and the decline is likely due to intensive firing and grazing of sclerophyllous woodlands and forests early in European settlement. **Early-settlement native forestry practices were intensive, however they did not alter over-storey tree composition.** Mid-twentieth-century wholesale vegetation clearance is clearly marked in the pollen record by a decline in Eucalyptus and increase in herbaceous species. Wetland vegetation was highly impacted by European land practices through changes to sediment inputs and hydrological conditions that began prior to catchment clearance, during the phase of intensive firing and grazing. Through the integration of multi-scaled, ecosystem-specific historical settlement histories and palaeo-ecological analysis, correlations between past land uses and biotic responses can be confidently demonstrated.

Bickford S. & Gell P. (2005) Holocene vegetation change, Aboriginal wetland use and the impact of European settlement on the Fleurieu Peninsula, South Australia. *Holocene* 15: 200–15.

A fossil pollen and charcoal record from a cyperaceous swamp on the Fleurieu Peninsula, South Australia, was investigated to provide a history of pre and post-European settlement vegetation change. It was found that the swamp initiated sometime before 8220 calibrated years BP. High rates of peat development and the expansion of swamp species between 7000 BP and 4500 cal. BP indicated wet conditions at that time. The swamp became drier in the late Holocene and some peat may have been lost through deflation. **Macroscopic charcoal and Typha pollen suggested that Aborigines deliberately burned the upland wetlands during the mid to late Holocene.** Prior to European settlement climate changes generated community shifts in the terrestrial vegetation. The record revealed a transition from an early Holocene Eucalyptus woodland to an *Allocasuarina* wet-heath in the humid mid-Holocene, a community type with no modern analogue in the region [perhaps because of grazing pressure from kangaroos and, after European settlement, rabbits]. In the drier late Holocene, a Eucalyptus-dominated woodland returned. **The impacts of European settlement were clearly seen in changes in sedimentation rates and in both terrestrial and wetland flora.** *Allocasuarina verticillata* declined early in the European period and fire tolerant species were promoted, before the almost complete removal of native vegetation through broad scale land clearance and its replacement with non-native pasture species. Compositional changes to the swamp flora were marked through the European phase with *Acacia* expanding early in settlement and later being replaced by *Leptospermum*, in response to changed fire and regional hydrological regimes. The impact of European land use is discussed in relation to Holocene climate-driven vegetation changes and aspects of Aboriginal land use.

Bickford S. & Gell P. (2004) Reconstructing pre-impact vegetation cover in modified landscapes using environmental modelling, historical surveys and remnant vegetation data: A case study in the Fleurieu Peninsula, South Australia. *Journal of Biogeography* 31(5):787 – 805.

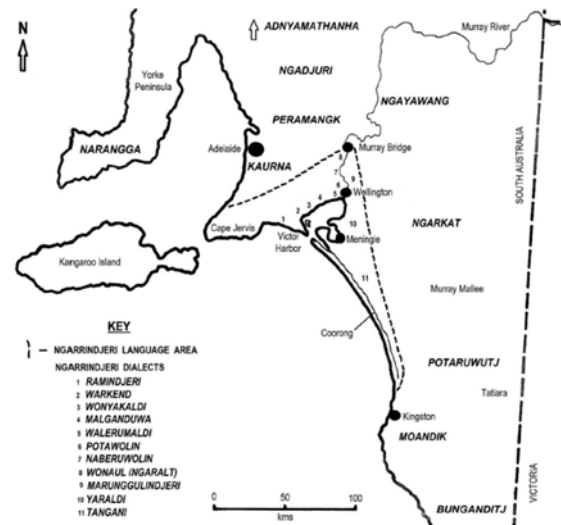
Clarke, P.A. (2019) The Ngarrindjeri nomenclature of birds in the Lower Murray River region, South Australia, *Transactions of the Royal Society of South Australia*, 143:1, 118-146.

What people observe in the environment is as much a product of the importance their culture places upon each type of object, as it is upon the acuity of their vision

The current work follows the ethnoecological approach to ethno-classification (Bulmer, 1967; Dwyer, 2005), which aims to understand and explain ecology as it is experienced and imagined. The investigation of the nomenclature of the Australian biota is fundamental for developing an understanding of Aboriginal relationships to the environment because languages are repositories for Indigenous Biocultural Knowledge (IBK).

Ngarrindjeri people recognised several categories of birds, and that there was not an early concept of them collectively forming a category equivalent to the modern Australian English concept of a "bird".

The close ecological relationship between the species of spoonbill and ibises as perceived by Ngarrindjeri people would also have been strengthened the fact that all of the above-mentioned species were hunted by spear and club at the beginning of summer along the swamps, and then cooked in the same manner in the ashes.



Source: Clarke, P.A. (2019) The Ngarrindjeri nomenclature of birds in the Lower Murray River region, South Australia, *Transactions of the Royal Society of South Australia*, 143:1, 118-146. [p120]

Clarke, P.A. (2018) Aboriginal foraging practices and crafts involving birds in the post-European period of the Lower Murray, South Australia, *Transactions of the Royal Society of South Australia*, 142:1, 1-26.

Indigenous peoples had a deep understanding of the environment, through what scholars would later describe as traditional ecological knowledge, or more recently as Indigenous biocultural knowledge.

For early Aboriginal inhabitants, the Lower Murray delta and eastern Fleurieu Peninsula was a rich foraging area which supported a diverse avifauna dominated by waterfowl species. The Aboriginal inhabitants formerly possessed common subsistence technologies and a shared ceremonial life. They had ceremonial and close trade relations with neighbouring Aboriginal clans to the north and east.

During the late nineteenth century, Aboriginal people became involved in a hybrid economy, with wild food sources still heavily relied upon by themselves and Europeans alike. The pre-European style methods of hunting birds recorded in the Lower Murray chiefly involved the use of nets, clubs and spears.

A technique recorded earlier for hunting ducks involved a bunch of common reed (*Phragmites australis*) flower heads and throwing clubs.

The practice of collecting swan eggs, known in Aboriginal English as "swan-egging", was a major activity for Aboriginal people in the Lower Lakes and Murray River districts throughout the twentieth century. During my fieldwork, Ngarrindjeri informants recalled collecting *kungari ngatjeri* (swan eggs) during August and September in the reeds and rushes growing at Nine Mile Reach near Wellington on the River, and in the lagoons around Lake Alexandrina, and along the Narrung Passage.

The IBK for each game species was crucial. For instance, Aboriginal informants described to me how they would carefully observe swan behaviour from late winter. Although the swan-breeding season is broad and variable, Aboriginal people claimed that in the Lower Murray it occurred when the water levels in the lagoons were high. Men determined the general area where floating nests made from reeds were being built. To find the exact location, the collectors searched for tracks made by swans as they pushed through the bulrush beds. Collectors generally obtained the eggs by wading out into the lagoons, although occasionally small boats were used. Putting eggs in a bucket of water tested their freshness: only the ones that sank were considered good for eating. Although fresh eggs were eaten, a few older Ngarrindjeri people, such as Laura Kartinyeri and Dick Koolmatie, preferred to cook and eat eggs that had "turned", meaning that they contained embryo chicks about the size of a thumbnail.

Aboriginal people travelled long distances to obtain swan eggs. For example, Ngarrindjeri man Hector Rigney and his grandmother Marjorie Sumner used to row up Currency Creek in the southern Fleurieu Peninsula to collect swan eggs.

Across the Lower Murray on the eastern Fleurieu Peninsula, other species whose eggs were eaten included the Australian coot (*Fulica atra*), purple water hen (*Porphyrio porphyrio*), grey teal (*Anas gracilis*) and black duck (*Anas superciliosa*).

Aboriginal people in the Lower Murray during the 1980s considered that the knowledge of how to make "old time" artefacts, and of where in the landscape to obtain the necessary raw materials, helped to reinforce their Ngarrindjeri identity.

IBK = indigenous biocultural knowledge

Clarke, P.A. (2017) Early indigenous practices of bird foraging in the Lower Murray, South Australia, *Transactions of the Royal Society of South Australia*, 141:1, 26-47.

Such was the perceived value of eggs that certain Lower Murray birds like the Pacific black ducks (*Anas superciliosa* Gmelin, 1789) were not hunted during nesting time.

Clarke, P. A. (2016a). Early Indigenous practices of bird foraging in the Lower Murray, South Australia. *Transactions of the Royal Society of South Australia*, 141(1), 26–47.

Clarke, P.A. (2016b) Birds and the Spirit World of the Lower Murray, South Australia. *Journal of Ethnobiology*, 36(4):746-764.

Beliefs in bird spirits are still widely held by the Indigenous people in the Lower Murray of temperate South Australia despite an overall decline in the perceived significance of creation ancestors since British colonisation in the early nineteenth century. This paper investigates these cultural beliefs in avian spirits. Birds are seen as possessing transformative powers and being mediators between human society and the invisible world. Contemporary Aboriginal people utilise their bird spirit folklore to connect with their past and to highlight their cultural distinctiveness, from both other Indigenous groups and the modern settler society. They draw upon this ornithological body of knowledge that is framed outside of Western science for cultural maintenance, education, and the re-defining of the relationships between knowledge-holders and the broader society.

For the Ngarrindjeri, it is not always clear when a bird is a spirit being or just another wild animal. Birds observed acting strangely or that appear at critical times in certain places are often treated as spirits. Malignant spirits are believed to be capable of taking on several forms, including those of birds.

Ngarrindjeri folklore concerning bird spirits is rich. The avian attributes that reinforce these beliefs are that they are highly mobile, easily observed or heard, and exhibit strong seasonal behaviours, as do people. The distinction between birds as natural species and birds as spirit beings is blurred.

Contemporary Indigenous people believe that spirits are part of a world where they communicate cryptically with humans through their use of supernatural powers.

The Indigenous culture was heavily transformed as Aboriginal people ceased being nomadic foragers and became subjects of a colonial welfare administration.

Cultural geographical study in the 1990s demonstrated that despite much cultural change since European settlement began, there are strong elements of continuity that modern Aboriginal culture in the Lower Murray and eastern Fleurieu Peninsula has with the past. There is still a distinct Lower Murray Aboriginal relationship with the land.

It is Lower Murray tradition that, in the past, a spiritually powerful man could transform himself into his *ngartji* and “he will sometimes remark that he has been about in the *ngatji* [*ngartji*] form”.

Beliefs in the *ngartji* encourage people to look after the environment and to show an awareness of what threatens it. As Ngarrindjeri people, it is seen as a cultural obligation to protect the *ngartji* spirits that are part of their culture.

Spirits in human form are sometimes said to interact with birds. During fieldwork many oral accounts were heard of the “little men” or *kinji* (kindja). These anthropomorphic spirits apparently lived in family groups with their camps on hills and high cliffs. The “little men” appeared in several colours, most commonly red or grey, although never black or white. They were said to be hunters with a particular desire for duck meat. This brought them into occasional contact with Aboriginal hunters in the wetlands. It was community wisdom that hunters should always leave one or two dead ducks behind as a gift for these spirit men. There are also more recent accounts of spirit men encounters when Ngarrindjeri people were foraging for Black swan (*Cygnus atratus*) eggs. In 1984, Paul Kropinyeri (personal communication) claimed to me to have recently seen two grey *kinji* men standing in water among reeds at Wallawa Swamp, on the edge of Lake Albert, when he was “swan egging”.

Internationally, it has been recognized that there is an imperative for traditional ecological knowledge to be incorporated into the contemporary understanding and management of natural and cultural landscapes (Lertzman 2009; Nabhan 2009). An ethnobiologist has remarked that: *We live in a world where biological and cultural diversity are being lost at dizzying rates. As ethnobiologists we know that losses of diversity in both of these realms are inextricably intertwined.* (Lepofsky 2009:161)

Clarke, P. A. (2015a) The Aboriginal ethnobotany of the South East of South Australia region. Part 1: seasonal life and material culture. *Transactions of the Royal Society of South Australia* 139 (2): 216-246.

Clarke, P. A. (2015b) The Aboriginal ethnobotany of the South East of South Australia region. Part 2: foods, medicines and narcotics. *Transactions of the Royal Society of South Australia* 139 (2): 247-272.

<http://www.murraybridgegallery.com.au/events-2/2018/8/20/ngarrindjeri-weaving-workshop>

<https://collections.museumsvictoria.com.au/items/171571>

This 2018 workshop is suitable for beginners to advanced participants and is a wonderful opportunity to learn the art of weaving from such an experienced and skilled weaver. Learn about the reeds "*Cyperus gymnauculos*" and "*Cyperus vaginatus*" and where to find them or how to grow them in your own backyard for future weaving projects.

Weaving is a very relaxing process and made more enjoyable as Aunty Ellen shares her experiences and Ngarrindjeri Storytelling with you.

<http://www.murraybridgegallery.com.au/events-2/2018/8/20/ngarrindjeri-weaving-workshop>

Master Weaver, Aunty Ellen Trevorrow



Clarke, P. A. (2015c) The Aboriginal ethnobotany of the South East of South Australia region. Part 3: mythology and language. *Transactions of the Royal Society of South Australia* 139 (2): 273-305.

Clarke, P. A. (2013) The Aboriginal ethnobotany of the Adelaide region, South Australia. *Transactions of the Royal Society of South Australia* 137(1): 97-126.

Acacia gum: One of the principal foods for Adelaide people during the hot season was wattle gum, minno (Teichelmann & Schürmann 1840: 2: 23). wilkinson (1848: 210) stated they roasted wattle gum in the fire before eating it. Tindale (1974: 60) considered golden wattle (*Acacia pycnantha* Benth.) to be one of the main sources of edible gum, which exudes from the lower trunk during the warmer months, often caused by insect borer attack. Wattle gum was probably the 'gum' that Teichelmann and Schürmann (1840: 2: 52) stated was traded by the Adelaide people. Bailey provided insights into the preparation of wattle gum as a food additive, recording that: *larger lumps of gum, formed on the stem of the golden wattle ... were used for food, like we use bread with meat. Especially when they cooked fish, they would give the lumps of gum a little roasting in the embers.* This roasting rendered it soft, and prevented it sticking. Particularly i noticed them doing this on the Onkaparinga river, in about 1844 (Bailey 1914). at Adelaide in 1839, Thomas claimed that aboriginal women often carried in their net bags 'pieces of gum, which is here found in great plenty (1836-66 [1925: 76]; see also wilkinson 1848: 352)'.

Seeds: Aboriginal use of seeds for food in the Adelaide region is poorly recorded, although is suggested by records from neighbouring temperate areas. wattle seeds, while still green, were probably the main source of seed in the diet of Aboriginal people in the southern region of Australia (Tindale 1981: 1879). Wattle pods found amongst plant debris excavated from Kongarati cave near Yankalilla, south of Adelaide (Tindale & Mountford 1936: 492 & 493) are possibly food remains. In contrast to desert dwellers in the north of South Australia, it is likely that temperate hunter-gatherers, such as the Adelaide people, were not major users of grass seed as food (Clarke 2005b; Tindale 1977).

Materials: In gaining a living, Aboriginal people made tools from a wide variety of materials, many of them incorporating parts of plants that were either gathered by the makers or obtained through trade. Some historical evidence of the range of material culture is gained from drawings and descriptions by Cawthorne (1844 [1926]) and Snell (1849-59 [1988]), and from the Angas (1847b) watercolour paintings. According to Cawthorne (1844 [1926: 5] the cootpe (kootpee) was a *reed* spear thrown with the aid of a spearthrower, midlah, and 'consists of two distinct, though connected, parts. The one is of reed, which forms the lighter end, and the other of *wood* (tea tree [*Leptospermum* species]), forming the point'. The identity of the 'reed' as the common reed (*Phragmites australis* (cav.) Trin. ex Steud.) was confirmed by examination of Adelaide spears held in the South Australian Museum. In the Adelaide region, cawthorne (1844 [1926: 16]) described netting, taara and wilkatja, as 'both made of *fibres* of rushes twisted into string'. angas (1847b: pl. XXX) listed wilkatja as a net, made from bulrush root twine, carried over the shoulders and used to carry food. According to Worsnop (1897: 90), at rapid Bay, south of Adelaide, aboriginal fishing nets between 6 and 9 metres long were made from 'chewed fibres of reeds [bulrush] rolled on the thigh and twisted into cord. Twine made from the fibres of *bark*, and with a bone of the kangaroo for a needle'. Based on records from other regions (see Table 2), it is possible that *bark strips* from a local species of *Acacia* were used for this purpose. An Australia-wide survey of Aboriginal artefacts suggested that the Adelaide region was towards the western end of the southern distribution of basketry, represented solely by the coiled technique (Davidson 1933: 276-286). Worsnop (1897: 86) claimed that in 'South Australia and Victoria bags or baskets were made of the leaves of the common reed [sedge?], also of the bark of the *Eucalyptus obliqua* [stringybark gum]'. Wilkinson recorded that Aboriginal baskets and mat cloaks were made from 'a peculiar species of grass', although his description covers both Adelaide and Encounter Bay people (1848: 323). Examples of southern South Australian mats in the South Australian Museum include those which have *stringybark* coils stitched together with *sedge stems*.

In Adelaide's adjacent Lower Murray region and further afield in the South East of South Australia, basketry was manufactured mainly from widely occurring sedge species, such as spiny-headed sedge (*Cyperus gymnauculos* Steud.), hoary rapier sedge (*Lepidosperma canescens* Boeckeler) and sticky sword sedge (*Lepidosperma viscidum* r.Br.). Angas (1847b: pl. XXVII) explained that tainkyidli was a 'Basket formed of green rushes platted by women; the rushes are gathered in bundles, and used whilst green and pliable; these baskets are manufactured principally by the tribes about Encounter Bay and cape Jervis'. in the vocabulary produced by Wyatt (1879: 176, 178), the terms recorded for '*woven grass*' baskets and mats are all for the Encounter Bay side, where people were more closely affiliated with Lower Murray Aboriginal cultures (Clarke 1994: chapter 2).

Clarke, P. A. (2012) Australian plants as Aboriginal tools. Rosenberg Publishing, Sydney.

<https://trove.nla.gov.au/work/164317351?q=Australian%20plants%20as%20Aboriginal%20tools&c=book> Accessed October 26, 2020.

Clarke, P. A. (2009) Australian Aboriginal Ethno-meteorology and Seasonal Calendars. *History and Anthropology* 20 (2): 79–106.

From many parts of Australia, particularly the temperate region where European colonization was earliest and most intense, the available data on hunter-gatherer perception and use of the environment is mainly historical. Settlers and colonial officials in the nineteenth and early twentieth century collected anecdotal data from Aboriginal groups under the pressure of European settlement.

The seasonal calendars for much of temperate Australia are either imperfectly known or not recorded at all, due to the early cessation of hunter-gatherer life styles in the face of intense European colonization in this zone. In spite of this, enough early foraging strategies are mentioned in the historical records to show a behavioural pattern, even when the indigenous terminology for seasons is unknown.

For ecological knowledge to ultimately survive in any cultural environment, it must be proven to be useful in a range of contexts. One way of achieving this is through the documenting of seasonal calendars in educational institutions as a means for providing an appreciation of the breadth of relationships that indigenous people have with their country.

Clarke, P. A. (2008) Aboriginal healing practices and Australian bush medicine. *Journal of the Anthropological Society of South Australia* 33 (1), 3-38.
<http://www.friendsofjenthorne.org.au/wp-content/uploads/Clarke-Vol-33-2008.pdf> Accessed October 26, 2020.

Plants feature prominently in Aboriginal remedies chiefly used to relieve symptoms such as fever, congestion, headache, skin sores, tired or swollen aching limbs and digestive problems. The Aboriginal pharmacopeia is vast and the diversity of herbal remedies served Aboriginal people well. As hunter-gatherers they had to seasonally move through different habitat zones in the landscape, which meant that it was necessary for them to possess knowledge of a broad range of remedies. It was also important for Aboriginal people to know the seasonality of each plant species, some of which may not be as effective or even available at certain times of the year.

Clarke, P.A. (2007a) *Aboriginal People and their Plants*. Dural Delivery Centre: Rosenberg Publishing. 191p

Clarke, P.A. (2007b) Indigenous Spirit and Ghost Folklore of "Settled" Australia. *Folklore* 118 (August 2007): 141–161.
https://www.researchgate.net/publication/249014453_Indigenous_Spirit_and_Ghost_Folklore_of_Settled_Australia/link/55529d4508ae980ca606c035/download Accessed October 26, 2020.

Clarke, P. A. (1987) Aboriginal uses of plants as medicines, narcotics and poisons in Southern South Australia. *Journal of the Anthropological Society of South Australia*, 25(5): 3-22.

Clarke, P. A. (1986) The study of ethnobotany in the south of South Australia. *Australian Aboriginal Studies*.
https://www.researchgate.net/publication/276207065_The_study_of_ethnobotany_in_southern_South_Australia Accessed October 26, 2020.

Cribb, A.B and Cribb, J.W. (1982a) *Useful Wild Plants in Australia*. Fontana, Sydney ISBN 0006363970

Cribb, A.B and Cribb, J.W. (1982b) *Wild Food in Australia*. Fontana, Sydney ISBN 0006363938

DEH (2005) *Wetland Inventory – Fleurieu Peninsula*. Department of Environment and Heritage, Adelaide, Australia.
<https://data.environment.sa.gov.au/Content/Publications/Wetland-Inventory-Fluerieu-Peninsula.pdf> Accessed January 9, 2021.

DEW (SA) (2019) Ngarrindjeri worldview

Kaldowinyeri stories and oral traditions passed down from generation to generation document the changes in ecological character of the region over millennia, and carry with them Ngarrindjeri ecological knowledge of the Ramsar site. Creation ancestors such Ngurunderi and Pondi, and the Muntjingga and Thukabi, teach Ngarrindjeri how to respect and understand the connection between the lands, the waters and the sky. These Kaldowinyeri stories record dramatic changes in historical coastal sea levels in the Ramsar site area. They also explain the richness of the available 'natural resources', including fresh and salt water aquatic life such as fish, shellfish, eels, water birds and water plants. These stories provide Ngarrindjeri with the laws and lessons required for the sustainable use, care and management of these species and lands and waters.

Both men and women hold specific cultural and environmental knowledge, and both genders continue to be involved in passing down Ngarrindjeri knowledge between generations and in the decision-making about Ngarrindjeri affairs, land, waters and resources. This is illustrated by Ngarrindjeri kinship systems and the strong cultural and spiritual connections Ngarrindjeri have to particular places, to particular species of animals and plants, and to various elements of the environment. Particular animal and plant species are the Ngartjis (totems or special friends) of Ngarrindjeri people, who in turn have special responsibility to care for their Ngartji. This relationship is described in the following statement made by Ngarrindjeri Rupelli (traditional leader), George Trevorrow (deceased):

Ngartji to non-Aboriginal people is like a totem which each one of us has and each group belongs to. It could be the pelican. It could be the swan. It could be the mullet. There are different species of... animal, fish, plant, but each group belongs to that Ngartji. A Ngartji is something that is more than a close friend. It's more your best friend. It is something that is more closely to you. (George Trevorrow in Bell, D, 2014 Ngarrindjeri Wurrurarrin: A world that is, was and will be, (2nd Edition) Spinifex, North Melbourne.)

Ngartjis are of great importance, and to care for Ngartji is to care for country. Without their Ngartjis, Ngarrindjeri believe they cannot survive. Ngartjis are also indicators of the health of the lands and waters, a function they can also perform from the western scientific perspective. If Ngartjis are numerous, in good health and breeding readily, it is an indication that the whole of Yarlulwar-Ruwe is functioning well. Consequently, the wetlands of the Ramsar site have a high cultural value for Ngarrindjeri, who refer to freshwater wetlands as 'nurseries', in recognition of the important role these areas play in providing food and shelter for many types of Ngartjis, and in particular safe shelter for their young.

In addition, the Ramsar site contains an archaeological record spanning over 5000 years of continuous Ngarrindjeri occupation. These Old People's living places (e.g. middens, burial grounds and other sacred places) have an international significance as they provide evidence of Ngarrindjeri customs, knowledge and traditions over many thousands of years. The physical characteristics of the land and waters are inextricably linked to the Ngarrindjeri Kaldowinyeri and the many stories associated with it. While not all of these stories are appropriate for public knowledge, others are well known and are included in this chapter, as they provide insight into the relationship between Ngarrindjeri culture and the physical landscape.

Ngurunderi the Creator

A long time ago Ngurunderi, our Spiritual Ancestor, travelled down the River Murray in a bark canoe in search of his two wives who had run away from him. At that time the River was only a small stream below the junction with the Darling River. A giant Murray Cod, Pondi, swam ahead of Ngurunderi. Pondi had nowhere to go, so he went ploughing and crashing through the land. His huge body and tail created the mighty River Murray. Near Murray Bridge, Ngurunderi threw a spear, but it missed and was changed into Lentelin (Long Island). At Tagalung (Taillem Bend) he threw another spear. The giant fish surged ahead and created a long straight stretch in the River. When Ngurunderi and his brother-in-law Nepele caught Pondi, at the place where the fresh and salt water meet they cut him up into many pieces and made the fresh and salt water fish for the Ngarrindjeri people. To the last piece Ngurunderi said, "You keep being a Pondi".

Meanwhile, Ngurunderi's two wives, the sisters of Nepele, had made camp. They were cooking thukeri (bony bream), a fish forbidden to Ngarrindjeri miminar (women). Ngurunderi smelt the fish cooking and knew his wives were close. He abandoned his camp and came after them. His huts became two hills and his bark canoe became the Warriewar (the Milky Way). Hearing Ngurunderi coming, his two wives built a raft of reeds and grass trees to escape across Lake Albert. On the other side, their raft turned back into reeds and grass trees. The women hurried south.

Ngurunderi followed his wives as far south as Kingston. Here he met a powerful man, Purumpari. The two men fought, using weapons and special powers, until Ngurunderi won. He burned Purumpari's body in a huge fire. It became granite boulders on the beach. Ngurunderi turned north along the Coorong Beach. Here he camped several times, digging soaks in the sand for fresh water and fishing in the Coorong Lagoon. Ngurunderi made his way across the Murray Mouth and along Encounter Bay towards Victor Harbour. He made a fishing ground near Middleton by throwing a huge tree into the sea to make a seaweed bed. Here he hunted a seal and its dying gasps can still be heard among the rocks. At Port Elliot he camped and fished again, without seeing a sign of his wives. He became angry and threw his spears into the sea at Victor Harbor, creating the islands there. Finally, after resting under a giant granite shade-shelter on Kaika (Granite Island), Ngurunderi heard his wives laughing and playing in the water near King's Beach. He hurled his club to the ground, creating Longkuwar, (the Bluff) and strode after them.

His wives fled along the beach in terror until they reached Cape Jervis. At this time Karta (Kangaroo Island) was still connected to the mainland, and the two wives began to hurry across it. Ngurunderi had arrived at Cape Jervis, and seeing his wives still fleeing from him, he called out in the voice of thunder for the waters to rise. The women were swept from their path by huge waters and soon drowned. They became the Pages islands. (Bell, 2008:26)

Like other Creation stories, Ngurunderi's journey ended at Karta from where he dived into the sea to cleanse his spirit and then ascended into the sky and became the bright star in Warriewar.

Ngurunderi's story also refers to the role of ancestral women (in this case Ngurunderi's two wives) in creating the Sea Country we know today. As Ngurunderi the creation ancestor travelled throughout Ngarrindjeri country, he created landforms, waterways and life. He gave to his people the stories, meanings and laws associated with the lands and waters of his creation. He gave each Lakalinyeri (clan) its identity to Ngarrindjeri Ruwe (country) and Ngartjis. Ngurunderi also taught Ngarrindjeri how to hunt and gather foods from the lands and waters.

Ngarrindjeri respect the gifts of Creation that Ngurunderi passed down to their spiritual ancestors, to their Elders and to the present generations. Consequently Ngarrindjeri must follow the traditional laws; they must respect and honour the lands, waters and all living things. Ngurunderi taught Ngarrindjeri about their Miwi, which is their inner spiritual connection to the lands, waters, each other and all living things, and which is passed down through their mothers since Creation.

Ngurunderi and Thukeri

Thukeri (Bony Bream) are important in Ngarrindjeri law, and the creation story associated with how the Bony Bream was created emphasises the importance of not being greedy, of always sharing, and the importance of not taking too much of any one resource. It is a Ngarrindjeri story of wise-use.

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 Yarlwar-Ruwe Plan 2007:8)

<https://data.environment.sa.gov.au/Water/Data-Systems/CLLMM/SitePages/Home.aspx?InfoComFrom=176>

Ens, E. *et al.* (2015) Indigenous biocultural knowledge in ecosystem science and management: Review and insight from Australia. *Biological Conservation* 181:133–149

The recognition of traditional ecological knowledge (or Indigenous biocultural knowledge) is increasingly being used to encourage cross-cultural awareness and overcome communication challenges between Indigenous people and biologists, as well as environmental managers and policy makers.

Gale, M. (2009). *Ngarrindjeri dictionary*. Raukkan, South Australia: Raukkan Community Council; Canberra: Department of Environment, Water, Heritage and the Arts, Australian Government.

The Ngarrindjeri Dictionary was produced by Gale (2009) from a broad range of sources and with extensive Aboriginal community input and direction, and this work has provided the standard orthography for words that is used in the present paper

GW LAP (2015) *Fleurieu Swamps Plant Identification Guide*. Goolwa to Wellington Local Action Planning Association. <http://www.gwlap.org.au/new-fleurieu-swamps-plant-id-guide/> Accessed July 30, 2020.

GW LAP (2016) Caring for our Fleurieu Swamps Fact Sheet Series. Goolwa to Wellington Local Action Planning Association. http://www.gwlap.org.au/wp-content/uploads/2016/04/1_The-Value-of-Fleurieu-Swamps.pdf and 3 others. Accessed July 30, 2020.

Hemming, S. (1985a) The Mulgawongk, a water monster or "Bunyip" of the Lower River Murray region of South Australia. *Journal of the Anthropological Society of South Australia*, 23(1): 2-7.

Hemming, S. (1985b) Aborigines at Port Willunga – Reminiscences of Thomas Martin. *Journal of the Anthropological Society of South Australia*, 23(9): 24-28.

Mr Martin describes the making of string from the rushes that grew in Willunga Creek. He said Aborigines first split the rushes and extracted the pithy centre. They would plait this material into string and ropes for "fishing lines and other things". They also separated the pith into smaller sections and plaited these together to make long ropes, which were used to tie up their belongings when moving from place to place. String was also made from sharp-leaved rush (likely *Gahnia trifida* and *G. siberiana*). In addition, Mr Martin described the use of smooth pebbles (he called them "bottlees") often washed down the creek after a flood, which were split to make a sharp edge for use in a wide range of purposes.

Hills and Fleurieu Landscape Board (2020) *Landscape Board Business Plan 2020/21*. <https://landscape.sa.gov.au/hf/about-us/our-regions-plan>. Accessed July 30, 2020.

Jones, D. S. and Clarke, P.A. (2018) *Aboriginal culture and food-landscape relationships in Australia: Indigenous knowledge for Country and landscape*. In: Zeunert, J. and Waterman, T. (2018) *Routledge Handbook of Landscape and Food*, Routledge, Abingdon, UK [pp41-60].

Lepofsky, D. (2009) The Past, Present, and Future of Traditional Resource and Environmental Management. *Journal of Ethnobiology* 29:161–162.

Lertzman, K. (2009) The Paradigm of Management, Management Systems, and Resource Stewardship. *Journal of Ethnobiology* 29:339–358.

Lister, P.R., P. Holford, T. Haigh, and D.A. Morrison (1996) Acacia in Australia: Ethnobotany and potential food crop. p. 228-236. In: J. Janick (ed.), *Progress in new crops*. ASHS Press, Alexandria, VA, USA. <https://hort.purdue.edu/newcrop/proceedings1996/V3-228.html> Accessed October 26, 2020.

Malone, G. (2012) *Phases of Aboriginal Inclusion in the Public Space in Adelaide, South Australia, since Colonisation*. Chapter 10 concerning the Ancestor Being Tjilbruke pp. 209–237. PhD Thesis, Flinders University, Adelaide, Australia. <https://theses.flinders.edu.au/view/ae876628-4508-4c12-a442-ad22e8e56fdb/1> Accessed, January 9, 2021.

MCA (2018a) *A brief history of the Mt Compass district*. Mount Compass Archives, Mount Compass, Australia. <http://mtcompassarchives.org/brief-history.html> Accessed January 10, 2021.

The area around Mount Compass, Yundi, Nangkita and Tooperang was originally a meeting place for three Aboriginal nations: the Warki (Ngarrindjeri), Peramangk and Kaurna peoples viewed this area as common ground and would trade or interact in this place where plentiful fresh water and food were available all year round. By 1920 it was reported that four Aborigines were seen in the area of Blackfellows Creek, reportedly making "a last visit to their country". The Mount Compass district was originally viewed as being very poor land agriculturally and this delayed its development as a community. It also meant there were few early settlers and retainers to observe remnant Aboriginal life. It was almost 50 years after European settlement that market gardening and dairy farming started to operate well in the District, and these enterprises did not flourish until the advent of artificial fertilisers and better understanding of how to manage swamp soils. Nangkita Village Settlement was established in 1894 with Government support. By 1909 more than 50 houses were reported in the District, still sparse compared with neighbouring Goolwa, Victor Harbour and Willunga.

MCA (2018b) *History time line for the Mt Compass district*. Mount Compass Archives, Mount Compass, Australia. <http://mtcompassarchives.org/timeline.html> Accessed January 10, 2021.

MCA (2018c) Chapter 2: *The People*. Mount Compass Archives, Mount Compass, Australia.

Pate, F. D. (2017) Diet, Mobility and Subsistence-Settlement Systems in the Late Holocene Lower Murray River Basin of South Australia: Testing Models of Aboriginal Seasonal Mobility and Sedentism with Isotopic and Archaeological Data. *Journal of the Anthropological Society of South Australia*, 41(6): 123-171.

The Lower Murray region was one of the most densely populated geographic areas of Australia prior to European colonisation. Aboriginal descent group territories in this resource rich riverine-coastal zone, being relatively small, reflected a more sedentary life style (Clarke, 1994). However, within these territories seasonal movements of habitation sites occurred in relation to harsh coastal weather and limited food sources associated with the winter months. Some non-coastal groups also practiced seasonal movements from lakes and rivers to nearby sheltered inland areas during winter (Clarke 1994; Tindale 1981).

Ethnographic and historical accounts identify a range of key plant and animal foods that were used in the resource rich Lower Murray region at the time of European contact. The river bank and floodplain supported stands of river red gums (*Eucalyptus camaldulensis*). Bulrushes (*Typha* spp.), rushes and sedges (*Juncus*, *Bolboschoenus* [formerly *Scirpus*], *Cyperus* spp.), and reeds (*Phragmites* *communis*) were associated with adjacent swampy areas. This aquatic environment would have provided various edible roots, waterfowl, fish, turtles, frogs, molluscs, and crustaceans.

Tindale, N.B. (1974) *Aboriginal Tribes of Australia*. Australian National University Press, Canberra, Australia. <https://openresearch-repository.anu.edu.au/handle/1885/114913> Accessed February 23, 2021. [p61]

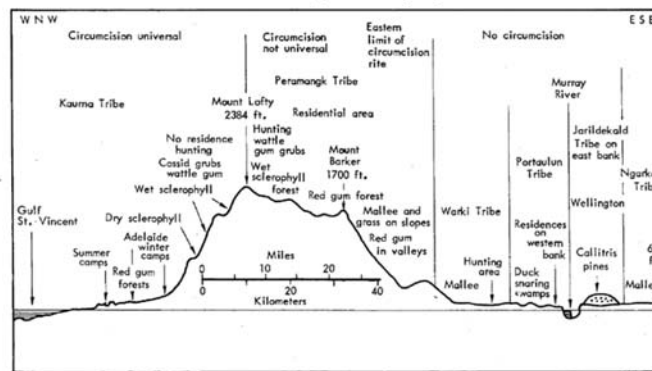


Fig. 20. Cross section from Gulf St. Vincent to the Murray River to show tribal boundaries.

Tindale, N.B. (1940) Map showing distribution of the Aboriginal tribes in Australia. *Transactions of the Royal Society of South Australia*, Volume 64. RSSA, Adelaide, Australia. https://www.sl.nsw.gov.au/sites/default/files/4790_indigenous_services_-_a3_collection_item_updated6final.pdf Accessed January 9, 2021.

<http://www.murrayriver.com.au/about-the-murray/bunyips/>

Long before Europeans walked the country, bunyips were believed to have inhabited swamps, lagoons and billabongs. Descriptions were varied yet had a common theme in that they described animals that 'had shining, baleful eyes and a bellowing voice'.



<https://fleurieufamilyhistory.org/history-of-the-fleurieu/indigenous-heritage/>

http://www.anthropologysocietysa.com/home/?page_id=61

RESEARCH NOTES – ABORIGINAL COILED BASKETRY IN SOUTH AUSTRALIA – by Steve Hemming

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-26_7-Sweetman.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-25_7-Interviews.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-25_5-Clarke.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-25_4-Hemming.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-24_5-Campbell.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-24_3-Clarke.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2013/08/JASSA-Volume23_9-Clarke.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2013/08/JASSA-Volume23_9-Hemming.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-23_6-Clarke.pdf

http://www.anthropologysocietysa.com/home/wp-content/uploads/2014/01/JASSA-Volume-23_1-Hemming_2.pdf

John Fargher 30 April 2021