THE PANDANUS:

HISTORIC OCCURRENCE

AND ABORIGINAL USES:

MORETON TO WIDE BAY DISTRICTS

Unity Water Pandanus dieback mitigation project: Coolum & North Shore Coast Care

> Dr Ray Kerkhove July 2017









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"In passion, respect and appreciation, to all those dedicated people working to restore and protect our cultural and natural heritage"

Many thanks as well to our other supporters:

Bunya Bunya Country Aboriginal Corporation Kabi Kabi Traditional Owners Queensland State Archives Royal Historical Society of Queensland (Welsby Library) State Library of Queensland Sunshine Coast Council Sunshine Coast Libraries (Heritage collection)

(Cover photograph – Caloundra 1899, Butler Collection John Oxley Library 11241 O/S)

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PREFACE

A deadly coastal icon of our headlands and dunes - the Pandanus - is the focus of a project to celebrate its cultural significance and to support its conservation in the Sunshine Coast region. Traditional lands, camp sites, pathways and cultural heritage of the Kabi Kabi First Nation people include much coastline, surf beaches, and rocky headlands. This environment is favoured by the pandanus plant (*Pandanus tectorius*), so it was very familiar to my people. Many of our Dreaming stories about the gatherings of the clans concern the sea, rivers, mountains, and plants and animals that live in or near them. I recall how Kabi Kabi families always reminded us of the importance of the pandanus tree or the 'breadfruit'. We used to sit under pandanus groves when we were fishing or gathering pipis and other food on the beaches. Our grannies used to tell us about weaving pandanus – into baskets, mats and other things - especially in the Mission days. It was always a valuable and very useful plant to us. We sought to look after it. In caring for both our natural heritage and cultural heritage, to this day, we look after the pandanus plant, which belongs to the coastal littoral rainforest.

- Kerry Jones, Kabi Kabi Traditional Owner

As an environmental consultant leading the current scientific research into pandanus, I am impressed by Ray's research, commitment and the ultimate findings. I concur with the global trend, that *Pandanus tectorius* were deeply revered by coastal indigenous people. Further to Ray's research, I discovered the pandanus provided year-round shelter from sun, wind, rain. It also offered a ready source of food, medicines, and fibre for a broad range of uses (eg nets and dilli bags). Along with the strong indigenous ties, pandanus play an environmental service second to none. Roots spread remarkably far from mature plants, regularly over 20-30 meters, providing critically important dune stabilisation. They protect less tolerant coastal flora species from the harsh wind and salt spray. Also they importantly provide food and incomparable habitat to an immense number of fauna.

In recent decades, our love and landscape use of this iconic coastal plant has resulted in the accidental dispersal of a pest insect, the Pandanus leaf hopper (Jamella australiae). Originally native to northern Australia it is currently actively spreading throughout Pandanus populations ranging from Townsville to Port Macquarie. This results in high pandanus mortality rates (over 50% in many localised areas across South East Queensland). With informed and applied knowledge, pandanus dieback can be greatly mitigated. Just as in the case of pandanus dieback, by far the largest immediate threats facing our National Parks and preservation areas are from pests and diseases, almost always unintentionally introduced through human urbanized activities and global movements. Ecosystems are sensitive and extremely vulnerable to irreversible species loss and functional collapse. Do we not have the responsibility as aware beings to protect the life we share this planet with, even from the harm we unintentionally cause? Should we not do our best to preserve the wildlife that we so playfully enjoy? We want our very own children to enjoy. Whether we ask for it or not, we are all custodians of all life. The fate of all organisms on this planet is completely reliant on our mercy, compassion and love. By coming to understand the lifecycle intimacies, interconnectedness and environmental parameters of our amazing flora and fauna, we can effectively protect and preserve them. I feel extremely proud and privileged to stand alongside the many others, passionately working to restore lost indigenous cultureso deeply linked to ecosystem composition. I feel deeply honoured to contribute to the knowledge sharing and the implementation of works that will assist in the preservation of our precious ecosystems and all the life they support.

- Joel Fostin- Environmental Consultant - Pandanus Dieback Project

SCOPE AND SOURCES

This document collates early written and visual references to pandanus in SE Queensland, and the author's summations/ conclusions. The aim is to arrive at a better approximation of local Aboriginal use of the plant, both traditionally and into post-contact times. As well, we hope to arrive at some evidence of the species' original distribution in this region.

The focus for this work is the Sunshine Coast and Fraser Coast areas of Queensland. Some references extend to Brisbane and Moreton Bay, as the Kabi Kabi claim extends into northern Moreton Bay. Moreover, distribution and use in adjacent areas helps us understand the plant's distribution and use in the study area. Indeed, to reconstruct Aboriginal uses, the author had sometimes to draw from examples in other parts of Queensland, as recorded uses within the Sunshine Coast/ Wide Bay area are scarce.

A variety of pandanus species are found along the Queensland coastline, with Pandanus tectorius being endemic to the South East and Pandanus spiralis endemic to the North. We must assume that in all likelihood, pandanus was used similarly across different parts of Aboriginal Australia, especially if the regions are near the Fraser/ Sunshine Coasts.

Material for this booklet was obtained largely through online research into early newspaper accounts (via TROVE nla). As far as possible, references contemporary with Aboriginal presence were sought (thus, 1840s-1900s). In other cases we rely on reminiscences or ethnographic studies of the 1910s-1940s. This material was supplemented with early explorers' and settlers' accounts, and evidence from early maps and photographs. The latter items were accessed through the State Library of Queensland (eg John Oxley collection), the Welsby library (Royal Historical Society of Queensland), Sun Picture (Sunshine Coast Libraries Heritage Collection), and Queensland State Archives.

- Ray Kerkhove, PhD Fellow, Griffith University

INDIGENOUS TERM(S)

Pandanus was often called 'breadfruit' by early Europeans and English-speaking Aborigines as it resembled and was related to this plant. The consensus of early accounts is that 'win-nam' was the usual name for the pandanus all over South East Queensland. Other words were used for specific parts of it, or when it is rendered into other forms, but few of these words were recorded. In Borroola (Gulf of Carpentaria) the following words referred to specific parts and uses of Pandanus spiralis. Thus we can infer that a similarly large range of words once saw use on the Sunshine Coast/ Fraser Coast:

1) pandanus leaves being stripped -	yalkanymantharra
2) pandanus nut generic -	ma-kurdirdi, ma-kyyarra, ma-wilirrinja,
3) pandanus nut interior -	wirriyalngu
4) pandanus nut interior - red to orange in colour -	kalbakalba
5) pandanus nut kernel -	nu-kurnbal
6) pandanus nut which is fully ripe -	ma-kuwarri
7) pandanus nut which is fully ripe -	ma-kuwarri
8) pandanus nut with many kernels inside -	ma-wurndangu
9) pandanus nut with plentiful kernels inside -	ma-wuyinkuyin
10) pandanus nuts being cut open -	barlibantharra
11) pandanus nuts which have fallen to the ground -	ma-kurnbal
12) pandanus palm -	ma-wirdiwirdi
13) pandanus palm nuts left on the ground	
from previous year -	ma-kambalngu
14) Pandanus Palm (Pandanus spiralis) -	ma-wukarra
15) pandanus palms growing out together	
from one base -	ma -wurndangu
16) pandanus: drink made from juice of	
pandanus nut -	kambuda
17) Pandanus: River Pandanus Palm	
(Pandanus aquaticus) -	ma-wirdiwirdi
18) pandanus: stalk of pandanus nut cluster -	dularia
19) pandanus: woven pandanus bag/basket -	a-birndawarra; a-marrbi; a-minini

John Bradley, Jean Kirton & Yanyuwa Community/ Borroloola, Yanyuwa wuka, language from Yanyuwa : a Yanyuwa dictionary and cultural resource (Northern Territory : J. Bradley, 1992), p. 482.

"The Pandanus, or bread fruit ("wynnum")"

- C C Petrie, 'Tom Petrie's Reminiscences,' *The Queenslander* 6 September 1902 p.514

"Wynnum – pandanus"

- RHSQ, Thomas Welsby, 1916, *Recollections*, p. 45

"Tiungal or *win-nam"* – Pandanus. A Yugurrapul (Logan/ Beaudesert) word but probably derived from the Kabi language"

 F J Watson, Vocabularies of Four Representative Tribes of South-Eastern Queensland Supplement to Journal of Royal Geographical Society of Australasia No.34 Vol. XLVIII Brisbane 69, 72

"Pandanus pedunculatus, R. Br.; screwpine. Native name Kaor"

- Indigenous Edible Productions, No.3, The Queenslander 10 February 1877 p.24

"mai - breadfruit or chestnut"

- L. Leichhardt Diaries 1843: 245. This may relate to when pandanus pith is rendered into a bread-like form, as "mai" was the word for any dough-like flour or paste. Aboriginals of SE Queensland used "mai" to describe damper and European bread.

"Jumpinpin – the root sucker of the pandanus tree"

- W E Hanlon, *The Early Settlement of the Logan and Albert Districts*, Read before the Historical Society of Queensland 27 March 1934, p.238.

"I may be wrong, but I do not really think the native name (Jumpin-pin) in any way relates to the Wyn- num tree (pandanus or screw pine)" (*Jumpin-pin on the bottom end of Stradbroke Island according to some settlers meant 'pandanus'*)

- Thomas Welsby, 'Place Names and the Aborigines,' *The Courier Mail*, 19 May 1936 p.12

"The name "*Gheerulla*" appears to be of Wakka origin, and may be a legacy from that tribe's breadfruit excursions to the Coast."

 Heap, E.G. (1980), In the wake of the raftsmen: a survey of early settlement in the Maroochy District up to the passing of "the Crown Lands Alienation Act, 1868" [Part 111], John Oxley journal: a bulletin for historical research in Queensland, 1 5: 8, p.24. Note: Gheerulla is near Kenilworth, thus this could relate to excursions from that point to the coast. "Wynnum – the pandanus or 'breadfruit' tree"

- W E Hanlon, *The Early Settlement of the Logan and Albert Districts*, Read before the Historical Society of Queensland 27 March 1934, 239.

CEREMONIAL/ DREAMING SIGNIFIANCE

The ceremonial significance of pandanus in the Sunshine Coast/ Fraser Coast area is not recorded. It was presumably akin to that of other parts of Queensland. It seems the leaves and seeds saw some use during ritual initiations. Tales of people who taunt or ridicule being transformed into trees occur on the Maroochy River, thus possibly the northern Queensland story mentioned below had some form in the Kabi Kabi area also.

(Bandaging during ritual scarification:) "severe cuts are made and the skin is pulled away from these cuts and mud rubbed in very thickly. The skin is then pulled back over the mud and wound, held In position by a bandage ofpandanus palm (screw palm) fibre. After a few days the bandage is taken off, and it can then be seen that the mud in the flesh has left a distinct roll, which protrudes sometimes as much as a quarter of an inch. Some warriors, and gins as well, have scars right around the body; sometimes natives have as many as 200 "tattoo" marks on their bodies. To have these marks is a sign of a great warrior or hunter. "

- Battlefields of Australia – Part 2: Northern Aborigines, *The Beaudesert Times*, 3 January 1936, p.7.

"(Daintree River:) On going nearer, there was seen under their shade a group of ten children, whose ages varied from four to ten years. They were seated in two rows, in a circle about six feet in diameter, facing inwards. **Their eyes were closed; their faces nearly touched the ground; and in their hands they held a quantity of the pips or seeds of a new and fine species of edible pandanus**. A man with another child upon his shoulder was close by, and a short distance off a gin stood as if on guard over the children. She stood motionless, her face sternly directed towards us, and poising aloft a spear, as if threatening to throw it if we interfered with her charge. An attempt was made to enter into conversation with the man, but he and the police could not understand one another's language; he gave the latter some shells and a wimmera. During the interview the woman remained silent and watchful, her spear being kept all the while pointed towards us."

- Local and General News, *Queensland Times*, 8 August 1874 p.3.

"Throughout the poem are incidental legends such as that of the origin of Pandanus palms. The folk who tortured Mentmee, the dog, and lo, he spoke and they were transformed to Pandanus palms to stand there mute and dream of bygone days and watch their shadows in the rippling stream."

- Culture of the Aborigines, Daily Mercury (Mackay), 14 Nov 1942, p.3.

INDIGENOUS FUNCTIONAL USES

In earlier times, grass trees and pandanus were referred to as "blackfellows' trees," apparently because they were so important and useful amongst Aboriginal groups. Heap's reference to Aboriginal excursions from Kenilworth to the coast specifically for pandanus (mentioned in the last section) likewise suggests the plant was highly valued for its diverse 'by-products.'

"blackfellows' trees"

- Pandanus and Other Natives, *The Brisbane Courier*, 5 September 1925 p. 6.

1. FOOD (FRUIT, NUTS AND STEM)

The majority of references indicate pandanus fruit – when very ripe - was chewed or sucked, otherwise soaked (if too astringent or unripe) and then chewed, with the liquid and fibres being similarly sucked – sometimes with honey. The nuts were extracted and either pounded into meal or roasted. The stem was eaten or presumably sucked as a source of water.

"The Pandanus, or bread fruit ("wynnum") was chewed at the end and sucked."

- C C Petrie, Tom Petrie's Reminiscences, *The Queenslander*, 6 September 1902, p.514.

"The fruits were used by our aborigines for food after soaking and special preparation, but they are unlikely to appeal to anyone with tastes more fastidious..."

- The Pandanus Pine, *The Telegraph*, 30 May 1936, p.19.

"The Blackfellows suck the acid juice of the ripe fruit with great gusto."

- Cleveland, *The Courier*, 12 October 1863, p.2.

"Pandanus pedunculatus, R. The edible part of the fruit is that portion adhering to the rachis.The fruit is eaten raw or baked, but when eaten raw is very pungent, and minute fibres causing intense irritation adhere to the tongue."

- Indigenous Edible Productions No.3, *The Queenslander*, 10 February 1877 p.24.

"(There is for the Aboriginals) an abundance of food on the island (Fraser Island)... the pandanus or 'native bread-fruit,' and numerous bulbiferous plants"

- Wide Bay and Burnett District, Maryborough Chronicle, Wide Bay and Burnett Advertiser, 23 October 1875, p.4.

"the screw or pandanus, a kind of breadfruit, of which the aboriginals make use as food, although it has a smell most disgusting to the white man"

- Agricultural Notes: Palm Trees, Morning Bulletin (Rockhampton), 22 July 1885, p.5.

(The Mornington Islanders) "...live on pandanus nuts"

- Natives Wore Mud for Clothing, *The Charleville Times*, 10 October 1957, p. 9.

"The aboriginals used to live on the flour of these nuts, and pigs are voraciously fond of them when ripe."

- Desultory Notes, The Capricornian (Rockhampton), 24 September 1887, p.24a

"The travellers were so hungry that they endeavoured to get food from the blacks, but they could not palate the damper made from the pandanus trees."

- Sixty Years in Queensland, *Morning Bulletin (Rockhampton),* 19 July 1924, p.12.

"The breadfruit, screw palm, or Pandanus Spiralis, F.V.M., is one of the most economical plants for the aboriginal. It produces a large cone-shaped fruit, which, when ripe, can be divided in small sections ; the base of each section is soft and sweet, and can be sucked off, but unless it is very ripe produces sore lips, and is usually roasted to prevent this. The nut is then cracked, and the seeds eaten, which are very palatable. The heart of the tree is also edible."

- Spinifex and Wattle, *The Queenslander*, 27 February 1904 p.21

"Pandanus, sp.—" Breadfruit." "Screw- Palm." Fruit sucked, shell broken, and seed eaten; however, unless very ripe, the fruit is roasted in the ashes previous either to sucking (it being too " hot") or to soaking in water, which becomes sweetened and is drunk."

- W E Roth, Ethnology: Aboriginal Food, *The Queenslander*, 7 December 1901 p. 107

2. "CHEWING ROPE"

"Jumpinpin – the root sucker of the pandanus tree, which was macerated and used as a chewing rope. This rope was immersed in a receptacle containing a mixture of honey, honeycomb, dead bees, grubs and dead or rotten wood, and when thoroughly saturated with this delightful nectar, was chewed and sucked. The chewed end was then directed into a second receptacle of the liquor, ready for chewing back again into number 1, and so on till repletion was attained. It was a contemplative occupation much favoured by the old men of the tribe"

- W E Hanlon, *The Early Settlement of the Logan and Albert Districts*, Read before the Historical Society of Queensland 27 March 1934, 238-9.

3. BEVERAGE

Aboriginal 'alcohols' were rare but not unknown. A type of honey wine was recorded as being made in canes in some areas. The first article seems to suggest pandanus beer was once known widely "in the early days" but in the writer's time (1930s) was confined to the 'far north,' thus presumably this drink was known in the Wide Bay and Sunshine Coast areas in earlier times.

"...the tree was in the early days, and still is in parts of the Far North, popular amongst the aborigines, simply because it yields the ingredients for "pandanus beer," a favourite aboriginal drink which has a real "kick" in it. The "beer" is made from the pineapple-like fruit of the pandanus. The fruit is first of all pounded between stones and then soaked for a day or two in water until all the juice is extracted. The liquor is then left until it ferments. Although the alcohol content of the "beer" is low, a small drink makes the aborigines feel as chirpy as two-year olds. When the stuff is taken in large quantities, however, it is intoxicating. The beverage has a very bitter taste; years ago I took a mouthful, but spat it out at once. I could not swallow the beastly liquor, and I still fancy that I can taste it. To me it seemed like a mixture of vinegar alum, kerosene, and castor oil!"

- 'E', Pandanus Beer, *The Queenlander*, 29 July 1937, p.2.

"the aborigines of the Far North will never pass a pandanus that is bearing fruit. They use the fruit for making a beer, which, while not intoxicating, makes them feel as chirpy as twoyear-olds. They simply pound the fruit between a couple of flat stones, then soak the pulp in clean water, and leave the liquor until it ferments. An old surveyor I know told me that after a good drink of the stuff the aborigines would work like champions."

- Serves the Purpose, *The Queenslander*, 23 August 1934 p.2.

"the fruit is ... soak(ed) in water, which becomes sweetened and is drunk"

- W E Roth, Ethnology – Aboriginal Food – 3,' *The Queenslander* 7 December 1901 p. 1074

4. WATER MARKER/ RESERVOIR

The water-rich, fibrous stem of the pandanus seems to have been chewed for water. Presence of pandanus groves at times indicated water near the location.

"Our fresh water supply was usually found at the root of the pandanus tree, having learnt from the natives that water could invariably be found there"

- Life in Aboriginal Camps – Adventures in Far Northern Australia, *Nambour Chronicle and North Coast Advertiser*, 20 July 1934, p.8.

"The roots also provide a drink occasionally on the waterless islands"

- Spinifex and Wattle, *The Queenslander*, 27 February 1904, p. 21.

"wherever the pandanus grows in plenty—by driving a spear some 3ft. or 4ft. down into the ground and seeing, whether the extremity is moist or not ; if the quest be successful, a bunch of dried grass will then be rammed down. The grass acts as a strainer to the debris, and thus permits of the water being sucked up by means of a reed"

- Ethnology – Aboriginal Food – II, *The Queenslander*, 30 November 1901, p. 1027.

"ABORIGINAL RESERVOIRS. (By 'Bill Bowyang.') Where the pandanus tree grows the moisture below the surface is tested by pushing a spear three or four feet Into the ground. If the point of the weapon is moist when withdrawn, a bunch of dry grass Is rammed down, and this acts as a strainer. The water is then sucked up with a reed. ... (but) I have met blacks... who tried to make a white man believe freshwater Is always to be found where the pandanus tree grows... (but) on one of the Whitsunday group of islands, and as there, was

a shortage of drinking water we selected a pandanus grove, and dug a well several feet deep, only to strike salt water."

- Bill Bowyang, Aboriginal Reservoirs, *Townsville Daily Bulletin*, 6 May 1930 p.5.

5. DRESS AND ORNAMENT

Dress elements composed of pandanus armlets etc were typical of Cape York groups. In South East Queensland and north coast NSW, pandanus "macrame" necklaces were similarly in use, made from frayed or plaited pandanus leaves or fibre (see illustrations).

"Roth describes necklace(s)...formed of strips of pandanus (screw pine) leaf worked into a plait of three to five

strands...similar practices...across eastern Queensland"

- Philip A Clarke, 2012, *Aboriginal Plants as Aboriginal Tools* (Rosenberg Publishing) p.219

"(In) Cape York ... the dress of the women is simply a narrow belt of... pandanus leaves, fastened round the waist."

- The Aborigines of Cape York, Mackay Mercury and South Kennedy Advertiser, 7



November 1874, p.3.

"...used for armlets"

- W E Roth, Ethnology – Aboriginal Food (3), *The Queenslander* 7 December 1901, p. 1074



Figure 3: probable pandanus women's leg ornament, Brisbane 1870s (John Oxley collection/ Michael Aird)

Figure 2: 'daisy chain'/ macramé of plaited pandanus, north coast NSW (NSW State Library)



Figure 1: Pandanus frayed fibre ornament, Brisbane 1870s (John Oxley collection)

6. FIBRE (ROPE)

In all likelihood, rope or fibre derived from pandanus stems or leaves was universally used across Aboriginal Queensland. It seems to have been a common source of fibre.

"(the) aerial roots from which a fibre is obtained for cords.."

- The Pandanus Pine, *The Telegraph* 30 May 1936, p. 19.

"Fibres and Cordage:..... Pandanus...and many others" (sale items)

- Silks, Fibres and Cordage, *The Queenslander*, 24 July 1880, p.116.

"There they (Daly River Aborigines) muzzle him (the crocodile) with a stout rope of plaited pandanus and lead him round like a dog until they grow hungry for his tail"

- River and Jungles, *Sunday Mail (Brisbane),* 28 May 1933 p. 14.

7. FIREWOOD

Settlers found pandanus extremely combustible. It is not clear whether this quality was valued by Aboriginal groups, but presumably it would have had similar use.

"This (Pandanus) is one of those plants that, in time to come, will be one of great economic value, from the quantity of turpentine it stores and secretes, as shown in its very inflammable and combustible nature when dry."

- Desultory Notes, The Capricornian (Rockhampton), 24 September 1887, p. 24a

"These trees grow in clumps, and when cut for firewood, burn like something dipped in kerosene."

- Life in Aboriginal Camps – Adventures in Far Northern Australia, *Nambour Chronicle and North Coast Advertiser* 20 July 1934 p.8.

8. TRAINING IN WEAPONRY

"First pandanus nuts are thrown at the candidate, who has to ward them off with his shield, and without moving his feet; then for the nuts are substituted small hardwood-tipped spears, which have to be deflected in like manner; later, in place of the shield, he is given a stick, and with this he has to protect himself "

- Examinations Among Native Tribes, *The Central Queensland Herald* (Rockhampton) 5 April 1934 p.27



Figure 5: flower or down hair decoration, Brisbane area 1870s-1880s (John Oxley library)

9. FLOWERS (PERFUME?)

Women would paste large bunches of flowers and feather down in their hair for colour and perfume in South East Queensland. It is not recorded whether pandanus flowers were used for this purpose, but they had a fragrant



Figure 4: Brisbane woman 1860s with decorated hair (John Oxley collection)

rary)

smell, thus it is probable they were.

"A species of pandanus (odoratia simus).... found also on Dunk Island has sweetly scented flowers from which an attar is extracted in India"

- Estelle Thomson, The Pandanus Pine, The Telegraph, 30 May 1936, p.19

10. ROOFING

The first quote describes Aboriginal use generally, thus could relate to South East Queensland. However, mostly the use of pandanus for roofing seems to have been a north Queensland practice. Post-Contact, houses with pandanus roofs (also of parallel logs, used like corrugated iron to drain off water) were common on Aboriginal Reserves all over Queensland by the late-19th/ early 20th centuries.

"the (pandanus) foliage is used for covering the gunyahs."

- Spinifex and Wattle, *The Queenslander*, 27 February 1904 p.21

"the Aborigines... live in their own bark and pandanus huts"

- Many Sided Interests of Life in the North: Cape York Country Visit, *The Telegraph*, 3 October 1934, p.19.

11. BASKETRY AND MATS (MOSTLY POST CONTACT)

Pandanus leaf baskets, mats and fans are traditional Cape York and Gulf of Carpentaria artefacts. Some sort of pandanus basketry may have been practiced on Bribie Island according to what is implied below, but otherwise pandanus basketry does not seem to have been prominent in southern Queensland in pre-Contact times. However, during the Reserves period (1890s-1950s) the craft spread around Aboriginal communities all over the state, largely because it was seen as a sustainable industry for Aboriginal workers. Pandanus basketry from various Reserves and Missions featured for sale and in competitions at the annual Brisbane Ekka. Thus many communities of southern Queensland became familiar with pandanus basketry. It seems the core techniques derived from Cape York, but 'updated' to suit the new market (Western needs including hats, napkin rings and placemats). Such objects also became standard domestic items in and around Aboriginal and Islander communities c. 1900-1950, perhaps as surplus or due to growing proficiency with the techniques.

"(Pandanus) table napkin rings, trays, fans"

- Woorabinda Settlement Show and Sports, *Morning Bulletin (Rockhampton),* 17 October 1949, p.3.

"(Pandanus) also used for... mats"

- W E Roth, Ethnology – Aboriginal Food (3), *The Queenslander*, 7 December 1901,p. 1074.

"Baskets made from Leaves. The Under-Secretary tor Agriculture has some samples of basketware and mats made from the leaves of the pandanus and coconut trees. They have come from au aboriginal settlement of the north and are the handiwork of natives, the quality of the articles suggests that they could be manufactured probably on a large scale"

- A Native Industry, *The Telegraph*, 27 July 1917, p.2.

"Port Mackay one of the orthodox pandanus mats"

- The Exhibition of Produce of the Wide Bay Farmers' and Planters' Association, Maryborough Chronicle, Wide Bay and Burnett Advertiser 11 December 1869, p.2.

"Plaited mats, fans, baskets of pandanus"

- Palm Leaves for Baskets, The Brisbane Courier, 28 July 1917, p.4.

"Good baskets obtained on Bribie Passage"

- Caloundra – Some of Its Attractions, *The Brisbane Courier*, 5 October 1907, p. 13.

"...macramé accessories, and finely woven pandanus leaf baskets (from the government Reserves)"

- Aboriginal Handcraft, *The Courier Mail*, 22 April 1949, p.7.

12. SUGAR BAGS (POST CONTACT)

Settlers started using sugar bags woven from pandanus fibre (leaves?) quite early (1860s?). It seems Aboriginals and Islanders contributed to this production.

"Town Hall exhibition: ... Pandanus utilized for making sugar bags"

- East Moreton Farmers' Association, *The Queenslander*, 13 June 1868 p.11

"four species of the pandanus in this colony, all of which might be profitably and conveniently converted into mats for the package of sugar or any other similar commodity."

- Sugar Bags Wanted, *The Queenslander* 14 September 1867, p.11

"(Pandanus)...from which coarse sacking is manufactured."

- The Pandanus Pine, *The Telegraph* 30 May 1936, p.19

13. FIRESTICK CAPS

This was a Cape York practice – making containers from pandanus to hold firesticks. It may have extended further south, especially after European contact.

"On the Batavia, Pennefather, and Embley Rivers (Cape York) this cap (for firesticks) is made of a piece of pandanus leaf bent over the extremities of the two sticks, bound round with twine, and covered over with warmed bees' wax, which thus " fixes " the cover after it had been moulded into shape; it is then finally dabbed over with one of the local gumcements or bees' wax"

- Aboriginal Implements and Manufactures, *The Brisbane Courier*, 20 August 1904 p.12.

14. SWIMMING LOGS

Traditionally and post-contact in central and northern Queensland (e.g. Keppel Islands), these were used much like modern day surf life-saving swimming

flotation device, to cross water bodies.



Figure 6: swimming logs in Arnhem Land (Thomson 1952)

"Swimming logs were generally made from *pandanus*. They were 4-5 m in length and about 15 cm in diameter. There are reports of people paddling from island to island using these logs. In addition, they were even used to cross to the mainland – a journey of some 15 km."

- W E Roth, 1898. *The Aborigines of Rockhampton and the Surrounding Coastal District,* Mitchell Library MSS 216, p.1; Woppaburra Land Trust, Conservation Handbook, 2009, *A handbook to guide the management, protection and conservation of the ancestral land and sea country of the Woppaburra people.* (R.J. Graham & Associates; Woppaburra Land Trust) pp.19, 28.



FIG. 2. SIMPLE SWIMMING LOG (ABOUT ONE-SIXTEENTH ACTUAL SIZE) Used in Arnhem Land and other parts of Northern Australia, as seen in Plate Aa. Such logs are generally selected from a pile of driftwood, used without modification and abandoned after use.

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Figure 7 : swimming log (Thomson 1952)
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"Rafts are often constructed from pieces of the light wood (possibly driftwood) called *wurdoko*, or from other light It will be apparent, even from this brief survey of buoyant wood

such as dry trunk of the *screw pine* (Pandanus) watercraft of the coastal areas of Cape York Peninsula ...lashed together in a bundle."

- D F Thomson, *Notes on Some Primitive Watercraft in Northern Australia, Man*, Vol. 52 (Royal Anthropological Institute of Great Britain and Ireland, Jan. 1952), pp. 1-5,

15. SHADE AND SHELTER

There are several early accounts of Aboriginal groups using pandanus groves as places to laze or sit, especially if keeping a lookout on the coast or busy oystering, pipi-gathering and fishing on the surf beaches. Joel Fostin's interviews with Indigenous groups and his own surveys suggest pandanus groves are relatively rainproof. He found they were used as an open-air beachside camp and shade when weather was warm or mild enough to permit this.

"(Sandy Cape, Fraser Island)a group of desperate aborigines, cowering under a weird looking many-branched pandanus"

- Jottings from Hervey Bay No.II, *The Brisbane Courier*, 20 August 1878 p.5.

16. CHRISTMAS ORNAMENTS (POST CONTACT)

"The blacks at the Myora Mission, Stradbroke Island, kept the Christmas festive season with a will, writes a correspondent. The church was decorated with great taste. ... Over the reading desk and doors were arches of palm trees, brightened by white lilies and Christmas bells, and fruit of the pandanus. Nearly the whole of the work was done by the people under the direction of the acting superintendent of the mission. A very bright service was held on Christmas Day, the church being crowded...the aborigines exclaiming it was the best Christmas they had ever spent."

- Christmas at the Myora Mission, *The Brisbane Courier*, 1 January 1896 p.7.

HISTORICAL SOURCES ON

NATURAL DISTRIBUTION

Pre-1930s references to pandanus are scarce. Early explorers, botanists and settlers of southern Queensland had limited interest in coastal vegetation, as it was seen as having limited economic importance. Much of the region's early exploration and settlement was slightly inland to avoid arduous river crossings. A few maps (detailed below) have inscriptions indicating the location of stands of 'breadfruit.'

Early photographs of the Sunshine Coast and Wide Bay region (1870s-1920s) mostly feature inland and river areas as this was where settlement and transport concentrated. Photographic coverage improved over the period from the 1930s to 1960s, but shots were mostly taken of the same few scenic areas, with pandanus being used to either frame or feature the scenery. This again belies the full extent of pandanus growth.

In summary, the archival record is sadly of limited use in approximating the extent of pandanus. It was observed that the plant grew mostly around rocky headlands or sand spits by the mouths of waterways adjoining the ocean or bays. It was recorded for lengths along surf beaches. More sporadically, it was recorded occurring inland, apparently along or near rivers.

Joel Fostin's research and surveys suggest pandanus was 'farmed' by Indigenous groups and was therefore once fairly extensive along the coast. He proffers the following factors as accounting for its limited appearance in some spots:

- areas where wildfire or inappropriate post-colonial fire has occurred (further deaths often occurring due to ongoing post-firing fungal damage);
- coast not exposed to swell (Hervey and Moreton Bay);
- localised areas of natural dune loss (e.g. fallen and/ or washed away);
- localised areas of advancing dune systems (natural seed deposition does occur, however in low numbers. Many areas still have original/descendant populations high in the hind dunes); and
- urbanised areas (Joel Fostin, per. comm, 3 July 2017)

"Grows at the mouths of rivers and creeks on the shores of the Pacific, often met in the interior however, a long way from the sea"

- Indigenous Edible Productions No.III, *The Queenslander*, 10 February 1877 p.24.

"On every rocky headland and in every bay and inlet the pandanus (or screw pine) always is near to the sea. In most precarious positions it seems to thrive on salt-laden air."

- Queensland Times, 27 December 1935, p.3.

1. MORETON BAY/ BRISBANE

The headlands of Cape Moreton and Point Lookout – much as today – are recorded as having had considerable Pandanus growth. The ocean side surf beaches of Stradbroke, including South Stradbroke, also had stretches of pandanus in the historic period. Cleveland and Wynnum were once well-known for their pandanus stands, and as the quote below illustrates, efforts were made as early as the 1870s to protect the species from vandalism. It seems the plant also grew on Redcliffe and presumably Sandgate given the latter area's proximity. Specimens were recorded up the Brisbane River.

"One which we nearly overlooked is the presence, on the (Cleveland) Point, of several breadfruit trees, which form pretty objects in the landscape."

- Cleveland, *The Courier*, 12 October 1863 p.2.

"To be found everywhere about Cleveland Bay"

- Indigenous Edible Productions No.III, *The Queenslander*, 10 February 1877 p.24.

"Visitors to our watering places find but few occupations in the way of amusement, and those who are lovers of botany will be particularly disgusted to find, on their next visit to Cleveland, that a wanton outrage has been committed on those beautiful trees, the Pandanus spiralis, which have hitherto formed an ornament to the Point. On every succeeding visit for the last few years I have found their cumbers lessened, which, in most cases, could be traced to idle boys, who take a delight in destroying trees and bushes, breaking windows of unoccupied houses, or carving their names on any conspicuous place. On a visit to Cleveland last week, and taking a stroll on the sands at the Point, I observed the largest specimen of the trees before mentioned lying prostrate, evidently very recently cut down. I made it my business to inquire of a resident in the neighbourhood, and found that it had been destroyed within a few hours by what my informant was pleased to call "one of the grammar school roughs," who, at holiday time, usually infests the place and is a perfect nuisance. I succeeded in obtaining the name of this interesting youth from several persons to whom he is well known, who had been witness to the destruction of the tree. I hoped (that some means would be devised to punish the mischievous vagabond."

- Wilful Destruction of Native Trees, *The Queenslander* 5 August 1871 p.2.

"I paid a visit the other day to the new township of Scarborough ... a broad sandy margin to the Bay, and which will serve as recreation ground, on which grows here and there the attractive pandanus, and the tall eucalyptus rising behind"

- Redcliffe, The Queenslander 1 June 1878 p.263

"(South Stradbroke) *Dhuleen* (the aboriginal lingo for nautillus), where Moreton Bay is divided from the Pacific Ocean by a sand ridge only a few hundred yards wide, covered with grass, relieved here and there with a clump of pandanus (bread- fruit trees)."

- A Cruise Round Moreton Bay, The Brisbane Courier, 25 March 1873 p.2.

"At Cape Moreton and at several other places, principally on the eastern side of the island, the pandanus also abounds."

- Moreton Island – II, *The Queenslander*, 18 February 1899, p.304.

2. SUNSHINE COAST

Barnes' survey map of 1845 indicates "breadfruit" running along the entire surf coast from Currimundi Creek north to Pt Cartwright. He also shows "breadfruit" at Skirmish Point and Woorim on Bribie Island.



Figure 4: Barnes map 1845 showing area between Currimundi Creek and Point Cartwright. The inscription reads: "narrow belt of breadfruit and honeysuckle (banksia) trees" in front of "swampy country covered with low scrub" (Qld State Archives)



Figure 9: Barnes 1845 map of Bribie Island - "breadfruit trees" marked at Pt Skirmish (Qld State Archives)



Figure 8: Barnes 1845 map - Woorim proposed township. The inscription reads "thickly wooded cypress pine (= casuarina), breadfruit, honeysuckle (= banksia)" (Qld State Archives)

The Barnes 1845 map seems to be the earliest reference to pandanus in the area. As the Sunshine Coast's beach strip held neither arable land nor workable timber, the natural environment nearest the surf beaches and headlands remained fairly intact into the 20th Century. Until the boom in housing estates and surfing resorts between the 1950s and 1970s, the coastal strip where pandanus habitually grows had some clearing for timber ports, tracks, roads and fishing/ boating resorts, but these were few and relatively small (camping grounds, seasonal holiday homes or 'beach shacks').

For this reason, photographs of 50-80 years ago can offer some guidance as to the natural distribution of pandanus. Photographic evidence suggests that during the 1930s-1950s if not earlier, pandanus was common all over Caloundra headlands since the 1890s, especially Moffatt Head, towards Kings Beach and towards Dickey Beach. The same could be observed about most other Sunshine Coast/ Cooloola headlands: Point Cartwright and Alexandra Headlands had some pandanus growth, as did Coolum, Pt Perry and Yaroomba.

The plant seems to have been particularly common all over Noosa Headlands close to the beach, as early as the 1910s. It was photographed at popular Noosa tourist sites such as Hell's Gate, Alexandria Bay, the Boiling Pot (Witches' Cauldron?), Devil's Kitchen, and Paradise Caves. Photos also show it occasionally at Peregian Beach and along the Coast by the Coolum-Noosa Road. Another headland, Double Island Point, also had good growths, and even the much less permanent 'rock' (Coloured Sands) of Teewah had some clusters.

By contrast, photos only show occasional specimens around the sand bluffs and headlands of Currumundi, Maroochy Heads or Mudjimba. As Joel Fostin indicated, this may or may not reflect the true situation. Some early photos show plants on Pincushion Island and one 1920s photo appears to indicate a dead pandanus grove immediately behind the fore dunes of Main Beach.



Figure 11: Double Island Point 1932 (State Library of Qld)



Figure 13: lone pandanus on Pincushion Island with view to Mudjimba Island 1920 (State Library of Qld)



Figure 10: Maroochy looking south 1920 showing probable pandanus dieback (State Library of Qld)



Figure 14: Peregian Beach 1963 (Sunshine Coast Heritage Library)



Figure 15: Noosa Heads looking south from Paradise Cave 1931 (Sunshine Coast Heritage Library)



Figure 16: Top of Pt Cartwright (Mooloolaba) 1910 (Sunshine Coast Heritage Library)



Figure 17: Foreground of pandanus at Alexandra Headlands looking south 1930s (Sunshine Coast Heritage library)



Figure 18: Kings Beach Caloundra 1920s (Sunshine Coast Heritage library)

"Miss Dorothy Hayward makes; an attractive picture as she leans against a pandanus palm and watches the surf at Coolum Beach"

- At Coolum, Brisbane Telegraph, 15 March 1949 p.7.

"One of the best panoramas on the North Coast is this week's Page 3 feature study. It shows Coolum Beach and Emu Mountain, framed in banksia trees and pandanus palms,

photographed from Point Perry. "

- North Coast Grandeur, *The Courier Mail*, 20 October 1952 p.3.

"One of Caloundra's beautiful bays, where the screw-pines, or pandanus breast the Southern gales."

- Special North Coast Supplement, The Queenslander 9 November 1938 p.31

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"(At Caloundra) there are some splendid headlands there covered with couch grass and shaded with pandanus, she oak and honeysuckle trees"

- Caloundra, *The Brisbane Courier* 5 October 1907, p.13



Figure 19: Clump of pandanus at base of Teewah Coloured Sands 1931 (Sunshine Coast Heritage Library)

4. FRASER COAST (WIDE BAY)

1920s photographs show pandanus growth along the ocean side dunes of Fraser Island. At Hervey Bay, the plant seems more sporadic –between casuarina and other tree growth.

"By observing the following directions, vessels drawing twelve feet can ascend the Burnett fifteen miles. ...the South Head will soon be easily distinguishable; ...one pandanus and three or four she-oaks, which form conspicuous objects on the point"



Figure 20: looking through pandanus foliage to Urangun Pier c.1940s (State Library of Queensland)

- Official Report of the Burnett River, The Queenslander 31 August 1867 p.6.

"an abundance of food on the island, which (includes) the pandanus or 'native bread-fruit,' (on Fraser Island)"

- Wide Bay and Burnett District, Maryborough Chronicle, Wide Bay and Burnett Advertiser 23 October 1875 p.4.

"Pandanus here and there" (Pialba)

- A Visit to Pialba, *The Queenslander* 17 February 1894 p.312.

AN HISTORIC PANDANUS MONUMENT

Caloundra had a historically important Pandanus, still marked by a concrete monument in the shape of the (now dead) original. It concerned a tragic shipwreck (Queen of the Colonies). Kabi Kabi people were directly involved in this story, as they were responsible for saving the victims of this shipwreck. Thus the monument was important to them. There is some controversy over whether the inscription was written by shipwreck survivors themselves, or by an early settler who came to the spot soon after and wished to mark the event by creating this carving.

"The famous "Queen of the Colonies" tree at Caloundra was inscribed by a lost boat's crew from that vessel, when they landed on Caloundra head in 1863, and even after all these years the inscription shows little evidence of having expanded by reason of the growth of the trunk which is still only a few inches in diameter, having increased little, if at all, in the 42 years. Some of the large trees to be found along the coast must be hundreds of years old."

- Pandanus or Breadfruit, *Townsville Daily Bulletin*, 5 September 1925 p.5.

"...the pandanus tree at Caloundra, and this recalls a story of privation and tragedy.... The Immigrant vessel, Queen of the Colonies, so the story says, lived in Moreton Bay from London in 1863. One of the passengers, a married woman died just before the boat was anchored, and a boat's party was despatched to Moreton Island to bury the body. This was done and the party were returning, when they were caught in a squall and driven out to sea. Fourteen days later on, just as hope was being abandoned, the party was discovered on the Caloundra beach. Then it was learned that the little boat had been capsized in the squall, and the widower of the woman that had been buried beneath the pandanus tree a few hours before, was drowned."

- Luck of the Pandanus, *The Telegraph* 30 July 1909 p.4.

"The recent death at Ipswich of Mrs. Emily Evans, at the age of 89 years, removed the last, or what is believed to be the last, remaining member of the band of immigrants from England who arrived in Brisbane in 1863 on the sailing vessel The Queen of the Colonies, which was associated with an unusually tragic happening in Moreton Bay. Born at Bath, Bristol (England), the late Mrs. Evans was 19 years of age when she arrived in this State, and right to her very last days she had vivid recollections of the tragedy that marred the end of her otherwise pleasant voyage from the Old Country. What helped to impress the incidents so firmly on her mind was the fact that the three persons who died in connection with the happening were her father, her cousin, and his wife. As The Queen of the Colonies, after an uneventful voyage from England, was nearing the northern end of Moreton Bay Mrs. Evans's cousin's wife (Mrs. Barnfield), who had been seriously ill for some weeks, died. At first a sea-burial was planned, but, yielding to the persuasion of Mr. Barnfield, who wanted his wife's body to be interred on land, the captain of the vessel..."

- Queen of the Colonies: How the Pandanus Palm on Caloundra Headland was Marked, *The Brisbane Courier*, 8 July 1933, p.19.

"A Historic Pandanus Tree on Caloundra Beach. This Tree Bears the Inscription "Queen of the Colonies," Carved by the Survivors of that Vessel about Fifty Years Ago"

- Some Attractions of Caloundra, The Queenslander, 25 January 1902 p.181



Figure 21: Queen of the Colonies Pandanus as it appeared in 1920 (State Library of Queensland)



Figure 12: Current monument to 'Queen of the Colonies' in Caloundra