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More Beautiful Bark

Elise Smith







Pukekura Park has an interesting collection of palms which belong to the Arecaceae family, perhaps the oldest group of flowering plants with fossils 120 million years old in Gondwanaland. Some palms have remained unchanged for 100 million years. Palms are generally tropical and sub-tropical, with a few found in mild temperate climates. Palms provide the world with a greater range of economic benefits than any other plant family such as palm oil and kernel, raffia, coconuts, palm wine, gula malacca syrup, thatch, dates, coir, and betel nuts. Some species have come close to extinction through the harvesting of wild "hearts of palm". Maori cooked the leaf bases and flower clusters of the New Zealand Nikau Palm (*Rhopalostylis sapida*), and used the leaves in buildings. In the Park, New Zealand Pigeons (Hemiphaga novaeseelandiae) enjoy ripe Nikau fruit from about December onwards. The New Zealand Nikau Palm is the most southerly palm species, and is closely related to the Kermadec Nikau Palm (*Rhopalostylis baueri*). They may be seen together next to the Bellringer Pavilion with the Kermadec Nikau Palm on the right (1). The literature considers them to be very closely related, and they appear to be inter-breeding in the Park. Here you can see the shiny green stem of the New Zealand Nikau (2) and the older, weather-beaten stem of the Kermadec Nikau (3). As monocotyledons, palms do not grow in girth with annual rings, only at the tip so, strictly, the interesting stem shapes and textures shown here are not bark.

On Palm Lawn, we see a collection of Fishtail Palms (*Caryota* spp.) (4 and 5). There are also several Fan Palms, with a very tall Australian Fan Palm (*Livistona australis*) on the south side of the lawn (6,7, and 8). To the north, is a group of young Mountain Coconut Palms (*Parajubaea* spp.) (9 and 10) which originate from South America where the nuts are eaten and a refreshing drink is made from the sap.

In the Brooklands traffic island garden the pineapple-shaped Jelly Palm (*Butia capitata*) shows carefully trimmed leaf bases (11 and 12). A Senegal Date Palm (*Phoenix reclinata*), a nationally significant specimen, is to be seen on Brooklands Lawn at the start of the former Nature Walk (13 and 14). Since this palm is dioecious, having separate-sex plants, dates will not be on the Wanderers' menu! The Chinese Windmill Palm (*Trachycarpus fortunei*), of which there are many in the Park, is also dioecious. This palm is from high altitudes in southern China, and is one of the hardiest. The tall specimen on Brooklands Lawn has probably been there for about a century, its age to be seen in the lichen-patterned stem (15 and 16).

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Park Patterns cont'd



#1 Rhopalostylis baueri Next to Bellringer Pavilion



#2 New Zealand Nikau



#3 Kermadec Nikau





#5 Caryota sp. Palm Lawn





#11 & 12 Butia capitata, Brooklands Traffic Island Garden



#9 Parajubaea sp. Palm Lawn









#6 Livistona australis Palm Lawn



#7 Livistona australis Palm Lawn



#8 Livistona australis Palm Lawn

Ye Mercury: Pukekura Park's Own Newspaper

Ron Lambert Senior Researcher Puke Ariki

Of all the Pukekura Park ephemera, some of the most ephemeral are, perhaps, copies of *Ye Mercury*. Apart from the examples in Puke Ariki's collection, I can remember having seen only two other rather battered copies in the last 30 years.

Produced for the organising committee of "Ye Olde Englishe Fayre" by the *Taranaki Herald* in 1883, *Ye Mercury* was printed on the cheapest possible paper which has surely ensured that few copies will have survived. Two editions of the four-page paper were issued, the first for the opening of the fair on 7 February and the second on 12 February, the day before its closing. They had editorial content, including a lengthy account of progress in the seven-year old Park, as well as advertisements for the town's tradesmen, retailers, and professionals. *Ye Mercury* was sold as a souvenir for "ye small sum of THREE PENNIES, but no change is returned to those who give Sylver" (*Ye Mercury* 7/2/1883).

"Ye Olde Englishe Fayre" was a fund-raising enterprise for the newly-established Recreation Grounds, now Pukekura Park. The fair would seem to have been a franchised operation that toured centres in the lower North Island during 1882-1883. It was managed by Mr Joseph Gibbs as a fund-raiser for local organisations. Those who benefited were the fire brigade in Whanganui, the Methodist Church in Hawera, and the clock tower fund in Feilding. The travelling show supplied facades, stalls, and "old-fashioned signboards" to recreate an Elizabethan street for the week-long fair. The dozen or so stalls were provisioned by local retailers and run by what appears to be nearly the entire female population of New Plymouth. The town's band also offered its services free, but a small troupe of professional actors accompanied the fair.

The first advertisements at the end of January 1883 announced the event to be "for ye benefitte of ye Church of St Mary's" (*Taranaki Herald* 26 & 30/1/1883). The paper, though, then reported that "It has been decided to have "Ye Olde Englishe Fayre" for the benefit of the Recreation Ground instead of the Church of England, as some slight objections have been raised with reference to the programme, and to cut out anything would be to spoil the whole show" (*Taranaki Herald* 31/1/1883). Perhaps the church authorities were troubled by the proposed presence of a "Gypsy queen" who told fortunes, and her bevy of acolytes "very gorgeous in their scarlet and gold "fixings""! (*Taranaki Herald* 8 &10/2/1883). In the remarkably short time of five or six days, retailers were solicited for supplying the stalls, and an army of volunteers was assembled for operating them and other aspects of the fair.

The fair was held in the newly-opened Alexandra Hall, the forerunner of the Opera House/TSB Showplace, from 7 to 13 February 1883. It was launched with appropriate mediaeval ceremony by the Mayor, William Bayly, who, as it was "ordayned so in ye olden tyme", proclaimed that all the town's shops would close at 6.00 pm on the evenings of the fair, so that "ye necessary moneyes may be raised for beautifying ... ye ground yclepped [called] Botanical Gardens" (Ye Mercury 7/2/1883). The Herald's reporter waxed eloquently on the opening of the spectacle: "Even here at the antipodes we hold an "Olde Englishe Fayre" in all its pristine splendour, and the hearty appreciation of the revival of mediaeval buildings, costumes, and sports, which was exhibited last night by the public, shows that our attachment to the British Isles is as strong now as ever. The ladies did not think it in any way compromised their dignity to divest themselves of the fashionable dress of the period and to assume the costume of an earlier age, when Parisian fashions were not so much thought of "(Taranaki Herald 8/2/1883).

Apart from the stalls selling "fancy goods, drapery, jewellery, electroplated ware, nick-nacks, Chelsea buns, cakes, confectionary, tobacconists' goods, refreshments of every description, and many things, of many forms, and many colours" (*Taranaki Herald* 3/2/1883), there was the "Gypsy" fortune-telling booth, maypole dances by local schoolgirls, clowns, a very popular Olde Chelsea Bun-house and the obligatory village stocks "so beautifully designed for the correction of men's morals" (*Taranaki Herald* 9/2/1883). In the supper room adjoining the hall, Richardson's Show put on several daily dramatic performances of a "thrilling tragedy" by the professional actors "Mr Harry Power and Miss Lolo de Glorian", ably assisted by gentlemen amateurs (*Taranaki Herald* 8/2/1883). The theatre group's repertoire changed during the week, providing added impetus for repeat visits.

After a week of packed houses, the fair closed at 10.00 pm on 13 February 1883, the hall was cleared of its shops and scenery, and a dance followed (*Taranaki Herald* 13/2/1883). Whether the Recreation Grounds Board considered the enterprise a financial success is not known. The nett proceeds were just over £40. Sales of *Ye Mercury* produced £10.10.0d. Its printing, together with advertisements for the fair in the *Herald*, cost £14. 4.10d (*Taranaki Herald* 19/3/1884).

OH YES! OH YES! OH YES!!!

Ye Olde English Fayre

FOR YE BENEFITTE OF YE RECREATION GROUND.

Grande Openinge Ceremonie-

WEDNESDAYE,

VIITH FEBRYE, MDCCCLXXXIII, At ye Halle yelepped Alexandra.

Ye Maisters of ye Olde Englishe Fayre thus describe their worke:—

Ye Alexandra Halle is fitted up to resemble an Olde Englishe Streete, with rowes of Shoppes wythe three stories, ye lower of wyche is used for ye Shoppes or Stalles.

YE MAIE POLE is in ye centre of ye Halle, round whych at times ye girls will dance.

YE OLDE CHELSEA BUN-HOUSE.

YE LADIES, in Ancient Costumes, will adde beautie to ye scene.

YE FUNNIE CLOWNES, YEGYPSIES ON YEVILLAGE GREEN.

YE GRAND RICHARDSON SHOWE,

in whych ye fearful Tragedie and ye beautiful
Pantomime will be performed by
MAISTRE HARRY POWER and
DAMOSEL DEGLORIAN.

Ye prices to enter are—Opening Ceremonie, Half-a-crown; all other tymes and seasons, One Shyllynge

One Shyllynge.
Ye Fayre wylle begyn atte VIII. by ye clocke, and wylle close as ye clocke striketh half-past X.

OH YES! OH YES! OH YES!

Come one and alle-riche and poore!

GOD SAVE-YE QUEENE!

Advertisement in Taranaki Herald 6 February 1883

The creation of "Manhattan Island", and Pukekura Park's first fernery David Medway

The extension of the main Pukekura Park lake above Poet's Bridge was completed in 1886 (*Taranaki Herald* 4/8/1886, p.2). Thirteen years later, the meeting of the Recreation Grounds Board on 5/5/1899 was advised that the water in the lake had been drained off to enable workmen to carry out certain excavation work at the far end of the "pond" (*Taranaki Herald* 6/5/1899, p.2). The Custodian, Charles Edgecombe, informed the next meeting of the Board on 2/6/1899 that he had "completed the large island (known to some folks as Manhattan Island); the borders have been planted with native specimens from the grounds nursery stock, and the central part - a diameter of forty feet - has been sown in grass, a well-grown maire standing in the centre. The men are now engaged laying out and planting a piece of ground near the work just completed" (*Taranaki Herald* 3/6/1899, p.3). "Manhattan Island" was in the valley immediately to the west of Monument Hill, between the head of the main lake and the steps leading up to Goodwin Dell. It has not been an island since about the 1970s.

W. W. Smith commenced duty as Curator of Pukekura Park on 23/3/1908 (*Taranaki Herald* 4/7/1908, p.2). Shortly afterwards, a reporter from the *Taranaki Herald* learned in a "Chat with the new Curator" that, on the island at the head of the large lake, groups of the dwarf-growing native ferns were to be planted and accurately named for the convenience of study by visitors. Speaking of New Zealand's native flora, Smith considered that there was "no place in the whole Dominion where it might be seen growing to such perfection as in Pukekura Park. The group of young native trees growing on the island affords an excellent practical lesson in the planting of new bush, and illustrates how easy it is, and how rapidly in some districts, to regenerate native bush. They have been planted several years and have made remarkably fine growth - so much so, indeed, that they will require judicious thinning and transplanting to enable the stronger and larger trees to expand and develop perfectly" (*Taranaki Herald* 14/4/1908, p.3).

William Park of Palmerston North spent a day in Pukekura Park in mid-1908. He observed that the Curator had "commenced to make a large fernery on an island which is already an excellent illustration of successful planting of native trees - now established for about eight years" (*Taranaki Herald* 12/6/1908, p.3). Smith informed the Pukekura Park Board in July 1908 that "The work of cleaning the large island at the head of the upper lake, and converting it into a large fernery comprised only of native ferns is progressing as rapidly as the weather will permit. Being well shaded from the sun and sheltered from the blighting mountain winds the ferns should flourish under the vigorous-growing young native trees" (*Taranaki Herald* 4/7/1908, p.2).

A general summary of the work completed in the Park during the previous twelve months was submitted by W. W. Smith to the Annual Meeting of the Park Board on 20/5/1912. He reported that "The first week in June was devoted to cleaning and planting ferns on the large island at the head of the large lake. They were procured with other native trees and shrubs from Ratapihipihi bush by permission of the Commissioner of Crown Lands. Fifteen young horse-shoe ferns were procured at the Whitecliffs. Of these, he regretted to say, twelve had been removed from the island. Other young plants of this beautiful fern growing in other parts of the park had also been removed. The various plants remaining on the island comprised thirty-seven species of native ferns. They continued to make vigorous growth, and were becoming typical specimens. They had now removed the small bridges between the island and the walk around it, but their removal did not prevent some unscrupulous person or persons from getting on the island and removing the plants and taking cuttings from the rarer shrubs" (*Taranaki Herald* 21/5/1912, p. 4).

Smith informed the Park Board on 2/12/1912 that "he had engaged a man to form the new walk leading from the Vogeltown entrance down to the head of the lake, thence from the upper bridge over the hill to the racecourse gate. The work had been completed, excepting the forming of a little track across the lower end of the large island at the head of the lakes" (*Taranaki Herald* 3/12/1912, p. 6). By the time the Park Board met on 3/2/1913 the steps required to complete the Vogeltown-Racecourse walk were finished. The part of the walk crossing the lower end of the terminal island in the upper lake was now open to visitors. To protect the collection of native ferns growing on the upper part of the island the Curator had, as directed, put wire-netting round the open space set apart for

visitors. (*Taranaki Herald* 4/2/1913, p.4). Shortly afterwards, a strong broad plank was placed "across the channel leading to the long island at the head of the large lake, which served very well as a bridge for the time being" (*Taranaki Herald* 4/3/1913, p.4).

In 1916, R. C. Hughes recorded that T. K. Skinner, while a member of the Recreation Grounds Board, had "designed and supervised the extension of the large lake and the forming of the little islands at the upper end, and he converted the swamp beyond into a long area of firm ground which was planted with a great variety of native trees" (*The Budget & Taranaki Weekly Herald* 12/8/1916, p. 34). These trees had "succeeded well" by 1925, and were considered to be a "good illustration of the comparative growth of native trees under favourable conditions" (*Taranaki Herald* 19/9/1925, p.8). Undoubtedly, some of the trees planted on and near "Manhattan Island" in 1899 are still present today, but W. W. Smith's fernery on the island has long since been replaced by the present Fernery which was opened in 1928.

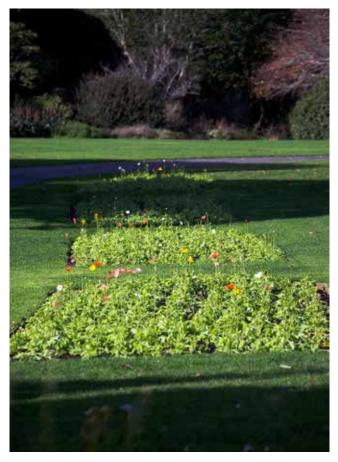
The accompanying photograph from George Fuller's collection is of "Manhattan Island" taken from the position of the present steps leading up to Goodwin Dell. The photographer is not known, and the photograph is not dated. However, judging in particular by the height of the vegetation on the island, it must have been taken within a few years of 1899 when "Manhattan Island" was created and first planted out.



Park autumn update

Ian Hutchinson Technical Officer Pukekura Park

The autumn planting program has been mainly focused on revamp works on various borders and gardens in Pukekura Park, and some adjustments to the flower beds and borders in Brooklands Park.



This year the herbaceous border in Brooklands Park will have only a few minor tweaks with some replacement plantings where some of last year's plantings did not come away properly. There will also be some additions to groups of varieties to fill the border out more and to reduce the amount of bare ground. The plants being added will be the same varieties as were used in last year's renovation.



Above. The four new Brooklands beds.

Splash of colour next to the Zoo wall in Brooklands.

Below. The Taro patch between the Tea House and the Fernery.



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From the Garden cont'd

Two other border changes have taken place recently. Firstly, the fireplace bed has been removed altogether and will be grassed over and, secondly, the border in front of the Norfolk Island Pines (*Araucaria heterophylla*) has been reduced in size. The idea behind these changes is to open up the longer views in Brooklands with fewer interruptions to sight lines and, in the case of the Norfolk Island Pines border, to reveal the trunks of the trees more. The Hydrangea collection that was in the fireplace bed has been relocated to the bush margin borders on the southern and western sides of the Brooklands lawn which will mean summer colour around the outer edges of the lawn.

This autumn the layout of some of the Brooklands flower beds has also been changed. Inside the main gates, the circle bed has been grassed over and the two rectangular beds have become four slightly shorter rectangles. The change to four beds has been done to try to shift the beds so that the winter shadow line of the nearby Holly (*Ilex aquifolium*) tree has less effect on plant performance, to have the colour flow further along the drive, and to compensate for the loss of the circle bed. In creating the four new beds the opportunity has also been taken to use completely fresh topsoil. Hopefully this will reduce some of the problems experienced in the existing beds with soil-borne plant diseases.

The two beds that were under the climbing Rose (*Rosa* 'American Pillar') have been grassed over and replaced with a new bed on the fireplace side of the driveway. This will make maintenance of both the flower bed and the roses easier. The last change to bedding layout can be seen in the "Four Seasons" border where the bedding that was half-way along has been moved back towards the main gate into a more sunny spot so that, hopefully, the plants will grow and flower better.

The first garden in the Pukekura line-up to receive some attention has been the garden at the back of the mobility car parking spaces near the Curator's office. Here, the amount of *Liriope* has been reduced and some *Canna* Lilies added to give this garden some extra summer colour. This, in combination with the revamp of the Sunken Dell during late spring last year, is all adding to a lift in the profile of this area leading up to the Tea House on the Lake.

The next revamp project area has been the *Hosta* beds in the bush area between the Tea House and the Fernery and Display Houses. Here the Hostas were lifted and the soil was composted before the existing plants were replanted, together with eleven varieties new to the collection. The Taro patch in this area has also been composted to increase its vigour and lushness, and five new species have been added to this collection. This revamp should lead to more dramatic and interesting foliage effects being observed on the way to the Fernery.

Lastly, the borders at the Fred Parker Lawn have been made over to increase the amount of colour and interest found in the gardens around this space. In the northern border, the path that used to bisect the garden has been removed which has provided space for several new perennials. The amount of bedding has also been increased by shifting some of the existing plants around to make space. The range of perennials planted includes varieties of *Penstemon*, *Geranium*, *Eryngium*, *Lobelia*, and *Centaurea*. This should result in a dramatic increase in the amount of flower colour displayed in this garden during the peak visitor season.



In the south border, the Ligularias have been relocated to the back and side of the border under the Japanese Maple (*Acer palmatum*). This has provided space to reintroduce some bedding to the border so there will be colour on all sides of the lawn. A plant called *Trachystemon* 'Ayerlies Gold' will be used, if it can be sourced, for the remaining gap in the middle of the south border. Its golden foliage will lift this shaded area under the Maple canopy.

From the Fernery



Collospermum hastatum flowers may provide a previously unrecorded food source for Vespula wasps

David Medway



Photo David Medway

Vespula wasps were breeding in Pukekura Park by 1952 (Taranaki Herald 13/2/1952, p.2; 16/2/1952, p.2). Those wasps were almost certainly German Wasps (Vespula germanica) because Common Wasps (Vespula vulgaris) did not become established in New Zealand until the 1970s. Vespula wasps are now abundant in Pukekura Park and Brooklands ("the Park") during summer and autumn, where they feed on a variety of foods including floral nectar from many introduced and native New Zealand plants.

Collospermum hastatum, also known as Kahakaha or Perching Lily, is an endemic New Zealand member of the Asteliaceae family. It occurs, mainly as an epiphyte on trees, in lowland areas of the North Island and northern South Island. Plants can grow into large and very heavy masses which are frequently perched on branches high up in tall trees. Those masses sometimes fall to the ground and continue to grow there. Collospermum hastatum is dioecious, having male and female flowers on separate plants. The flowers appear in panicles in January and February. Collospermum hastatum is very common throughout the Park where it grows on numerous trees, both native and introduced.

The pistil of a flower is an integrated organ comprising stigma, style and ovary. Stigmas are the pollen-receptive portion. Mature stigmas produce secretions (stigmatic exudate) favourable for the retention and germination of pollen. Stigmatic exudates contain lipids, carbohydrates, proteins, and water. The amount, composition, and duration of stigmatic exudate varies between species. In

addition to its primary role, stigmatic exudation may function as a nutritive source for floral visitors such as flies and bees. As far as I am aware, the amount, composition, and duration of the stigmatic exudate of *Collospermum hastatum* has never been studied.

On 7/2/2011, I noticed numerous *Vespula* wasps visiting the female flowers of a large clump of terrestrial *Collospermum hastatum* in the Park. Wasps visited the flowers over the next several days, but then stopped doing so. Elsewhere in the Park, several *Vespula* wasps began visiting the female flowers of an epiphytic *Collospermum hastatum* when those flowers opened. Wasps also visited those flowers over the next several days, but then stopped doing so. When on the flower panicles, the wasps moved quickly over many flowers and fed rapidly. They seemed to feed only on the upper portions of the flowers, which were visibly moist. The wasps must have stopped visiting the flowers because the food source they provided was no longer available. All of the many wasps I identified from pertinent characters visible in my photographs were *Vespula vulgaris*. They were the only insects I saw feeding at female *Collospermum hastatum* flowers.

During my observations I saw several honeybees (*Apis mellifera*) collecting pollen from male *Collospermum hastatum* flowers, but I saw only two wasps visit those flowers. This suggests that male *Collospermum hastatum* flowers may not provide wasps with a sufficiently attractive food source. On the other hand, as mentioned, I saw numerous wasps visit female *Collospermum hastatum* flowers. This visitation coincided with the period when those flowers would have been producing stigmatic exudate. The wasps depicted in the accompanying photographs may have been feeding on those secretions. It is possible that wasps are attracted to female *Collospermum hastatum* flowers because of the stigmatic exudate they provide at this time.

This is the first published record of *Vespula* wasps feeding at *Collospermum hastatum* flowers. It may also be the first published record of *Vespula* wasps feeding on the stigmatic exudate of any flower.



Common Wasps feeding at female *Collospermum hastatum* flowers.

Pukekura Park, February 2011.





Photos David Medway