

**BOTANICAL INVENTORY OF THE  
MUNGALLA COASTAL HABITATS**

**ACTFR Report No. 08/15**

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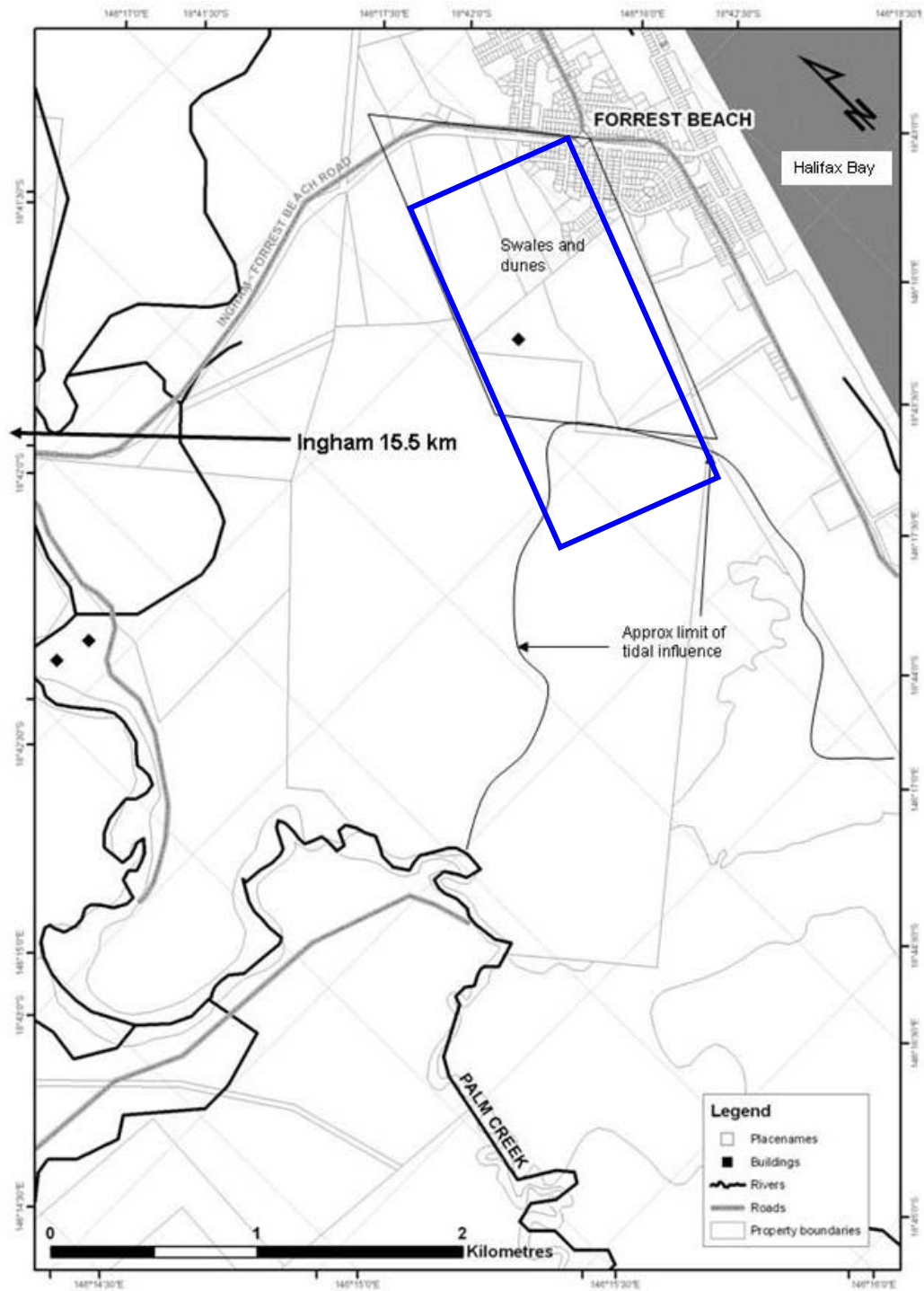
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## **BOTANICAL INVENTORY OF THE MUNGALLA COASTAL HABITATS**

### **Introduction**

Mungalla is a ~5,000 ha coastal grazing property that is situated about 15 km east of Ingham, Queensland. The property contains extensive coastal wetlands that have very high habitat values for bird and fish life and has significant development of sand dunes, tidal swamps and other coastal wetlands (Figure 1). These are among the last substantial area of wetlands remaining in the region as most other wetlands have been lost or isolated by intensive sugar cane development. Mungalla has been used historically for cattle and horses and is now owned and managed by Nywaigi traditional owners. Nywaigi traditional owners have a long history of involvement with management of Mungalla and were successful in purchasing the property in 2001. Due to its location at the bottom of the catchment, Mungalla is impacted by catchment issues above the property as well as impacts from long-term management on the property. In particular, the introduction of exotic pasture grasses combined with increased nutrient availability from adjacent intensive cropping has resulted in significant infestations that are impacting on habitat, and changing hydrology, even within tidal areas at the downstream part of the property. The property is a grazing enterprise but requires better infrastructure to manage the environment such as controlling when and where cattle feed and to avoid sensitive coastal areas such as sand dunes and swales, and salt pans.

This report facilitates one of the requirements associated with the Envirofund activities associated with Mungalla: namely to provide a botanical inventory of plants primarily in the dunes and swale area, but also to include the wetland margins, and to enhance knowledge of traditional owners of what is on site and how best to relate them to visitors.



**Figure 1.** Map of Mungalla and the location of the dunes and swales area, and the approximate limit of tidal influence. Approximate extent of the study area is indicated by the blue line.



**Figure 2**

**Top left:** The dunes and swales area on consolidated sands.

**Top right:** The wetlands with an infestation of *Hymenachne amplexicaulis*, fringed by Paper Barks.

**Left:** Wetland margins with infestations of *Salvinia* and Water Hyacinth.

## Botanical Inventory

This inventory records the vegetation in the Mungalla Coastal Habitats Management area. The area includes a series of elevated dunes and associated swales on consolidated sands, in the north, that descend into permanent freshwater wetlands in the south (Figure 2). The transition between the wetlands and the drier habitats is abrupt. The area has been subjected to cattle grazing since the 1870s, and much of the elevated area has been previously cleared and much of the present vegetation represents regeneration. Although hydrology of the wetlands has been impacted by the construction of walls, and water is impounded for greater times than in natural systems, there is important habitat values associated with them if the present degradation can be controlled.

There are significant infestations of major wetland weeds such as *Hymenachne amplexicaulis*, Para Grass (*Urochloa mutica*), Water Hyacinth

(*Eichhornia crassipes*) and *Salvinia* (*Salvinia molesta*). The dunes and swales consist of an overstory of *Acacia* species and *Alphitonia excelsa*, and with a dense understory of herb, shrubs and grasses. The impacts of fires are evident. Major weeds in the dunes and swales area include *Lantana* (*Lantana camara*) and *Hyptis* (*Hyptis suaveolens*). The wetland margins are dominated by Paper barks (*Melaleuca leucadendra*), and the wetlands by the major weeds as listed above. Of special interest is the occurrence of the Endangered Northern Weeping Cabbage Palm (*Livistona drudei*) on the wetland margins, and in some drainage lines where soil moisture levels remain permanently high. Some of the plantings associated with the original homestead in the Cassady Archeological Area may be the earliest introductions of *Mango* (*Mangifera indica*) and *Coconuts* (*Cocos nucifera*) in northern Queensland.

**Methodology:** The botanical inventory surveys at Mungalla were conducted in early September 2008. Informal transects were walked across most of the area and plant species were identified and photographed. Species that could not be identified *in situ* were later identified using the resources of the James Cook University Tropical Biology Herbarium (JCT), the ACTFR field herbarium, and relevant literature. Plant nomenclature follows that in Bostock, D. & Holland, A.E. (2007), *Census of the Queensland Flora*, EPA, Brisbane.

**Results:** The plant species recorded in Mungalla are arranged in the following plant functional types:

- Ferns (1 spp.), herbs (22 spp.) and grasses (7 spp.)
- Shrubs (21 spp.)
- Trees (30 spp.)
- Vines and scramblers (18 spp.)

Data for each species include the plant family, common name, distribution, and notes.

## FERNS, HERBS AND GRASSES

*Ageratum conzyoides*

ASTERACEAE

**Billy Goat Weed**

This herb is a native of Brazil, but has naturalised across much of the warmer areas of the world. In Brazil, it is reported to have many medicinal uses by the indigenous peoples. Although a weed, it is not considered to have a major detrimental effect on native vegetation.



*Bacopa floribunda*

SCROPHULARIACEAE

A diminutive common native herb associated with moist areas, especially wetland margins and riparian areas.



*Blechnum* sp.

BLECHNACEAE

**Blechnum Fern**

A native fern that often colonises disturbed areas, especially in sandy soils. In Mungalla, recorded from the dunes and swales area in open situations.



*Brachyachne convergens*

POACEAE

**Native Couch**

This is a native grass with thin, pale green leaves. The flowers are in upright inflorescences with 3-5 finger-like branches. This species is common in Mungalla near the 'Caravans'. It is a useful stock fodder.



*Catharanthus roseus*

APOCYNACEAE

**Pink Perriwinkle**

This is a native of Madagascar, and is now distributed throughout warmer areas of the world. It is a minor weed, naturalizing from a garden plants. Flowers can be white, pink or mauve.



*Centella asiatica*

APIACEAE

**Pennywort**

This is a native herb that occurs in moist areas. In Mungalla, it was recorded from the wetland margins. Flowers are very cryptic and small, and occur on the stems at soil level. Leaves are used as 'greens' in Asian cooking. There are many medicinal uses of this species, ranging from an antibacterial to relief of high blood pressure. It is widespread across northern Australia and much of tropical Asia.



*Chamaecrista rotundifolia*

CAESALPINIACEAE

This is an introduced pasture forage plant recorded in the dunes and swales area. It is a prostrate trailing plant, with leaflets in pairs and yellow, pea-like flowers. It is native to the Americas.



*Crinum pedunculatum*

AMARYLLIDACEAE

**Crinum**

This is a native *Crinum*, occurring in moist coastal habitats. In Mungalla, it was recorded in the wetland margins, in moist seasonally inundated soils.



*Crotalaria goreensis*

FABACEAE

**Rattle Pod**

This is a widespread native species occurring in open situations. In Mungalla, it was recorded in the dunes and swales area, growing among grasses and small shrubs. The flowers are yellow, and the fruit are small erect green pods.





*Cymbidium madidum*

ORCHIDACEAE

**Native Cymbidium**

This native orchid was observed growing on the lower trunk of an *Acacia crassicarpa* in the dunes and swales area. The species is usually found in rainforest, but also in sheltered areas in drier locations. The green flowers are produced in pendulous inflorescences.



*Cynodon dactylon*

POACEAE

**Couch Grass**

This is a native grass that often occurs in disturbed sites. It is most abundant in the riparian zone of streams and rivers. In Mungalla, it was recorded throughout the area.



*Cyperus* sp.

CYPERACEAE

**Sedge**

This species was recorded in the wetland margins where seasonal inundation occurs. It is a large clumping sedge.



*Dendrobium canaliculatum*

ORCHIDACEAE

**Onion Orchid**

This native orchid was observed growing on paper barks in the wetland margin area. The bulbs resemble onions and the white/purple flowers are produced on straight, erect spikes.



*Dianella caerulea*

HEMEROCALLIDACEAE

**Dianella**

This species was recorded in all areas in Mungalla. Those in open drier sites were densely clumping whilst those in sheltered moist sites were often a single stem with only a few basal shoots. The leaves are arranged in one plane. The flowers are blue to white, and borne on erect spikes.



*Eichhornia crassipes*

PONTEDERIACEAE

**Water Hyacinth**

This is a major water weed that infests freshwater water bodies throughout the world's tropical areas. It is a free-floating plant, with a swollen base and spoon-like leaves. The mauve flowers are produced on small erect spikes. It is a native of the Amazon Basin where natural predators prevent it from becoming a weed there.



*Eragrostis* sp.

POACEAE

**Love Grass**

This is a native grass of open sites. The flowers spikelets are produced in a single plane, with many flowers in each spikelet. In Mungalla, it was recorded in the dune and swales area.



*Euphorbia heterophylla*

EUPHORBIACEAE

**Painted Euphorbia**

This is a garden escape that has become a minor weed in Australia. It is a native of Mexico. In Mungalla, it was recorded in the dunes and swales area. The sap is toxic, and may cause severe dermatitis if contact is made with skin.



*Evolvulus alsinoides*

CONVOLVULACEAE

This is a native prostrate herb, occurring in open situations. In Mungalla, it was recorded in areas along roadways. Single flowers are borne on thin spikes, and are pale blue, and sometimes white.



*Heteropogon contortus*

Poaceae

**Small Spear Grass**

This is a common native grass distinguished by the twisted wiry flower spikelets. It was recorded in the dunes and swales area.



*Hymenachne amplexicaulis*

POACEAE

**Hymenachne**

This is a major weed grass that invades freshwater water bodies. It blocks waterways, impacts on drainage and fish habitats, and changes the natural ecology of the area. Flowers are produced in spikes and the leaf blade encircles the stem at its base. This species is native to Central America.



*Lepironia articulata*

CYPERACEAE

This is a native wetland plant that occurs in coastal areas of Queensland. The stems are rhizomatous, and leaves are reduced to very small sheathing scales that are not obvious. Flowers are produced on one side of the stem towards the top.



*Lomandra longifolia*

LAXMANNIACEAE

**Long-leaved Mat Rush**

This common native species has long narrow tufted leaves; the inflorescence is a spike emerging from the base. In Mungalla, it was observed in the dunes and swales area in sheltered sites.



*Megathrysus maximus*

POACEAE

**Guinea Grass**

This is an introduced tall clumping grass that occurs throughout Mungalla, but most common in the dunes and swales area. The inflorescence is an open panicle. It is native to Guinea.

No image

*Melinis repens*

POACEAE

**Red Natal Grass**

This is an introduced grass, occurring throughout Mungalla in open sites, usually associated with disturbed areas or roadsides. The flowers are in an open panicle and reddish. It is a native to southern Africa.



*Mitracarpus hirtus*

Rubiaceae

This is a herb native to the Americas. In Mungalla, it was recorded in the dunes and swales area, in open sites associated with disturbance and roadsides.



*Panicum decompositum*

POACEAE

This is a common native grass recorded in the dunes and swales area.



*Pterocaulon serrulatum*

ASTERACEAE

**Ragweed**

This is a native herb usually found in a variety of habitats. In Mungalla it was recorded in the wetland margins, as a roadside plant. The leaves are decurrent with basal 'wings' with serrate margins, and have a woolly tomentum. The flowers are crowded into round heads.



*Richardia brasiliensis*

RUBIACEAE

This is an introduced herb from Brazil. In Mungalla, it was recorded from the dunes and swales area, associated with disturbance.



*Salvinia molesta*

SALVINIACEAE

**Salvinia**

This is a significant water weed that infests freshwater water bodies. It is a native of South America. It is free floating and forms dense mats across the surface of the water. As this plant is a fern it reproduces from spores. Reproduction also occurs from stem fragments, and is therefore difficult to eradicate.



*Sansevieria trifasciata*

DRACAENACEAE

**Mother-in-law's tongue**

This is a garden escape that has become a minor weed in parts of Australia. It is a native of tropical Africa. This plant spreads by underground rhizomes



*Stachytarpheta jamaicensis*

VERBENACEAE

**Snake Weed**

This is an introduced minor weed, native to the Caribbean area. The leaves are bright green to purplish, and the blue flowers are borne on erect spikes. In Mungalla, it was observed in all areas.



*Stenochlaena palustris*

BLECHNACEAE

This is a large native climbing fern that was observed in the wetland margins.

No image

*Tridax procumbens*

ASTERACEAE

**Tridax Daisy**

This is an introduced herb associated with disturbance. It is native to Central America. It is a decumbent plant that roots at the nodes. Flower heads are borne on long peduncles. The ray florets are white or cream, and the central flowers are yellow.



*Urochloa mutica*

POACEAE

**Para Grass**

This is an introduced pasture grass that has become invasive of wetlands. It spreads by stolons, and roots at the nodes. It is native to the Americas. In waterways, it reduces flow, out-competes native plants, and alters the ecology of an area. It can reproduce by stem fragments and is difficult to control.



**SHRUBS***Aeschynomene indica*

FABACEAE

**Budda Pea**

This is a native shrub that tends to over populate with disturbance. It was observed in the wetland margin area. Although mostly an annual, some individuals can persist longer. The pea-like flowers are yellow, and the pods are flat to about 5 cm long.

*Asclepias curassavica*

APOCYNACEAE

**Scarlet Milk Weed**

This is a weed that is native to tropical America. It was originally a garden plant, but is now naturalized over much of tropical Australia. The leaves are petiolate, and the flowers orange-red. The fruits are long pods that split open to reveal seeds embedded in thin cotton-like fibres that allow the seeds to be transported by wind.

*Breynia cernua*

PHYLLANTHACEAE

**Coffee Bush**

This is a native shrub most often found in sheltered moist situations. In Mungalla, it was observed in the dunes and swales area as an understory shrub. The leaves have lateral veins that form distinctive loops, and the fruit matures to red through to black.

*Clerodendrum inerme*

LAMIACEAE

This is a native shrub that occurs in coastal areas. In Mungalla, it was recorded on the wetland margins where it was a common plant. The stems are arching; the flowers are produced on the stems apices. The flowers have white petals with purple stamens. It can be distinguished from the following species by the absence of the colourful calyx, and the shorter floral 'tube'.





*Clerodendrum floribundum*

LAMIACEAE

**Lollybush**

This is a native shrub or small tree with erect stems, growing in open situations. In Mungalla, it was recorded in the dunes and swales area. The flowers are white, with a long floral 'tube', and purple stamens. The calyx expands into a red structure as the fruit matures.



*Crotalaria pallida*

FABACEAE

**Streaked Rattle Pod**

This is an introduced species that only occasionally reaches weed proportions. It is native to Brazil. The leaves are tri-foliolate, and the flowers yellow, streaked with reddish-brown lines. It is found throughout Mungalla, but there is a large population adjacent to the wetland margin in a drier, open area.



*Crotalaria verrucosa*

FABACEAE

This is a native species occurring in open areas in a variety of habitats. In Mungalla, it was observed in the dunes and swales area as an understory plant. The leaves are simple; flowers are large with purple petals.



*Exocarpos latifolius*

SANTALACEAE

**Native Cherry**

This is a native shrub usually found in sheltered places. It is parasitic on the roots of adjacent trees. The leaves are thick with widely spaced veins; the flowers are very small, and the fruit is borne on a succulent, orange-red pedicel.



*Ficus opposita*

MORACEAE

**Sandpaper Fig**

This is a native shrub to small tree, usually associated with riparian situations but otherwise found in a variety of habitats. The leaves are opposite on the stem, and have a rough sandpapery texture. The fruits are the size of a marble, and purple when mature.



*Hyptis suaveolens*

LAMIACEAE

**Hyptis**

This is a major weed of moist tropical areas in Australia. The leaves have a strong but not unpleasant odour when crushed. The leaves have crenate margins, and the flowers have blue to mauve petals. This species is capable of covering large areas, especially associated with disturbance. In Mungalla, it was observed in all areas.



*Indigofera hirsuta*

FABACEAE

**Hairy Indigo**

This is a native shrub that occurs in open situations in tropical areas in Queensland. The leaves are pinnate with up to seven leaflets; the flowers are reddish, and the curved pods are covered in spreading hairs. In Mungalla, plants were observed in the dunes and swales area.



*Lantana camara*

VERBENACEAE

**Lantana**

This is a major weed species that is able to infest native forests and out-compete native plants. It is native to South America, and was first introduced into Australia as a garden plant. The fragile stems bare small prickles; the leaf margins are crenate-serrulate, the flowers borne in heads. Flower colour ranges from white to yellow to red.



*Nymphaea gigantea*

NYMPHAEACEAE

**Giant Water Lily**

This is a native water lily, occurring in tropical areas in Australia. The leaves can be up to 60 cm across, with toothed margins; flowers are borne on stout erect peduncles up to 50 cm above the water surface; flower colour ranges from white to blue to dark purple. In Mungalla, this species was observed in open water.

*Persicaria attenuata*

POLYGONACEAE

**Smartweed**

This is a native freshwater plant that is associated with lagoons, swamps and creeks. In Mungalla, it was observed on the wetland margins. The leaves are densely silky hairy on both surfaces. The inflorescences are spikes or panicles, and the smallish flowers have white to pale pink petals.

*Pogonolobus reticulatus*

RUBIACEAE

This is a native shrub that is widespread over tropical Australia in various habitats. In Mungalla, it was observed in the dunes and swales area. The ovate leaves are leathery with prominent veins. The flowers are small with white petals, and the fruit a black berry about 1 cm diameter. The crushed roots are used as a source of strong yellow dye by indigenous people.

*Sida sp.*

MALVACEAE

This is a native shrub occurring in many habitats in tropical Australia. In Mungalla, it was observed in the dunes and swales area. The leaves have indented margins. The flowers are borne in the leaf axils, and have spreading light to bright yellow petals.



*Solanum mauritianum*

SOLANACEAE

**Wild Tobacco**

This is an introduced species that has become a minor weed in some areas. In Mungalla, it was observed in all areas, but with a significant population in the dunes and swales area in a disturbed site near the pig trap. The large leaves have scalloped margins. Flowers have white petals, the fruit are green to dull yellow berries. It is native to South America. This is a poisonous plant, and handling it can cause irritation and nausea.

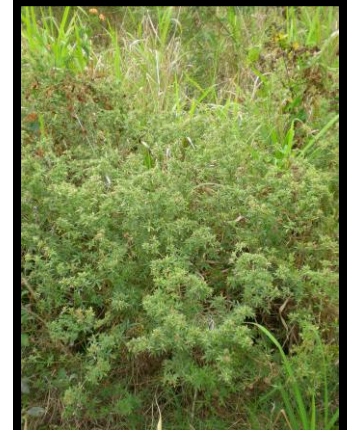


*Stylosanthes scabra*

FABACEAE

**Stylo**

This is an introduced fodder plant that has spread into many areas. The leaves have three leaflets and the pea-like flowers have yellow petals. In Mungalla, this species was observed in the dunes and swales area.



*Triumfetta rhomboidea*

SPARRMANNIACEAE

**Chinese Burr**

This is a naturalized species that is native to Asia. It can reach dense infestations in some areas, especially disturbed sites. In Mungalla, it was observed as scattered plants in the dunes and swales area. Leaves can be variable but most often are three lobed at the apex. Small yellow flowers are produced in the leaf axils. The fruit is a dehiscent capsule with a spiny outer surface.



*Urena lobata*

MALVACEAE

**Urena Burr**

This is a naturalised species that resembles the previous species in habit and leaf morphology. However, this species has large pink to purple, hibiscus-type flowers. The fruit is a spiny capsule. It is native to tropical Asia.



*Waltheria indica*

BYTTNERIACEAE

This is a native shrub with soft hairy leaves that have prominent veins on the lower surface. The small yellow flowers are borne in the leaf axils. The fruits are a small capsule. In Mungalla, this species was observed in the dunes and swales area.



## TREES

*Acacia crassicarpa*

MIMOSACEAE

**Thick-podded Salwood**

This native wattle is most common in the drier parts of the dunes and swales area. Flowers are in spikes; pods are moderately spiraled, woody and broad, with prominent yellowish veins. This species is widely distributed in northern Queensland through Torres Strait to New Guinea.



*Acacia flavescens*

MIMOSACEAE

**Red Wattle**

This native wattle is usually a small tree with furrowed shaggy bark. Flowers are in heads, and pods are flat. Phyllodes have three glands along the upper margin and one at the base of the leaf. Most common in the lower areas where there is some retained moisture.



*Acacia holosericea*

MIMOSACEAE

This is a shrub or tree wattle, occurring in most habitats except the very wettest. Phyllodes have a gland at the apex, and are mostly covered in downy hairs; flowers are in spikes. In Mungalla, this species occurs in all areas.



*Acacia mangium*

MIMOSACEAE

**Hickory Wattle, Black Wattle**

This tree wattle occurs on the margins of the wetlands and nearby areas, where soil moisture levels are high. Phyllodes have a gland at the base. Flowers are white to cream, in spikes, and pods are strongly spiraled.



*Alphitonia excelsa*

RHAMNACEAE

**Red Ash, Soap Tree**

This is among the dominant plants in the dunes and swales area. At open sites, it can flower and fruit when small, but can grow into a large tree in more sheltered sites. The backs of the leaves are white to grey, and the round fruits have a 'cap' at the base.



*Araucaria cunninghamii*

ARUACARIACEAE

**Hoop Pine**

Hoop pines were planted around the old Mungalla Homestead and have grown to very large trees. These may be among the oldest surviving cultivated plants in the Ingham area. There is some naturalization of seedlings but these do not persist beyond a sapling size.



*Canarium australicum*

BURSERACEAE

**Canarium**

A moderate tree of the dunes and swales area. Leaves are pinnate and the fruits resemble olives in shape and colour. The seed is edible.



*Cocos nucifera*

ARECACEAE

**Coconut Palm**

The coconut palms planted near the old Mungalla Homestead are among the tallest in the Ingham area. Their height suggests that they are among the oldest surviving coconuts in north Queensland.



*Commersonia bartramia*

BYTTNERIACEAE

A moderate tree associated with the moist areas to the north of the dunes and swales area. Flowers profusely in summer.

No image

*Corymbia tessellaris*

MYRTACEAE

**Moreton Bay Ash**

Moreton Bay Ash are scattered throughout the dunes and swales area. The tree is recognized by the tessellated bark in the lower trunk.



*Cupaniopsis anacardioides*

SAPINDACEAE

**Tuckeroo**

An uncommon tree in the dunes and swales area, occurring in sheltered sites. The leaves are pinnate and the fruits are red capsules that open to reveal black seeds. This species could be confused with *Canarium australianum* in the juvenile state.



*Dillenia alata*

DILLENACEAE

**Red Beech**

A moderate tree on the wetland margins and moist sites. Leaves have winged petioles; flowers have bright yellow petals that open broadly; fruits are red berries enclosed in a five-parted structure.





*Glochidion* sp.

PHYLLANTHACEAE

A small tree associated with the wetland margins. Leaves are dark green, and the five-parted fruits are solitary on the twigs.



*Grevillea pteridifolia*

PROTEACEAE

**Toothbrush Grevillea**

This species occurs on the sandy ridges in well drained sites. The leaves resemble fine fern leaves; the flowers are produced on thickish stems, and resemble long-bristled toothbrushes.



*Hibiscus tiliaceus*

MALVACEAE

**Cotton Tree**

This is a moderate-sized tree that occurs on the wetland margins. The leaves have a purplish tone, and are heart-shaped. The flowers are yellow and are hibiscus-like in form.



*Jagera pseudorhus*

SAPINDACEAE

**Foam Bark**

This moderate tree occurs in the dunes and swales area, in sheltered sites. The leaves are pinnate, and the bark is soft and 'puffy'. The small flowers are produced in inflorescences among the leaves.



*Livistona drudei*

ARECACEAE

**Northern Weeping Cabbage Palm**

The Northern Weeping Cabbage Palm is an endangered species confined to the coastal areas between Black River and Kurrimine Beach. It can grow to about 25 m tall, with a dense crown of fan-shaped leaves. The fruit are small, round, and black at maturity, and about the size of a marble. As well as a few adult palms, there are a number of seedlings and juveniles occurring in the wetland margins.



*Lophostemon suaveolens*

MYRTACEAE

**Swamp Mahogany**

This is a moderate tree associated with wetland margins. The bark is papery, the leaves tough, and the flowers look like small *Eucalyptus* flowers.



*Macaranga tanarius*

EUPHORBIACEAE

**Blush Macaranga**

This is a pioneer species occurring in some disturbed sites. Distinguished by large heart-shaped leaves, but may be confused with *Hibiscus tiliaceus*, but flowers in this species are small and greenish.

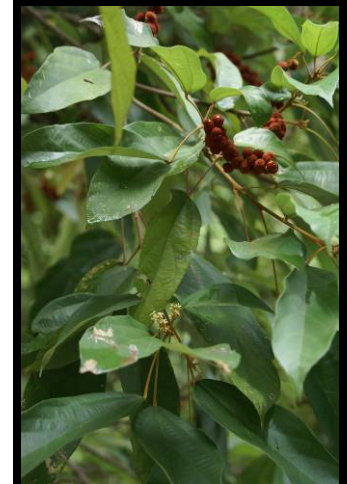
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*Mallotus philippensis*

EUPHORBIACEAE

**Red Kamala**

This is a moderate tree occurring in the dunes and swales area, growing in sheltered to semi-open sites. The leaves are grey on their lower side, and the fruit are small rough berries that turn dark red at maturity.



*Mangifera indica*

ANACARDIACEAE

**Mango**

Avenues of mangoes survive near the old Mungalla Homestead site. These are among the largest surviving mango trees in the Ingham area.



*Melaleuca dealbata*

MYRTACEAE

**Paper Bark**

This is a large paper bark tree associated with semi-moist areas between the dunes and swales, and the wetlands. The new leaves have a distinctive grey felt covering, but may be confused with *Melaleuca leucadendra* which is otherwise confined to the wetland margins.

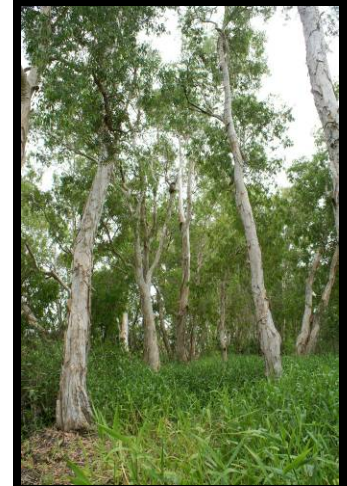


*Melaleuca leucadendra*

MYRTACEAE

**Paper Bark**

This species is associated with the wetland margins and is the dominant plant in that area. Orchids and other epiphytes may occur on this species. The flowers are cream-green bottle brushes that attract native bees and have a distinctive 'burnt honey' smell.



*Pandanus spiralis*

PANDANACEAE

**Pandanus**

This species is most often associated with moist areas, but may also occur in the dunes and swales area as scattered juveniles. The leaves are used in weaving and the fruit are edible although it takes some effort to extract the nutritious portion.



*Planchonia careya*

LECYTHIDACEAE

**Cocky Apple**

This species occurs mostly in sandy, well-drained open sites in the dunes and swales area. The leaves are greyish and the flowers open at night and look like shaving brushes. The fruit is a favoured food of parrots and cockatoos.



*Ravenala madagascariensis*

STRELITZIACEAE

Traveller's Palm

This is a garden escape of which a single individual was recorded in the wetland margin. In cultivation, it is a tall plant with 'banana-like' leaves that are produced in a large fan arrangement.



*Rhizophora stylosa*

RHIZOPHORACEAE

This is a mangrove plant that tolerates freshwater, and occurs on the margins of the wetlands. It is distinguished by prop roots and long green pointed fruits.

No image

*Terminalia muelleri*

COMBRETACEAE

This is a moderate tree that occurs in the dunes and swales area. The leaves are clustered on the twig tips; the fruit are small winged capsules that are a favoured food of cockatoos.



*Trema orientalis*

ULMACEAE

This is a soft-wooded pioneer species that occurs in disturbed sites in the dunes and swales area. The small black fruits are produced on the twigs between the leaves.



## VINES AND SCRAMBLERS

*Argyreia nervosa*

CONVOLVULACEAE

**Elephant Creeper, Woolly Morning Glory**

This is an introduced plant that is native to the Indian subcontinent. In some areas, it has become an invasive weed that can climb over vegetation and cause degradation. In north Queensland it is a nuisance weed that tends to be short-lived.



*Canavalia sp.*

FABACEAE

**Jack Bean**

This scrambling vine occurs on the wetland margins where it is anchored in moist soils that may be seasonally inundated. The flowers open only partially, and the pod is a flat bean about 15 cm long. Some *Canavalia* species are endangered.



*Cassytha filiformis*

LAURACEAE

**Dodder Vine**

This leafless parasitic twiner resembles yellow wires encircling tree branches and trailing across grass and shrubs. It is attached by small suckers. The small yellow flowers are borne along the stems, and fruits are pinkish and edible.



*Cayratia trifolia*

VITACEAE

This is a small climber that attaches by tendrils, and has five-lobed leaves. The flowers are inconspicuous.

No image

*Cryptostegia grandiflora*

APOCYNACEAE

**Rubber Vine**

This is a major weed in drier areas and was recorded as a few juvenile individuals on the wetland margins. It is an opportunistic species whose seeds are widely disperse by wind.

No image

*Flagellaria indica*

FLAGELLARIACEAE

**Supple Jack**

This is a strong climber that attaches by tendrils on the ends of the leaves. Once ascended, it tends to flop down and trail across the forest floor before climbing again. It was recorded in both the dunes and swales area, and the wetland margins, but develops best in sheltered moist areas.



*Ipomoea* sp.

CONVOLVULACEAE

**Morning Glory**

This is a small climber occurring in the dunes and swales area, in open sites. The plant trails over shrubs and grasses, and twines around thin stems.



*Jasminum didymum* subsp.  
*racemosum*

OLEACEAE

**Jasmine**

This is a moderate climber that trails and twines through shrubs and small trees, and may also be free-standing as a scrambling shrub, in both the dunes and swales area, and the wetland margins. Leaves have three leaflets. The flowers are small, white with five petals, and pleasantly perfumed. The fruit is black.



*Ludwigia adscendens*

ONAGRACEAE

This is a native water vine that tends to proliferate in disturbed sites. It is confined to open sites in shallow water, and the stems attach by roots at nodes into mud and soil just under the water surface. The flowers are yellow with five petals.



*Macropodium atropurpureum*

FABACEAE

**Siratro**

This vine is native to the Americas and may become an invasive plant in some areas. At Mungalla it occurs in disturbed sites and scrambles over shrubs and grasses. Flowers are dark purple, and pods are long and narrow.



*Mimosa pudica*

MIMOSACEAE

**Sensitive weed**

Sensitive weed is native to the Americas and is common throughout Mungalla, occurring in open sites among grasses and bare ground.



*Parsonsia lanceolata*

APOCYNACEAE

This is a native vine that was recorded climbing over small trees in the wetland margins. It most often occurs in sheltered sites with moist soils. Sap is watery. Flowers are in clusters; fruits are paired, to about 10 cm long.



*Passiflora* sp. cultivar

PASSIFLORACEAE

Plants of the cultivated Passion fruit were recorded in the dunes and swales area.

No image



*Passiflora foetida*

PASSIFLORACEAE

**Stinking Passion Flower**

This is a native vine that may become a minor weed in disturbed areas. It occurs throughout Mungalla, but mainly as scattered individuals in sheltered sites. The fruit can be extremely bitter if not fully-ripened. Leaves are three-lobed, and tendrils tightly coiled. Green persistent bracts surround the fruit.



*Smilax australis*

SMILACACEAE

**Sarsaparilla**

This is one of the native grapes, and occurs throughout Mungalla in sheltered sites. The stems are wiry, and twine and scramble over shrubs and small trees. There are prickles along the stems. Flowers are creamy coloured, and the fruit is round and black.



*Solanum nigrum*

SOLANACEAE

**Black Night Shade**

This is a vine native to Eurasia, and occurs sporadically throughout Mungalla. The vine twines through shrubs and small trees, by tendrils. The fruit are small black berries.



*Stephania japonica*

MENISPERMACEAE

**Tape Vine**

This is a native vine that occurs throughout Mungalla, but is most common in open sites where there is some persistent soil moisture. The leaves are peltate, the white flowers are in dense clusters, and the fruit is red.

