



Favourite Native Plants - 2011



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Made on the New Zealand Plant Conservation Network website – www.nzpcn.org.nz

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Introduction

The annual vote to find New Zealand's favourite plant is over for 2011 and the conclusion reached is that everyone loves native plants!

The winning species, bamboo rush (*Sporadanthus ferrugineus*) highlights many of the issues surrounding our native plants and ecosystems. Relatively new to science, this handsome and impressively tall rush is now only found in the Waikato region because 95% of its wetland habitat has been destroyed.

As Niels says in his comment "An iconic plant hidden from the eyes of most people unless you are prepared to brave the swamps of the Hauraki".

There was unprecedented voting this year with thousands of votes cast for more than 100 species by plant enthusiasts from New Zealand and around the world.

The top ten ranked plants for 2011 range from lowly liverworts to the lofty kauri and include many rare and threatened species. Some old favourites returned, such as pohutakawa which has previously won the vote twice. Less well-known species also emerged, such as the gorgeous New Zealand calceolaria (*Jovellana sinclairii*) whose showy bell-like flowers mean it is often mistaken for an exotic.

The top 10 are as follows:

1. *Sporadanthus ferrugineus* (Bamboo Rush, Giant wire rush)
2. *Agathis australis* (kauri, kauri pine)
3. *Jovellana sinclairii* (NZ calceolaria)
4. *Ipomoea pes-caprae* subsp. *brasiliensis* (Beach morning glory,)
5. *Pittosporum kirkii* (Kirks kohuhu, thick-leaved kohukohu)
6. *Urtica ferox* (Ongaonga, tree nettle)
7. *Metrosideros excelsa* (Pohutukawa, New Zealand Christmas tree)
8. *Frullania wairua* (Liverwort)
9. *Lejeunea hawaikiana* (Liverwort)
10. *Pittosporum serpentinum* (Surville Cliffs kohuhu)

Read all the fantastic comments about the species posted on the Network website - www.nzpcn.org.nz

Cover photo taken at Kopuatai wetland by Peter de Lange.

Agathis australis

Common Name(s):

kauri, kauri pine

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Occurring from Te Pahi south to Pukanui (near Kawhia) in the West and in the northern Kaimai Ranges in the East. Over much of its former range it has been heavily logged, such that the best stands now only occur in the Coromandel and Waitakere Ranges, on Great and little Barrier Islands, and in Northland at Waipoua, Trounson, Omahuta, Puketi, Herekino, Warawara and Radar Bush forests. Despite its northerly limit this species has been successfully grown as far south as Oban, Stewart Island, and seedlings have been observed near planted adults in Wellington, Nelson and Christchurch.

Habitat:

The species forms its own forest type - Kauri forest - which is typified by dense canopies of kauri. Common associates in the northern half of its range may include taraire (*Beilschmiedia tarairi* (A.Cunn.) Benth. & Hook.f. ex Kirk), northern rata (*Metrosideros robusta* A.Cunn.), rimu (*Dacrydium cupressinum* Lamb.), towai (*Weinmannia silvicola* Sol. ex A.Cunn.), and makamaka (*Ackama rosifolia* A.Cunn.). Historically kauri forest seems to have been best developed on river terraces, coastal plains and the generally flat flood basalts of the Tangihua complex, which make the dominant geology of Waipoua, Omahuta, Puketi, Trounson. Some people believe that the hill and range occurrences, which is where most stands can now be seen, are relictual stands not truly favoured by the species, but merely examples of where it can grow, and of course locations where it was usually left because log extraction was less feasible.

Features:

Stout, monoecious forest tree 30-60 m tall, with trunk 3-4(-7) m diam. Trunk typically devoid of branches for majority of its height. Trees at ricker development stage have a columnar growth form with trunk scarcely free of branches. As tree matures the basal branches are progressively abscised, eventually leaving bare trunk typical of mature specimens. Bark blue-grey, falling in large thick flakes with scalloped margins, undersides of discarded bark and freshly exposed underbark rust brown. Leaves (needles) alternate to subopposite, sessile, thick and leathery; juvenile leaves 50-100 mm x 5-12 mm, lanceolate, pinkish green, often black-spotted (a fungus specific to kauri causes this); adult leaves 20-35 mm, oblong, apex obtuse. Male cones 20-50 mm long, stout, cylindrical, female cones globose 50-75 mm diam., cone-scales (carpidia) deciduous, at first broad but then gradually narrowing toward base, bearing one ovule per scale. Seeds ovoid, compressed, margins winged.

Flowering:

Female cones produced from September - December. Male cones throughout the year but most common from September to January

Fruiting:

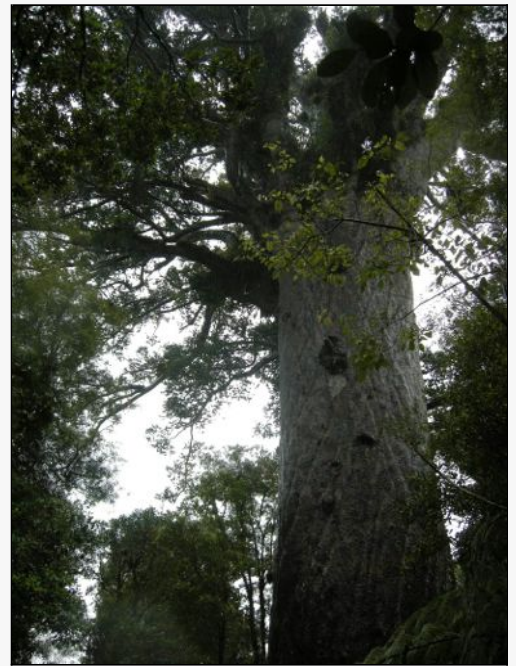
Mature cones occur anytime from December through to May, with rare persistent examples found on trees right up to about August

Threats:

Not strictly regarded as threatened but some stands of kauri on private land remain vulnerable to illegal logging, while trees are still periodically removed (although only by permit or with approval) for cultural purposes, such as for making waka (canoes) or other Maori buildings and structures. Some small southerly populations are rather vulnerable to goat browse destroying regenerating seedlings and saplings. More recently kauri dieback (also known as *Phytophthora taxon Agathis* or PTA) has caused the death of kauri trees and has become a serious issue (see the information and links provided below and see images above of lesions and thinning caused by the disease).

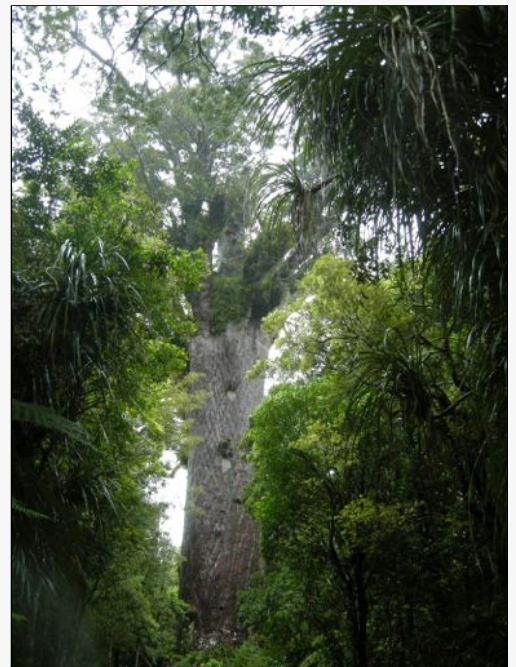
For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=2047



Caption: Waipoua Forest, Northland - Tane Mahuta

Photographer: John Sawyer



Caption: Waipoua Forest, Northland - Tane Mahuta

Photographer: John Sawyer

Frullania wairua

Common Name(s):

Liverwort

Threat Status (2009):

Nationally Critical

Distribution:

Endemic. North Island, Te Pahi.

Features:

Plants small, main shoots to 750 micrometre wide, olive-green. Branching frequently pinnate, branches mainly of *Frullania*-type. First branch underleaf with three distinct segments, the ventral lamina divided for half its length into two subequally sized lobes + 1 dorsal saccate lobe. First branch leaf with two distinct segments, a strap-shaped dorsal segment + 1 saccate ventral segment (+ a stylus), otherwise \pm characteristic in form to those of the main stem. Stem leaves of main shoot flat, slightly imbricate, ovate, to 300 x 225 micrometre, distal margins flat, lobe apices rounded, acute or abruptly apiculate, especially on younger shoots; base truncate or rounded; dorsal surface smooth. Lobules remote from stem, obliquely spreading, at angle of 30–50 degrees so that they are tilted outwards, clavate-cylindric, somewhat dorsiventrally compressed near mouth otherwise upper half gibbous, apex obtuse, the lobule obscuring the exposed area of the dorsal lobe to 125 x 80 micrometre, the opening of the mouth wide, free margin of lobular mouth crenulate-sinuate. Stylus small, uniseriate to triangular, up to 40 micrometre long, of 4–8 cells, 2–3 cells wide at base. Underleaves to 0.05–0.1x size of leaf lobes, distant, to 75(100) x 50(75) micrometre, 4–6 cells wide, 0.5–0.6 bifid, lateral margins entire, lobes 2–3 cells wide, attenuate apex of 3–5 uniseriate row of cells. Lobules of secondary stems \pm similar in size, but lobes and underleaves of secondary branches markedly smaller than those of leading stems. Leaf lobe composed of relatively large cells with major axis to c.20 cells long, minor axis to c.15 cells wide. Median cells of leaf lobe subquadrate to polygonal, with distinct, hyaline triangular trigones. Underleaf median cells with distinct trigones, particularly in the underleaf lobes. Lobule median cells with flexuose walls formed by indistinct heavily pigmented olive-brown to dark brown trigones in contrast to the hyaline walls of the lobe and stem underleaf, 1.5–2.25x longer than wide, cell cavities 8.5–14 x 5–8 micrometre. Oil-bodies of the lobe median cells 2–6 per cell. Dioicous? Gynoecia terminal on leading stems, bearing 1 subfloral innovation with a branch replacing the bract-lobule of the outermost series of bracts, and 1–2 subfloral branches immediately posterior to the outermost series of bracts. Innermost bract unequally bilobed for 0.5–0.6 its length; bract-lobe mostly entire with several coarse serrations; bract-lobule coarsely and sparingly dentate. Innermost bracteole about half bilobed, sinus narrow, lobes acuminate, free lateral margins with 2–4 coarse serrations. Median cells of female bract and bracteole with walls similar to those of underleaf median cells with comparable variation. Archegonia 3 per gynoecium. Perianth half exerted, oblong-ovate, c. 1000 x 750 micrometre. Sporophyte and spores not known.

Fruiting:

Fruiting perianths have been seen in September

Threats:

So far only known from one site where it grows on the canopy twigs of a solitary Bartlett's Rata (*Metrosideros bartlettii* J.W.Dawson) - itself a Nationally Critical species

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=4989



Caption: *Frullania wairua*

Photographer: John Braggins



Caption: *Frullania wairua* on

Bartlett's Rata twig

Photographer: John Braggins

Ipomoea pes-caprae subsp. *brasiliensis*

Common Name(s):

Beach morning glory,

Threat Status (2009):

Naturally Uncommon

Distribution:

Indigenous. Abundant throughout the Pacific Ocean and in parts of Central America. Reaching its world southern limit in New Zealand. In New Zealand it is common on some of the Kermadec Islands, and is otherwise known only from an extant population at Te Paki, and a recent historic one near Waipapakauri at the southern end of the Ninety-mile beach.

Habitat:

Usually a strict beach strand plant found along the high tide mark growing in driftwood or at the base of foredunes. On the Kermadecs it has also been recorded growing along the rim of active fumaroles

Features:

Stout, tap-rooted, glabrous perennial scrambler. Stems numerous, prostrate, trailing up to 20 m long, rooting freely at nodes. Petiole stout, fleshy, erect, 110 mm or more long. Leaves 40-120(-170) x 35-120(-150) mm, broad-oblong to suborbicular, entire, thick, fleshy; base cuneate to truncate, apex emarginate or shallowly 2-lobed. Inflorescence 1-several-flowered; peduncles 30-150 mm long, stout, fleshy; pedicels 10-30 mm. Sepals 8-12 mm, unequal, ovate, obtuse. Corolla 30-50 x 40-55 mm, funnelform, pink with an irregular rose-band inside around the base of the limb. Stamens included. Capsule 20 mm diam., globose-ovoid. Seeds 2-4, tomentose, brown.

Flowering:

October-April

Fruiting:

October - August

Threats:

Not threatened, but outside the Kermadec Islands it is only known from one extant mainland site near Te Paki. Formerly it grew near Waipapakauri on the Ninety-Mile Beach but that site, which consisted of one plant was destroyed by forestry.

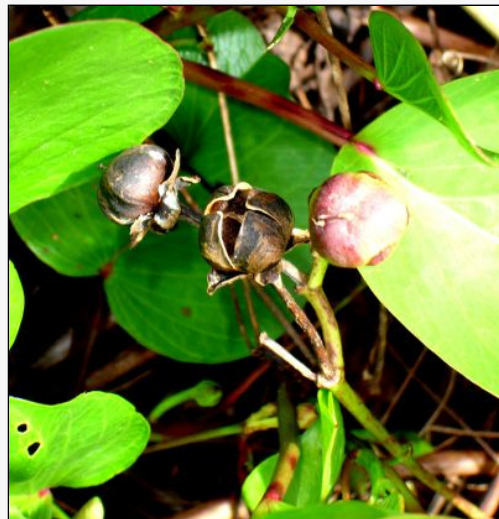
For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=551



Caption: *Ipomoea pes-caprae* subsp. *brasiliensis*

Photographer: Peter de Lange



Caption: *Ipomoea pes-caprae* subsp. *brasiliensis*

Photographer: Peter de Lange

Jovellana sinclairii

Common Name(s):

NZ calceolaria

Threat Status (2009):

Non Threatened

Distribution:

Locally found from near Hicks Bay southwards.

Habitat:

Shaded coastal and lower montane streamsides, cliff seepages, or on damp sparsely vegetated ground on forest margins.

Features:

Herbaceous, leafy, ± glandular-pubescent, perennial, forming rounded shrubs up to 1.0 × 1.8 m. Stems up to 0.8 m long, green or red, laxly branched, slender, initially sprawling, otherwise ascendant, bases becoming woody with age; upper branches numerous, slender, finely striate, often bearing minute leaflets in axils. Leaves opposite, somewhat membranous; petiole up to 8.2 × 2.3 mm, fleshy, adaxially channeled, bases sometimes pulvinate; lamina 20-80 × 20-50 mm, dark green to yellow-green above, light green or pinkish below, narrow-ovate, broad-ovate, ovate-oblong to ovate elliptic, apiculate, margins coarsely 2-3 crenate-serrate, sometimes lobed, bases broadly cuneate, cordate to weakly oblique, sometimes cordate-truncate. Inflorescences numerous, slender, terminal, paniculate, usually trichotomously branched, up to 300 mm. Pedicels slender, up to 30 mm. Calyx subcampanulate, c.2 mm, deeply cut into ovate to deltoid lobes. Corolla white to yellow-flushed, spotted purple, puberulous, divided c.one-third to half-way into 2 nearly equal concave lips 4.8-10.2 mm long. Anthers suborbicular, filaments short. Capsule obovoid, 3.8-4.2 mm long. Seed 0.35-0.60 mm, dark red-brown, ± elliptic to oblong, rarely curved.

Fruiting:

October - February

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=174



Caption: Cultivated
Photographer: John Smith-Dodsworth



Caption: A cultivated specimen
Photographer: John Smith-Dodsworth

Lejeunea hawaikiana

Common Name(s):

Liverwort

Threat Status (2009):

Naturally Uncommon

Distribution:

Indigenous. Australia, New Zealand, Cook Islands (Rarotonga). In New Zealand recorded from the Kermadec islands (Raoul Island), North Island (Te Pahi (Radar Bush, North Cape), Karikari Peninsula, Hihi (near Mangonui), at Maunganui Bluff) and on Chatham Island (see Renner & de Lange 2011)

Habitat:

On bark or rock (usually basalt). Favouring smaller trees such as *Coprosma grandifolia*, *Geniostoma ligustrifolium* var. *ligustrifolium* and *Melicytus chathamicus*.

Features:

Plants light, opaque green, tightly adnate to substrate, leafy shoots up to 675-725 μm broad, freely, irregularly ramified, the leading axes usually gynoecial, the branches commonly soon androecial otherwise usually gynoecial; innovations beneath unfertilised or fertilised gynoecia always developed, at least normally *Lejeunea*-type. Stem slender c.50 μm diameter; cortical cells in 7 rows, somewhat but not greatly firm-walled, surrounding c.4 medullary cell rows of somewhat inferior size. Leaves contiguous to weakly imbricate, ovate-lanceolate, c.250-275 x 500-550 μm , at most feebly convex, the short-acuminate apices often a little deflexed, entire-margined, smooth (marginal cells not or hardly projecting as crenulations), the acuminate apices ending in mostly 3-4 superposed single cells which are subsisodiametric or weakly elongated (1: 1-8). Lobules ovoid, strongly inflated except in and near apical tooth, about 0.3 length of lobe, with a blunt 1-celled apical tooth, the fine hyaline papilla at antical base. Underleaves small, c.115-135 x 135-175 μm long. c.0.6-0.7 bifid via a U-shaped sinus, divided to within 2-3 cells of rhizoid-initial region; lobes narrow, often their acuminate apices arched toward each other, 3-4 cells broad at base and long-tapered into a uniseriate apex formed of mostly 2 superposed cells. Rhizoid-initial region prominent, mostly formed of c.12-16 cells giving rise to conspicuous rhizoid-initial discs, the plants closely adherent. Cells in 2-3 marginal rows rather firm-walled and with obscure trigones and weak, isolated intermediate thickenings; laminar cells becoming clearly larger, 23-26 x 24-28 μm , 5-6-angled, weakly or hardly firm-walled but with rather large, \pm convex-sided but not nodular trigones, + isolated, scattered intermediate thickenings. Oil bodies in 1-2 marginal rows lacking, in third row vestigial or small; laminar cells with mostly 4-8 variable usually fusiform oil-bodies varying from transversely few-septate to botryoidal to granular-botryoidal, the larger 4.5-5.5 x 15.0-17.5 μm . Autoecious. Androecia forming short lateral branches lacking sterile leaves, mostly spicate, compactly so, with c.4-8 or more closely imbricate, inflated pairs of bracts, their arched keels \pm inflated cells; bracts diandrous; bracteoles 1-2 at androecium base. Gynoecia on short to lateral branches (gynoecia at apices of leading shoots rare; apical dominant normal); always innovating, innovations single, usually remaining sterile but \pm elongating; at times innovations producing 1-2 male and/or female branches. Female bracts in 1 pair, sheathing basal 0.45-0.55 or perianth; bracts with lobes ovate to obovate-lanceolate, acute to longly acute at apex, edentate or with 1-4 variable, obtuse to obscure teeth; lobule lanceolate to narrowly obovate, acute to apiculate, often with a tooth of inner margin, the distal third or more free, the keel short to long, unwinged. Bracteole free, variably obovate to ovate, 0.4-0.6 bifid, sinus V- to narrowly U-shaped, lobes erect and acute, often with 1(-2) teeth of one or both margins. Perianth obovate, a little complanate, the lateral keels more pronounced, the ventral shorter, often weak and abbreviated; perianth keels smooth; perianth apex truncate, the long beak sometimes a little recessed.

Fruiting:

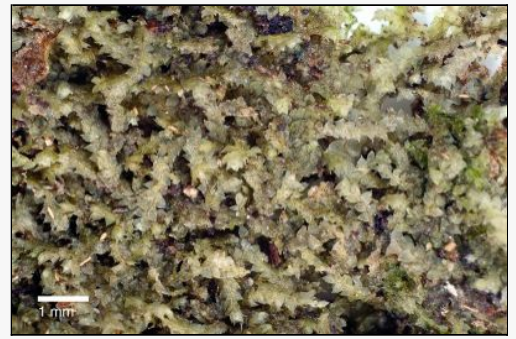
Fruiting material is frequently seen throughout the year

Threats:

Once regarded as highly threatened *Lejeunea hawaikiana* has proved to be more overlooked than it is threatened. In suitable habitats it is often abundant. However, to date it is still only known from a handful of sites suggesting that it is probably Naturally Uncommon.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=5006



Caption: Surville Cliffs, on *Metrosideros excelsa*. Feb 2011.
Photographer: Jeremy Rolfe

Metrosideros excelsa

Common Name(s):

Pohutukawa, New Zealand Christmas tree

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Naturally occurring from the Three Kings Islands (north of Cape Reinga) south to about Pukearuhe, northern Taranaki (in the west) and near Mahia Peninsula (in the east). However, exact southern limit is difficult to ascertain as it has been widely planted and there is evidence that old time Maori cultivated the tree in some southerly areas. Found inland around the Rotorua Lakes and at Lake Taupo - though these occurrences could stem from Maori plantings (though the association of other normally coastal species around these lakes argues against this). Now widely planted throughout the N. Island and northern S. Island (especially around Nelson, the Marlborough Sounds, the Kaikoura Coast and on the west coast to about Hokitika).

Habitat:

Coastal forest and on occasion inland around lake margins. Also in the far north occasionally an associate of kauri forest. In some northerly locations it forms forest type in its own right - this forest is dominated by pohutukawa, other associates often include tawapou (*Pouteria costata*), kohekohe (*Dysoxylum spectabile*), puriri (*Vitex lucens*), karaka (*Corynocarpus laevigatus*), and on rodent-free offshore islands the frequent presence of coastal maire (*Nestegis apetala*), and milk tree (*Streblus banksii*) suggests these species too may once have been important in mainland examples of pohutukawa forest.

Features:

Tree up to 20 m tall with canopy spread of (10-)20(-50)m. Specimens typically multi-trunked from base, trunks up to 2 m diam., branches spreading, and often arching, sometimes looping over ground, and/or bearing "brooms" of aerial adventitious roots. Branchlets numerous, twiggy and long-persistent. Bark firm, persistent and difficult to detach, often deeply furrowed, grey to grey-brown, somewhat corky. Young branchlets tomentose, being covered in fine, deciduous, greyish-white hairs. Leaves of all but water shoots leathery, (25-)50-100(120) x 25-30(-60) mm, elliptic, oblong, rarely lanceolate, apex acute or obtuse, dark olive-green, undersides thickly clad in white tomentum, uppersurface at first distinctly tomentose but hairs shedding with leaf maturation. Flowers borne on stout, tomentose pedicels. Hypanthium obconic, sepals triangular (deltoid). Petals oblong, crimson, pink or yellow, soon shedding.

Flowering:

(August-) November-December (-March)

Fruiting:

(January-) March-April (-May)

Threats:

Like all New Zealand tree *Metrosideros*, pohutukawa is most at risk from possum (*Trichosurus vulpecula*) browse. These can seriously damage and even kill trees. Often where their browsing occurs within sites of unrestricted stock and vehicle access, pohutukawa forest is in danger of becoming locally extinct. It does remain common over large parts of its range, a situation being greatly improved by the efforts of people encouraged by the national coordination of Project Crimson - a non profit organisation set up to protect, enhance and/or establish pohutukawa forest, as well as promote the species use, and its conservation.

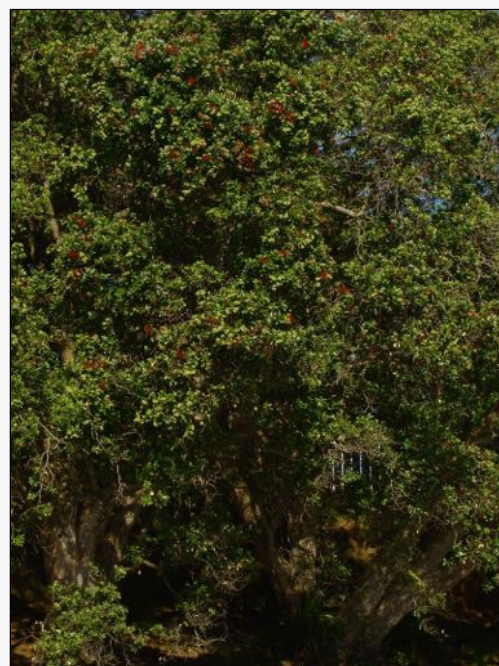
For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=975



Caption: Wellington

Photographer: John Sawyer



Caption: *Metrosideros excelsa*

Photographer: Wayne Bennett

Pittosporum kirkii

Common Name(s):

Kirk's kohuhu, thick-leaved kohukohu

Threat Status (2009):

Declining

Distribution:

Endemic to the northern half of the North Island, from Mangonui to Raetihi.

Habitat:

Usually epiphytic, rarely terrestrial in coastal to montane forest.

Features:

A small, gynodioecious, openly-branched shrub to 4 m tall with stout, purplish branches. Leaves are crowded towards the tips of the branch on 10 mm long stalks. The leaf blade is thick and fleshy, and broadens towards a rounded tip; leaves are 50–100 mm long by 20–30 mm wide. Flowers are either solitary or in clusters of up to four at the tips of branches, bright yellow and appear in November. Fruit are oval, woody capsules up to 40 mm long that split in half to reveal black seeds sitting in yellow sticky pulp, and appear in January.

Flowering:

October to December

Fruiting:

January to May

Threats:

Forest clearance, possum browse.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=140



Caption: Mt Taranaki

Photographer: Bill Clarkson



Caption: Mt Taranaki

Photographer: Bill Clarkson

Pittosporum serpentinum

Common Name(s):

Surville Cliffs kohuhu

Threat Status (2009):

Nationally Endangered

Distribution:

Endemic. North Island, Te Pahi, North Cape, Surville Cliffs. Confined to the 120 ha exposure of ultramafic rocks at the North Cape Scientific Reserve, Surville Cliffs.

Habitat:

A strictly ultramafic endemic shrub preferring exposed cliff faces and associated talus slopes. Very rarely found on semi-stabilised boulder falls and talus slopes as an understorey associate of small copses dominated by another, as yet unnamed Surville Cliffs endemic, *Phyllocladus* aff. *trichomanoides*.

Features:

Sprawling, heavily branched, semi-erect shrub up to 1.2m tall and 2.5m wide. Branches prostrate, rooting on contact with the ground; branchlets semi-erect; young branchlets densely clad in dark orange-brown, ferruginous tomentum, this fading to buff yellow and then grey as branchlets mature. Young bark purple-black, glabrate, fading to greyish-black. Leaves crowded at the tips of branches, with dead leaves long persistent; 10–50 × 12–28mm, alternate, obovate, obovate-elliptic to rhomboidal, coriaceous, apex ± emarginate, obtuse to subacute, often mucronate; base cuneate to obcordate; margin entire, markedly thickened and recurved; petioles 4–6mm long; upper leaf surface grey-green, covered in deciduous buff-yellow hairs, these fading to greyish-white with age; lower surface densely clad in a persistent dark-orange, ferruginous indumentum, this fading to dark grey with age. Inflorescences terminal, fascicled, 1–4-flowered; pedicels covered in dark-orange, ferruginous tomentum, 2–6mm long. Flowers night-fragrant, gynodioecious. Sepals lanceolate, 4–5mm long, pilose, hairs yellow-orange; petals oblanceolate, acute to subacute 9–12 × 2–3.5mm, chocolate, reddish-black, red, occasionally yellow. Anthers oblong, acute, yellow, 2–4mm long, filaments 5–6mm long, reddish-black, red, occasionally yellow. Ovary ovoid or ellipsoid, thickly invested in ferruginous, pilose hairs, 3–5mm long; style 4–6mm long, stigma capitate. Capsules 2-valved, globose, apex occasionally with a small 1–2mm mucro, c. 10 × 10mm, external surface smooth to faintly rugose, copiously covered in ferruginous tomentum, this fading from buff-yellow to greyish-white with age, valves ± woody, much thickened at apex; mucilage orange-brown. Seeds 2–15, 3.5–4.5mm long, broadly elliptic or irregular, lustrous red-brown or black.

Flowering:

July - October. Sexes on different plants.

Fruiting:

August - January

Threats:

Pittosporum serpentinum is known from 85 individuals in the wild. These are at serious risk from browsing animals such as possums. Indeed possums are now severely impacting the species (de Lange et al. 2011). Weeds such as pines (*Pinus radiata*), pampas grass (*Cortaderia seloana*) and needle-leaved hakea (*Hakea sericea*) are also a long-term potential risks to this shrub, and indeed all of the Surville Cliffs flora. Although seedlings have never been seen, in 2009 and 2011 the first ever saplings were seen (de Lange et al. 2011). It should be noted that all of the North Cape area is also potentially at risk from fire.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=86



Caption: Surville Cliffs.

Photographer: Jeremy Rolfe



Caption: Surville Cliffs.

Photographer: Jeremy Rolfe

Sporadanthus ferrugineus

Common Name(s):

Bamboo Rush, Giant wire rush

Threat Status (2009):

Relict

Distribution:

Endemic. New Zealand: North Island (Waikato - formerly Kaitaia)

Habitat:

Lowland, oligotrophic, high moor, restiad bogs.

Features:

Robust, dioecious perennial, 1–6 m high, forming dense rafts. Rhizome 10–15 mm diameter, horizontal, branched. Roots 3–5 × 250–300 mm, white. Culms up to 6 m tall, 10–15 mm diameter, brittle, rigid, upright, terete to subterete, smooth or slightly grooved, glaucous green when young, maturing red-brown or yellow-brown; branched in upper 2/3; branches numerous, slender, firm, flexible, upright; basal 140–200 mm of culm conspicuously swollen with soft, spongy, light brown tissue. Culm base with 3–7 loosely appressed, overlapping scales; scales 10–50 × 15–40 mm, ovate to broadly ovate, coriaceous, light brown to brown, apex rounded and mucronate. Leaves along culm solitary, distant, tightly appressed; lamina 15–50 × 15–50 mm, ovate to broadly ovate, brown to dark brown, fading to grey; basal leaves pectinate, upper leaf margins entire or fractured; apex rounded, mucronate. Inflorescence a terminal panicle up to 150 mm long, red-brown, upright to spreading, sometimes drooping; male inflorescence dense, crowded; female inflorescence sparse, diffuse. Flowers pedicellate to almost sessile. Tepals 6, in 2 whorls of 3, 2.0–3.0 × 0.4–0.5 mm, subulate to lanceolate, light brown to yellow-brown, channelled, apex acute to weakly acuminate, mucronate. Stipe 0.6–0.8 mm long. Male flowers with 3 stamens; filaments 1.8–2.0 mm long, anthers 1.0–1.3 × 0.2–0.4 mm, cream, pollen yellow; pistil rudimentary. Female flowers with 1 pistil; style 0.8–1.3 mm long, pink, papillose on upper surface, decurrent with ovary on lower surface; ovary 0.3–0.7 × 0.2–0.6 mm, ± globose, amber to dark brown, vertical groove on upper surface; staminodes 3, each 0.5–0.8 mm long. Fruit 1.2–1.5 × 0.5–0.7 mm, narrowly ellipsoid, sides dark brown, suture light brown to cream-brown, surmounted by persistent, long style; dehiscent along lower suture. Seed 0.7–0.8 × 0.5–0.6 mm, shortly oblong to broadly ovate, light orange-brown when fresh fading to light brown.

Flowering:

October - December

Fruiting:

November - January

Threats:

Threatened in the past by wetland drainage, which eliminated the species from 95% of its known range by 1970. Today confined to Torehape, Kopouatai and Moanatuatua. Of these Moanatuatua is no longer a truly viable, functioning system and Torehape is being restored, but only Kopouatai truly preserves the *Sporadanthus* dominated raised bog ecosystem intact. All three populations remain highly vulnerable to fire - itself an issue as there is good evidence that fires are necessary to maintain the species but it is also clear that excessive burning will eliminate it.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=688



Caption: *Sporadanthus ferrugineus* (inflorescence)

Photographer: Wayne Bennett



Caption: *Sporadanthus ferrugineus* at Torehape

Photographer: Wayne Bennett

Urtica ferox

Common Name(s):

Ongaonga, tree nettle

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Found throughout NZ in North and South Islands reaching Otago as its southern limit.

Habitat:

Common in the fringes of bushland. Mainly found in coastal and lowland forest margins and shrublands.

Features:

The tree stands up to 2 meters tall with a base up to 12cm diameter. Its leaves are pale green 8-12 x 3-5 cm that are borne on petioles up to 5 cm long.

Flowering:

November - March

Fruiting:

December - May

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1354



Caption: Close up taken on Otago Peninsula

Photographer: John Barkla



Caption: Otago Peninsula

Photographer: John Barkla