



Bream Head Scenic Reserve - Selection of regionally significant plants



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

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Introduction

This book was compiled from information stored on the website of the New Zealand Plant Conservation Network (www.nzpcn.org.nz).

This website was established in 2003 as a repository for information about New Zealand's threatened vascular plants. Since then it has grown into a national database of information about all plants in the New Zealand botanic region including both native and naturalised vascular plants, threatened mosses, liverworts and fungi.

Funding to develop the website was provided by the New Zealand Government's Terrestrial and Freshwater Biodiversity Information System Programme (TFBIS).

The species information used on the website has come from a variety of sources. The indigenous vascular plant text was written largely by Dr Peter de Lange (former Network Vice President). Peter based the descriptions on a wide range of sources including the Flora of NZ Series (Allan 1961, Moore and Edgar 1970 and Webb et al 1987) as well as numerous other taxonomic treatments. For a full bibliography of information sources see the References at the end of this book.

Where no published treatment was available Peter used herbarium specimens and his own knowledge of the flora to prepare species pages. Various other contributors have provided text and additional information to many species pages including botanists such as Mike Thorsen, John Barkla, Cathy Jones, Simon Walls, Nick Singers and many others. The threatened fungi text was written by Eric Mackenzie and Peter Buchanan (Landcare Research).

More than 200 photographers have kindly provided images to illustrate the website and for use in this book especially John Smith-Dodsworth, Jeremy Rolfe, Peter de Lange, Wayne Bennett and Gillian Crowcroft.

The New Zealand Botanic Region

The information on the Network website, from which this book was compiled, is for species that are indigenous to or naturalised within the New Zealand Botanic Region as defined by Allan (1961). The New Zealand botanic region encompasses the Kermadec, Manawatawhi/Three Kings, North, South, Stewart Island/Rakiura, Chatham, Antipodes, Bounties, Snares, Auckland Campbell island/Motu Ihupuku and Macquarie.

About the Network

The Network has more than 800 members worldwide and is New Zealand's largest non-governmental organisation solely devoted to the protection and restoration of New Zealand's indigenous plant life.

The vision of the New Zealand Plant Conservation Network is that '*no indigenous species of plant will become extinct nor be placed at risk of extinction as a result of human action or indifference, and that the rich, diverse and unique plant life of New Zealand will be recognised, cherished and restored*'.

Since it was founded in 2003 the Network has undertaken a range of conservation initiatives in order to achieve its vision.

That work has included:

- Training people in plant conservation
- Publishing plant books, reports and posters
- Raising money for the David Given Threatened Plant Research Trust to pay for plant conservation research scholarships
- Advocacy to raise awareness of the importance of plant life in general and especially New Zealand's status as a Global Centre of Plant Diversity
- Lobbying central and regional government and business to protect indigenous plant life
- Educating people about plant life through the Network website
- Connecting people through the monthly newsletter, the Network conference and the annual general meeting

What is a threatened plant?

The NZ Threatened Plant Committee was formed in 1991 and ever since then it has met at regular intervals to review the status of indigenous vascular plants. It is made up of a small group of botanists that between them have an extensive knowledge of the native plants of New Zealand. This group is chaired by Dr Peter de Lange of the New Zealand Department of Conservation.

This committee applies a set of criteria to each native plant to determine its conservation status. The resulting list of species classified as threatened is published in the NZ Journal of Botany (see for example de Lange et al. 2009). The main threat categories used are: Extinct, Critical, Endangered, Vulnerable, Declining. Other categories used are: Recovering, Relict, Naturally Uncommon, Coloniser, Vagrant and Data Deficient. For vascular plants the threat status used in this book is taken from the 2009 conservation assessment (see de Lange et al 2009).

More recently other committees have been established to review the status of non-vascular plants but their lists are yet to be published.

Adiantum aethiopicum

Common Name(s):

Maidenhair, Makaka, True maidenhair

Threat Status (2009):

Non Threatened

Distribution:

Indigenous. New Zealand. North and South Islands from Te Pahi south to the Waikato and Bay of Plenty, thence rather localised and often absent from large areas until the Wairarapa. Recorded once from the Buller River gorge in the South Island but not seen recently in the South Island. Also New Caledonia, Australia and South Africa.

Habitat:

Coastal to lowland. Despite its delicate appearance *Adiantum aethiopicum* is often found in very dry, exposed sites in short grassland, on clay pans, stable dunes systems, open scrub and forest. It is also occasionally found in periodically flooded ground in riparian forest and on damp clay banks in shaded gullies.

Features:

Tufted, stoloniferous fern. Rhizome long-creeping (stoloniferous), to 3 mm diameter; wiry, c.1.5 mm diameter; scales chartaceous, yellow, transparent, broadly deltoid, entire, often spirally curled. Fronds yellow-green or bright green, densely tufted, or sometimes scattered along stolons up to 750 mm long. Stipe to 400 mm long, glossy, glabrous, red-brown, bearing conspicuous basal scales similar to those of rhizome. Lamina 120-400 × 50-230 mm, 3-pinnate, ovate to deltoid. pinnae narrowly deltoid. Pinnules round to flabellate; distal margin sometimes shallowly lobed; lobe margins entire or obscurely dentate when sterile; stalks not articulate. Sori 1-5 along the base of the distal margins, 1(-2) per lobe; soral flaps reniform, lunate to sublunate, usually at the base of a shallow sinus (notch) on the pinnule margin. Spores 64 per sporangium, with largest diameter (34.6-)41.1(-53.6) microns.

Flowering:

Not applicable - spore producing

Fruiting:

Not applicable - spore producing

Threats:

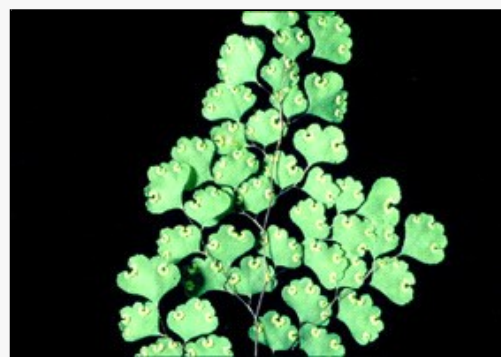
Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=2045



Caption: Stony Bay, Coromandel
Photographer: John Smith-Dodsworth



Caption: Stony Bay, Coromandel
Photographer: John Smith-Dodsworth

Blechnum triangularifolium

Common Name(s):

kiokio, Green Bay kiokio

Threat Status (2009):

Non Threatened

Distribution:

Endemic. North, South and Chatham Islands. In New Zealand proper recorded from North Cape south to Napenape (North Canterbury) and near Okarito (Westland)

Habitat:

Coastal to montane, although this species is mostly found in coastal and lowland situations. *Blechnum triangularifolium* is a basicolous species frequenting base-rich substrates such as calcareous silt and mudstones, sandstones, limestone, marble, basalt and basaltic andesite, it also grows on the ultra basic serpentinite rocks at North Cape. In these habitats it is often found growing within seepages with such plants as *Machaerina sinclairii*. In karst country it may extend a considerable distance inland and it has been collected on a few occasions from calcareous rocks in montane forest.

Features:

Rhizome short-creeping to erect; clothed with the bases of old stipes and a dense mass of scales; scales to 12×2 mm, lanceolate, acuminate, light brown, reddish brown, or sometimes bicolorous, entire or minutely toothed. Fronds dimorphic, usually pendulous, $0.3-0.900 \times 0.09-0.55$ m, widest at base of lamina; fertile fronds smaller than sterile fronds. Stipe $0.15-0.73$ m, fertile stipes similar in length or longer than stipes of sterile fronds, up to 10 mm in diameter at the base, stramineous to pale brown, darkening only at the very base, stipes scaly especially at base, upper stipes almost glabrous at maturity; scales up to $10.0 \times 1.0-1.5$ mm wide, ovate, cordate or linear, acuminate, often appressed, brown concolorous or "black-spot", shiny, entire or finely toothed. Lamina broadly deltoid, pale green, 1-pinnate, 8-33 pairs of pinnae. Rachis and costae pale brown or reddish brown with sparse to moderately dense scales and some irregular small fine hairs; scales mostly small, up to 3.0×1.5 mm, ovate to cordate, peltate, appressed, shortly acuminate, shiny and bicolorous with "black-spot", entire or finely toothed (these scales usually especially conspicuous on abaxial costae); also some larger scales, up to 10×1 mm, narrow, linear, acuminate, twisted, concolorous pale brown or reddish brown, entire or finely toothed. Sterile pinnae $70-250 \times 14-20$ mm, lanceolate-linear, slightly falcate, acuminate to attenuate at apices, rounded or tapering acutely to rachis; shortly petiolate or sessile at base of lamina becoming basiscopically adnate then sometimes fully adnate towards the apex of the lamina; coriaceous to papery; margins finely serrate, often crenate or undulate, toothed with glandular vein ending and brown cartilaginous marginal tissue; veins simple or once-furcate; scales on mature pinnae not extending to surface of lamina; basal pinnae slightly longer or similar to pinnae pair above and longer than middle pinnae, sometimes deflexed, auricles and auriculate pinnae bases absent; terminal pinna usually a little longer than subterminal. Fertile pinnae $110-240 \times 3-6$ mm, narrow, linear, shortly petiolate at the base becoming basiscopically adnate and winged towards the apex; basal pinnae not reduced; sori covering under surface except for sterile attenuate apices and small sterile lobes that occur at the base of the lowermost pairs of pinnae in some specimens; spores $46-64 \times 29-50$ μm .

Flowering:

Not applicable - spore producing

Fruiting:

Not applicable - spore producing

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1553



Caption: North Cape. Nov 2010.

Photographer: Jeremy Rolfe



Caption: North Cape. Nov 2010.

Photographer: Jeremy Rolfe

Brachyglottis kirkii var. *angustior*

Common Name(s):

Kohurangi, Kirk's Tree Daisy

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Confined to the North Island where it is known from about Te Puke and Ngaruawahia north to Te Paki

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1560



Caption: Long Bay, Coromandel, April

Photographer: John Smith-Dodsworth



Caption: Close up of flowers, Long Bay, Coromandel, April

Photographer: John Smith-Dodsworth

Cheilanthes distans

Common Name(s):

Woolly cloak fern, Woolly rock fern

Threat Status (2009):

Non Threatened

Distribution:

Indigenous. Kermadec Islands: Macauley Island. New Zealand: Three Kings, North and South Islands. Also Australia and New Caledonia (mainly easterly from Te Pahi south to Banks Peninsula).

Habitat:

Coastal to montane in dry, rocky habitats with only sparse or no vegetation cover. Often found growing with *Asplenium flabellifolium*, *Cheilanthes sieberi* subsp. *sieberi* and *Pellaea calidrupium*. More common in the drier eastern parts of the country.

Features:

Rupestral (rarely terrestrial) fern. Fronds up to 350 × 30 mm; stipe red-brown or dark brown, with moderately dense to dense covering of brown scales and some hairs' rachis densely covered in scales. Lamina linear, 2-pinnate or 2-pinnatifid at base and for most of length; large pinnae triangular-ovate; pinnules oblong- elliptic; margins entire or lobed; adaxially sparsely to moderately densely covered with slender, white hairs and occasional caducous scales, very rarely glabrous; abaxially sparsely to densely covered in scales and sparse white hairs. Spores spherical, granulose and ridged, with echinate ornamentation, 43-79 microns diameter, 16 per sporangium.

Flowering:

N.A. - spore producing

Fruiting:

N.A. - spore producing

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=2087



Caption: Mangatoetoe Stream, Aorangi Forest Park.

Photographer: Jeremy Rolfe



Caption: Kennedy Bay, October

Photographer: John Smith-Dodsworth

Chionochloa conspicua subsp. cunninghamii

Common Name(s):

Hunangamoho, broad-leaved bush tussock

Threat Status (2009):

Non Threatened

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1659



Caption: Castle rock, Coromandel, February

Photographer: John Smith-Dodsworth

Corokia buddleioides

Common Name(s):

korokio

Threat Status (2009):

Non Threatened

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1755



Caption: Mt Donald McLean

Photographer: Gillian Crowcroft



Caption: *Corokia buddleioides*, Mt Donald McLean

Photographer: Gillian Crowcroft

Corokia cotoneaster

Common Name(s):

Korokio, wire-netting bush

Threat Status (2009):

Non Threatened

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1756



Caption: Kingston

Photographer: John Barkla



Caption: Cape Reinga

Photographer: John Sawyer

Dracophyllum sinclairii

Common Name(s):

Gumland grass tree

Threat Status (2009):

Non Threatened

Habitat:

Dracophyllum sinclairii is a common species of northern coastal cliffs, shrub lands (especially gumland scrub), and secondary regrowth but it is also known from forested slopes (especially kauri forest), and also colonises, along ridgelines and mountain slopes. *Dracophyllum sinclairii* is most common north of Auckland and Thames and in this area it is especially common in gumland scrub and seral vegetation.

Features:

Single-stemmed small tree 1.0–7.6 m tall. Bark on old branches dark grey to blackish brown, finely to deeply fissured, young stems reddish brown. Leaves dimorphic. Juvenile leaves spirally arranged along branches, spreading to recurved; lamina sheath, 9.0–30.0 × 5.0–12.7 mm, shoulders tapering to truncate and margin entire, occasionally ciliate in upper half; lamina subcoriaceous to coriaceous, 85.0–221.0 × 2.5–9.0 mm, linear–triangular, surfaces glabrous with a patch of scabrid hairs at base of adaxial surface; margins serrulate with 50–70 teeth per 10 mm. Adult leaves spreading to recurved, glaucous to light green (occasionally light brown); lamina sheath 3.5–7.3 × 3.3–6.6 mm, rounded to truncate and margin membranous with the top half ciliate; lamina 37–95 × 1–5 mm, linear–triangular, surfaces glabrous with a tuft of scabrid hairs at base on adaxial surface; slightly striated; margins serrulate with 60–80 teeth per 10 mm. Inflorescence a terminal spike; shorter than leaves, erect, drooping later, dense, 14.5–34.7 mm long, linear–oblong; inflorescence bract over-topping flowers, 7.0–8.0 × 0.7–1.0 mm, ovate to broadly ovate, adaxial surface glabrous with a patch of scabrid hairs at base; margins serrulate. Flowers 4–9, sessile. Flower bracts over-topping flowers, 6–20 × 3–4 mm, ovate, adaxial surfaces sericeous; abaxial surfaces glabrous to scabrid; margins minutely serrulate. Sepals 2.5–6.0 × 1.2–2.0 mm, ovate–lanceolate, longer than corolla tube; adaxial surfaces with the top half pubescent; margins ciliate. Corolla white; corolla tube 4.0–4.5 × 2.5–3.0 mm, narrowly–campanulate, widened at mouth; corolla lobes spreading horizontally to reflexed, 2.3–2.5 × 1.7–2.2 mm, triangular, shorter than corolla tube; apex inflexed, subacute; adaxial surface papillate. Stamens inserted on corolla tube in the upper third, filaments 0.5–1.0 mm long; anthers included, 0.8–1.0 mm long, rectangular, light yellow. Ovary 1.4–1.5 × 1.4–1.5 mm, obovate, apex round or oblong, and then 1.3–1.4 × 0.6–0.7 mm with apices mostly bidentate, sometimes irregularly toothed; style included, 1.3–1.5 mm long, glabrous; stigma five-lobed. Fruit 1.5–3.5 × 1.5–2.5 mm, obovoid, light brown; apex truncate, glabrous. Seeds 1.0–1.3 mm long, ovoid, yellowish brown, testa slightly reticulate.

Flowering:

January – November

Fruiting:

March - August

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1818



Caption: Te Pahi. Sep 2011.

Photographer: Jeremy Rolfe



Caption: Kennedy Bay. July

Photographer: John Smith-Dodsworth

Hebe macrocarpa var. *macrocarpa*

Common Name(s):

Hebe

Threat Status (2009):

Non Threatened

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1993



Caption: Huia (Mt Donald Mclean)

Photographer: Gillian Crowcroft



Caption: Leaf buds from one plant, with and without sinus. May 2008.

Photographer: Jeremy Rolfe from a specimen collected by Peter de Lange.

Hebe parviflora

Common Name(s):

Hebe

Threat Status (2009):

Non Threatened

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=2308



Caption: Pukahunui valley,
December

Photographer: John Smith-
Dodsworth



Caption: At Pukahunui valley,
December

Photographer: John Smith-
Dodsworth

Helichrysum lanceolatum

Threat Status (2009):

Non Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=809



Caption: Otago Peninsula
Photographer: John Barkla



Caption: Cooks Cove, East Coast
Photographer: John Sawyer

Leionema nudum

Common Name(s):

Mairehau

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Confined to the North Island where it is locally distributed from Te Pahi south to Pukenui Hill, Kawhia in the west and the northern Kaima Range in the east. Rather uncommon south of Auckland and Thames

Threats:

Not Threatened but it is heavily browsed by goats over some parts of its range

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=902



Caption: Flowers, Waipoua Forest, December

Photographer: John Smith-Dodsworth



Caption: Waipoua Forest, December

Photographer: John Smith-Dodsworth

Lophomyrtus obcordata

Common Name(s):

Rohutu, New Zealand myrtle

Threat Status (2009):

Non Threatened

Distribution:

Endemic. North and South Islands. Patchy and often absent over large parts of the country. More common in the eastern North and South island though locally prominent in some parts of western Northland and Auckland.

Habitat:

Coastal to montane in forest - though mostly found in coastal and lowland forested habitats. *Lophomyrtus obcordata* is often rather local over large parts of its range though it seems to be reasonably common on the Pouto and Kaipara Peninsula where it grows on stable sand dunes in a forest dominated by an as yet unnamed species of *Kunzea ericoides* (known as rawirinui to northern Maori and referred to by de Lange & Murray 2004, de Lange et al., 2005 and de Lange et al. 2010 as *Kunzea* aff. *ericoides* (a)). *Lophomyrtus obcordata* is also occasionally dominant in alluvial forest remnants of the eastern South Island. In these places it is often parasitised by the dwarf mistletoe *Korthalsella lindsayi*.

Features:

Shrub up to c.6 m tall. Trunk slender, up to 02 m diameter. Bark greyish pink, chartaceous, flaking in large, irregular shards, underbark pale cream. Branches numerous, erect, compactly branched to spreading. Branchlets initially 4-angled maturing subterete, rather brittle, minutely pubescent. Leaves opposite (sometimes in fascicles), coriaceous, puberulent when young (hairs patent), becoming glabrous with age, glandular punctate, oil glands colourless, leaf lamina and petioles shortly decurrent with branchlet; petiole 0.7-1.0 mm long, brittle; leaf lamina 5-12 × 5-10 mm, obcordate, cuneately narrowed to base, adaxially dark green to grey-green (sometimes tinged red), paler beneath (sometimes tinged pink). Flowers 4-merous, 6-8 mm diameter, borne in axillary, solitary monads on slender, 10-14(-20) mm long, pubescent pedicels. Hypanthium subturbinate, not extending beyond ovary summit, glandular punctate, oil glands colourless (rarely pink tinged), calyx lobes 4, 1.0-1.8 mm long, persistent, spreading, pubescent, oblong, acute. Petals 6-8 × 5-8 mm, suborbicular, white, margins entire to slightly irregular, oil glands colourless. Stamens 60-80(-100 or more), free, in 4 weakly defined whorls, filaments 6-8 mm long, anthers cream, dorsifixed, latrorse. Ovary inferior, 2-3-locular, ovules numerous, in a single row on each linear placenta. Style 6-8 mm long, slender, white, stigma capitate, scarcely dilated. Fruit a broadly ovate, bright to dark red (rarely black or violet) 6-7 mm long berry. Seeds numerous, reniform, 2.0-4.3 mm diameter, testa pale brown, glossy ± smooth, very hard.

Flowering:

November - March

Fruiting:

January - May

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=943



Caption: Bark. Upper Hutt, eb 2011.

Photographer: Jeremy Rolfe



Caption: Stevensons Island, Lake Wanaka.

Photographer: John Barkla

Metrosideros carminea

Common Name(s):

Crimson rata, Carmine rata

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Confined to the North Island where it occurs from Te Paki south to Taranaki in the west and Mahia Peninsula in the east

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=980



Caption: *Metrosideros carminea*

Photographer: Peter de Lange



Caption: Carmine rata

Photographer: DoC

Myoporum laetum

Common Name(s):

Ngaio

Threat Status (2009):

Non Threatened

Distribution:

Endemic. Three Kings, North and South Islands. Also on the Chatham Islands where scarce and probably naturalised.

Habitat:

Coastal to lowland forest, sometimes well inland (in Hawkes Bay, Rangataiki and Wairarapa). Often uncommon over large parts of its range.

Features:

Decumbent shrub, shrub, or small tree up to 10 m tall and in decumbent forms 2-4 m across. Trunk to 0.3 m diam. Bark light grey to brown, thick and corky, firm, persistent, rough and furrowed. Branches stout, spreading. Leaf buds dark brown, purple-black to almost black, very sticky. Petioles flattened up to 300 mm long. Leaves somewhat fleshy, yellow-green to green, conspicuously white to yellow gland-spotted, (40-)100-120 x (10-)30-40 mm, lanceolate, oblong-lanceolate, oblong to obovate, acute to acuminate, margins crenulate-serrulate in upper half to third, margins sinuate to plain. Flowers in 2-6-flowered axillary cymes. Peduncles up to 15 mm long. Calyx-teeth 2 mm, narrow-lanceolate, acuminate. Corolla campanulate, white, purple-spotted, 5-lobed, lobes hairy on upper surface. Stamens 4. Fruit a narrow-ovoid drupe, 6-9 mm long, white or pale to dark reddish-purple.

Flowering:

October - January

Fruiting:

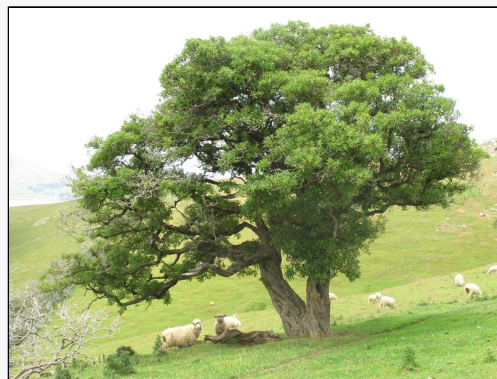
December - June

Threats:

Not threatened. However, in some parts of the country such as urban Auckland, Wellington and along portions of the Kaikoura coast hybrid swams involving Tasmanian boobialla (*Myoporum insulare* sens. lat.) are common. The widespread planting of Tasmanian boobialla, or hybrids poses a risk to ngaio in places where it is not common.

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=992



Caption: Otago Peninsula

Photographer: John Barkla



Caption: Otago Peninsula

Photographer: John Barkla

Nestegis apetala

Common Name(s):

Coastal maire, Bastard Ironwood (Norfolk Island)

Threat Status (2009):

Non Threatened

Distribution:

Indigenous. Norfolk Island and New Zealand (North Island including northern offshore islands from the Three Kings Islands south to Hauturu (Clark Island), near Whangamata. *Nestegis apetala* is especially common on the Poor Knights and Motukino (Fanal Island) - on the latter of which it forms a distinct, pure forest type.

Habitat:

Strictly coastal. Inhabiting coastal forest often along the exposed margins, also on rocky slopes, cliff faces, talus slopes and exposed ridgelines, as well as forming a minor subcanopy in closed forest. *Nestegis apetala* is often an important component of northern offshore island forests where it co-habits with pohutukawa (*Metrosideros excelsa*), tawapou (*Planchonella costata*), coastal mahoe (*Melicytus novaezelandiae*), *Streblus* spp. (especially *S. banksii*), houpara (*Pseudopanax lessonii*) and whau (*Entelea arborescens*).

Features:

Stout spreading dioecious (?gynodioecious) tree up to 10 m. tall; trunk up to 1 m diameter, sometimes several arising from base, these often twisted; bark firm (not flaking), often deeply furrowed, grey to grey-brown, tessellated. Branches spreading, often tortuous. Branchlets glabrous. Leaves glabrous, coriaceous, dark glossy green above, paler and dull below, margins undulate, somewhat waxy, midrib prominent on both surfaces, yellow; petioles stout, rigid 8-15 mm long; lamina of juveniles 50-120 × 40-90 mm, broad-oblong to ovate, apex acute to acuminate, base cuneately narrowed; of adults 50-80 × 40-70 mm, elliptic-oblong to ovate-elliptic, apex acute to acuminate, base cuneately narrowed. Inflorescence a slender 10-18-flowered raceme 30-45 mm long, rachis and pedicels, stout glabrous. Flowers 2.5-2.9 mm. diameter, greenish to greenish-yellow; males, females (and very rarely apparently perfect flowers) on very slender pedicels; calyx unequally deeply cleft, ovate, subacuminate; males with 2 large exerted anthers, ovary rudimentary or functional; female flower with 2 rudimentary anthers, ovary with large 2-lobed stigma. Drupe 10-18 mm long, oblong-ovoid, flesh dark pink, red or purple-black to maroon (flesh somewhat oily); endocarp 9.0-15 × 5.5-8.5 mm, dull, pale orange-yellow, elliptic to narrowly elliptic (and slightly compressed). Seed, 1(-2) per endocarp, elliptic, purple-brown. Description adapted from Allan (1961) and Webb & Simpson (2001).

Flowering:

October-January

Fruiting:

January-April

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1031



Caption: *Nestegis apetala* - close up of foliage showing upper leaf surface. Note wavy leaf margin
Photographer: Peter de Lange



Caption: *Nestegis apetala* - close up of foliage showing underside of leaves.
Photographer: Peter de Lange

Nestegis cunninghamii

Common Name(s):

Black maire

Threat Status (2009):

Non Threatened

Distribution:

Endemic. North, South, Hauturu (Little Barrier) and Aotea (Great Barrier) Islands. Scarce north of Auckland and often uncommon over wide parts of its former lowland range due to it being preferentially logged by early settlers. In the North Island Black Maire is now most commonly seen in the main Axial Ranges and Central Volcanic Plateau. In the South Island extending to Napenape in the east and near Greymouth in the west.

Habitat:

Widespread in coastal to montane forest. Often prominent in riparian Podocarp forest and on the Podocarp forests developed on the ignimbrite and pumice country of the Central Volcanic Plateau. As a rule Black Maire seems to prefer more frost prone habitats than White Maire (*Nestegis lanceolata*) though both species often grow together. Black maire is also common host for white mistletoe (*Tupeia antarctica*) in the Central Volcanic Plateau, Hawkes Bay and Wairarapa.

Features:

Stout gynodioecious spreading tree up to 25 m tall usually forming a broadly domed canopy; trunk up to 1.5m diameter, sometimes with several arising from base, usually straight and arching, sometimes twisted; bark firm (not flaking), grey-brown to dark brown, tessellated. Branches spreading, branchlets minutely pubescent. Leaves glabrous, coriaceous, dark green to brown-green above, ± dull, paler beneath, margins plane, entire with prominent raised midrib and side veins, borne on rigidly stout petioles 9-10(-15) mm long; lamina of juveniles 100-300 × 5-10 mm, narrow-linear, apex acute, base cuneately narrowed or attenuate; adult lamina 150-400(-600) × 20-40 mm, lanceolate to ovate- or elliptic-lanceolate, obtuse or subacute, coriaceous, weakly bullate and somewhat rough to touch; midrib and side veins impressed above (prominent below). Inflorescence a stout 8-12(-20)-flowered raceme 10-25 mm long; rhachis and pedicels densely pubescent. Male flowers with 2 large exerted anthers, ovary mostly rudimentary (occasionally functional); female flower with 2 sessile barren anthers, ovary with large 2-lobed stigma. Drupe 15-20 mm long, ovoid, flesh red, orange-red to purple-black; endocarp 10-18 × 6-9 mm, dull, pale orange-yellow, narrowly elliptic, elliptic to broadly elliptic, terete (sometimes weakly compressed). Seed purple-brown. Description adapted from Allan (1961) and Webb & Simpson (2001).

Flowering:

October - November

Fruiting:

December - April

Threats:

Not Threatened

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1032



Caption: *Nestegis cunninghamii* - close up of upper leaf surface

Photographer: Peter de Lange



Caption: *Nestegis cunninghamii* - leaf underside showing distinctive venation

Photographer: Peter de Lange

Pseudowintera colorata

Common Name(s):

Red horopito, mountain horopito, alpine peppertree

Threat Status (2009):

Non Threatened

Distribution:

Endemic. North, South and Stewart Islands

Habitat:

Coastal, lowland, or montane forest margins and shrubland

Features:

Shrub to 3.5 m tall; trunks and branches upright; bark dark; branchlets dark. Plants glabrous. Petiole slender, 5-10 mm long, dark reddish brown. Leaves alternate, pungent and pepper-tasting; midvein inconspicuous above, raised below; lamina 2-6(-8) x 1-3 cm, elliptic, margin undulate, tip obtuse to subacute, coriaceous, upper surface matt green to yellowish-green, blotched with red in exposed situations, undersides glaucous to white and often pink-flushed. Inflorescences axillary, flowers bisexual, c. 1 cm diam., in fascicles of 1-3, on slender pedicels 5-10 mm long, bracts ciliate. Calyx cupule margins subtire to shallowly lobed. Corolla comprised of 5-(6) free petals, these 4-5 mm long, linear to narrow-oblong, greenish yellow, apex obtuse.

Carpels 1-5, us. 1-2 maturing, stigma apical. Stamens 5-20. Fruit a 2-3-seeded fleshy globose to subglobose berry, 5-6 mm diam., dark red or black, flesh red. Seed 1- or 3-angled, obovate to elliptic, 2.6-3.6 mm, surface irregular.

Flowering:

November-March

Fruiting:

December-June

Threats:

Not Threatened. Often one of the few shrub species in heavily browsed forests

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1201



Caption: Flowers, South Otago coast

Photographer: John Barkla



Caption: Harbour Cone, Otago Peninsula

Photographer: John Barkla

Rubus squarrosus

Common Name(s):

Leafless lawyer, yellow-prickled lawyer

Threat Status (2009):

Non Threatened

Distribution:

Endemic. North and South Islands, from Ahipara south (rare north of the Manawatu)

Threats:

Not Threatened but often local and uncommon over large parts of its potential range. Some northern populations are very vulnerable to habitat destruction

For more information, visit:

http://nzpcn.org.nz/flora_details.asp?ID=1267



Caption: *Rubus squarrosus* flowers, Taiaroa Head

Photographer: John Barkla



Caption: Kaitorete Spit, Canterbury

Photographer: Melissa Hutchison

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