

# flora



Photo: Ian Hutton.

Scalybark

***Alyxia lindii***

**Family APOCYNACEAE**

**Description**

Scrambling shrub to 2-3m high which tends to climb over other low vegetation. The dark green leaves have milky sap and are arranged in threes. The white flowers appear in terminal clusters between November and February and are followed by a black, 2cm long fruit.

**Conservation significance**

Endemic, widespread but never common. Protected within the Permanent Park Preserve.

**Distribution**

Found mainly on the ridges of the lowland hills i.e. Transit, Intermediate, Mt Eliza. The genus *Alyxia* consists of about 120 species from India through tropical Asia to Southern China, Malaysia, east and north Australia, and the Pacific Islands.

**Ecology**

Grows more in shade than open sun.

**Population data/health**

Scattered as single plants through range.

**Habitat**

Semi-shaded forest of lowland ridges.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Alyxia squamulosa*****Family APOCYNACEAE****Description**

Scrambling shrub tending to climb over stunted bushes. The dark green leaves are oblong or slightly wider at the end and are arranged in whorls of 4 or 5. They have milky sap. Flowers are white, sweet-scented and arranged in large heads. Fruits are black and around 2cm long, sometimes with 2 fruits end to end.

**Conservation significance**

Endemic and restricted in its range. Protected within the Permanent Park Preserve.

**Distribution**

High in mountains, particularly on exposed ridges off Mt Gower and Mt Lidgbird, down to 600m.

**Ecology**

Mainly in open sun.

**Population data/health**

The main populations are confined along the Razorback Ridge and the ridge south east off Mt Lidgbird to "The Pimple". The plant is prolific at

both of these locations, but only scattered rarely elsewhere.

**Habitat**

Highly restricted habitat on Lord Howe Island. Remote, exposed, rocky ridges off the mountains at elevations above 600m. The habitat is significant in that it contains several plant species rarely found elsewhere, e.g. *Gonocarpus* sp., *Xylosma parvifolium*, *Geniostoma huttonii*, *Coprosma inopinata*.

**Threats**

The ridges where this plant mainly grows are very narrow, and walkers accessing these areas can trample this species.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Apium prostratum* ssp. *howense*****Sea Celery****Family APIACEAE****Description**

A trailing, perennial herb, with stems to 30cm. Strongly aromatic when bruised. Leaves are 2-17cm long and divided into 3. The small flower clusters are in groups of 1-3 and consist of 8-12 flowers. They are white to pinkish.

**Conservation significance**

Endemic subspecies.

**Distribution**

Coastal calcarenite cliffs and adjacent sand areas near the sea.

**Ecology**

Grows in cracks of coralline rocks and sand pockets, above the high water mark, but within the splash zone.

**Population data/health**

Fairly common throughout its range.

**Habitat**

Grows in cracks of calcarenite rock and sand pockets above the high tide line but can be within the splash zone.

**Threats**

Possible crowding by introduced grasses and the weed *Senecio elegans*, which is increasing along calcarenite cliffs from Ned's Beach to Middle Beach.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Asplenium goudeyi***

**Family** ASPLENIACEAE

**Description**

Fern with fronds ranging from 20cm to 150cm long.

**Conservation significance**

Endemic species widespread and common. Protected within the Permanent Park Preserve.

**Distribution**

Found from sea level to the mountain tops, northern hills and southern mountains. From a genus of about 700 species worldwide.

**Ecology**

Can tolerate a wide range of conditions – some stunted individuals with 20cm fronds on west facing rock cliffs in full sun, others with fronds

150cm long on mountain summits in shaded conditions.

**Population data/health**

Common and widespread.

**Habitat**

Grows on soil, or as an epiphyte on rocks or occasionally trees, in sun or shade.

**Threats**

None known

**References**

Jones, D 1996 A new species of *Asplenium* L. section *Thamnopteris* C.Presl. (Aspleniaceae) from Lord Howe Island. *Muelleria* 9.

***Asplenium milnei***

**Family** ASPLENIACEAE

**Description**

A medium sized terrestrial or lithophytic fern with bright green, shiny, pinnate fronds. The spore cases are linear and 5-10mm long and follow a lateral nerve on the frond.

**Conservation significance**

Common endemic. Protected within the Permanent Park Preserve.

**Distribution**

Common around the lowlands on calcarenite and basalt soil, ranging to the mountain tops, but not as common at higher elevations. Genus of 750 species, cosmopolitan.

**Ecology**

Grows on basalt and calcarenite soils. On coastal cliffs it is stunted and develops leathery, yellowish fronds.

**Population data/health**

Common and widespread.

**Habitat**

Common on the forest floor, or sprouting out of calcarenite rocks, Also grows on exposed rocky coastal cliffs.

**Threats**

Rodents eat frond stipes.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Asplenium pteridoides***

**Family** ASPLENIACEAE

**Description**

A terrestrial fern with coarse, much divided fronds.

**Conservation significance**

Rare endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Found only in higher parts of the southern mountains. Main areas are Little Pocket and valley off south east of Mount Lidgbird.

**Ecology**

Only found growing in moist areas under deep shade.

**Population data/health**

Surveys carried out 2002 indicate that the species is rare and may be listed as endangered. There are two main populations: Little Pocket on Mount Gower; and the valley south east of Mount Lidgbird.

**Habitat**

Deep shaded valleys as understory plant, with canopy of *Hedyscepe canterburyana*.

**Threats**

Limited range.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Asplenium surrogatum***

**Family** ASPLENIACEAE

**Description**

A medium sized terrestrial or occasionally epiphytic fern with dark green shiny fronds, with pinnae deeply divided.

**Conservation significance**

Common endemic fern.

**Distribution**

Mainly found in the southern mountain areas from sea level to the summits (where it is more common), and a few moist areas of the northern hills.

**Ecology**

A hybrid with *A. milnei* has been recorded.

**Population data/health**

Widespread and common.

**Habitat**

Shaded forest floor on basalt soil.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.



***Atractocarpus stipularis*****Green Plum**

**Family** RUBIACEAE

**Description**

A tree to 12m high with large rounded fleshy leaves.

**Conservation significance**

A common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Found from sea level to the mountain tops in moist sheltered forests, mainly around the southern mountains. Also a few in the northern hills and Transit Hill. From a genus of 40 species New Caledonia, PNG, Malesia, Tonga.

**Ecology**

Bird dispersed seeds. Seeds germinate prolifically.

**Population data/health**

Common and abundant.

**Habitat**

Sheltered forest in moister conditions on basalt soil.

**Threats**

Rats eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Blechnum contiguum***

**Family** BLECHNACEAE

**Description**

A climbing fern with stiff, shiny, dark green fronds; usually epiphytic on logs or tree trunks, climbing with its thick rhizome, rarely terrestrial.

**Conservation significance**

An endemic species. Lord Howe Island is the only location in Australia for this species. Protected within the Permanent Park Preserve.

**Distribution**

Restricted to the southern mountains above 600m. It is a conspicuous component of the summit cloud forest fern flora. Also found in New Caledonia.

**Ecology**

Occurs in cloud forest vegetation.

**Population data/health**

Common in its range.

**Habitat**

Shaded moist areas of the higher mountain areas.

**Threats**

None known.

**Other comments**

There are some differences between the Lord Howe Island and New Caledonia plants.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Blechnum fullagarii***

**Family** BLECHNACEAE

**Description**

A terrestrial or lithophytic fern. Fronds dimorphic.

**Conservation significance**

Endemic species restricted to the summits of the southern mountains. Protected within the Permanent Park Preserve.

**Distribution**

Confined to Mt Gower above 750 metres, where it is common on the summit. Genus of 220 species worldwide.

**Ecology**

Moist forests.

**Population data/health**

Widespread and abundant in its limited range.

**Habitat**

Shaded forest of southern mountains.

**Threats**

Climate change may change the moisture conditions of the cloud forest on Mount Gower summit and threaten this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

## ***Blechnum geniculatum***

**Family** BLECHNACEAE

### **Description**

Terrestrial or lithophytic fern. Fronds are 10-25cm long and 7-15cm broad.

### **Conservation significance**

Rare endemic species, with a very restricted habitat. Protected within the Permanent Park Preserve.

### **Distribution**

Cliffs with waterfalls that flow off the north and west faces of Mount Gower, also on rock faces on Mount Gower. A few specimens seen at base of waterfalls on Mount Lidgbird west face and south west face around 450m.

### **Ecology**

*Blechnum geniculatum* appears to need almost constant water, either as trickle or spray. It can gain a foothold on sheer vertical basalt rock faces, and grow despite some very strong flows of water from time to time.

### **Population data/health**

Surveys carried out in 2002 indicate that this species is rare. May be eligible for listing as endangered.

### **Habitat**

Wet gullies where creeks flow over mountain summits, down rock faces with waterfalls and water seepages, and at the base of waterfalls.

### **Threats**

In a few places Crofton Weed is invading stands of *Blechnum geniculatum*. However *B. geniculatum* tends to grow on the more open, vertical, rock cliffs and can cling onto the bare rock whereas the Crofton Weed needs some soil to get a hold. Crofton Weed grows vigorously at the base of the main cliff on the north face of Mount Gower where there is light, and particularly where there is water from the waterfalls off the summit.

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Blechnum howeanum***

**Family** BLECHNACEAE

**Description**

A tall, vigorous, terrestrial fern with light green fronds to 1 metre long.

**Conservation significance**

Common endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Common around the southern mountains from 100m to the summits. Genus of about 220 species worldwide.

**Ecology**

Prefers damp areas.

**Population data/health**

Common in its range.

**Habitat**

Found mainly in creek beds and moist shaded areas and the base of waterfalls of the southern mountains.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Boehmeria calophleba***

**Family** URTICACEAE

**Description**

A small tree to 3m with soft-textured leaves that are silver-white underneath.

**Conservation significance**

Endemic species, uncommon but widespread in mountains. Protected within the Permanent Park Preserve.

**Distribution**

Uncommon but locally abundant in wetter forest areas of the southern mountains, particularly Mount Lidgbird. An endemic species from a genus of 75 species, mainly tropical, one species in New Zealand, one in the rainforests of northern NSW.

**Ecology**

Thrives in moist sites. This species can be a coloniser of landslips.

**Population data/health**

Widespread in its range, and sometimes locally abundant.

**Habitat**

Grows well in moist shaded gullies on the slopes of the southern mountains.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Brachyscome segmentosa***

*Family* ASTERACEAE

**Description**

Perennial herb, stems spreading and decumbent.

**Conservation significance**

Endemic species restricted to damp shaded areas in the southern mountains. Protected within the Permanent Park Preserve.

**Distribution**

Around ledges of the southern mountains above around 300m.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Frequent in its range.

**Habitat**

Damp shaded areas at higher elevations.

**Threats**

Introduced grasses carried on walker's boots may impact on the habitat along walking tracks.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Caesalpinia bonduc*****Knicker Nut**

**Family CAESALPINIACEAE**

**Description**

A woody scrambling shrub with bipinnate leaves and bright yellow flowers. The undersides of the leaf stems have sharp recurved hooks. The seed pod is also covered in recurved hooks, and contains two hard seeds.

**Conservation significance**

Rare and restricted occurrence on Lord Howe Island. Presumed extinct on N.S.W. north coast. Listed as Endangered on the TSC Act.

**Distribution**

It is only found behind Ned's Beach and adjacent to Old Settlement Beach on Lord Howe Island. It is also found widely in the tropics and subtropics.

**Ecology**

Seeds float to aid dispersal.

**Population data/health**

Surveys carried out in 2001 found 19 plants at Ned's Beach and one plant at Old Settlement.

**Habitat**

Sandy soil in sun or light shade, close to the coast.

**Threats**

The introduced grasses Buffalo Grass *Stenotaphrum secundatum* and Kikuyu *Pennisetum clandestinum* are invading the habitat at Ned's Beach.

**Current management actions**

None.

**Other comments**

The sharp recurved hooks under leaves make this an unpopular plant.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.



Photo: Ian Hutton

Knicker Nut



Photo: Ian Hutton

Knicker Nut



## *Calystegia affinis*

**Family** CONVOLVULACEAE

### Description

A thin-stemmed twiner with sparse leaves and pale pinky-purple flowers, sprawling over a wide area of several square metres to 1800 square metres.

### Conservation significance

Found only on Lord Howe & Norfolk Islands. Lord Howe Island specimens may be distinct from Norfolk Island specimens. Listed as Endangered on the NSW TSC Act. Listed as Critically Endangered on the EPBC Act. Mt Gower populations protected within the Permanent Park Preserve.

### Distribution

Rare and very localised and restricted in its range. This species is endemic to Lord Howe Island and Norfolk Island. On Lord Howe Island it is located at Old Settlement and Mt Gower. From a genus of about 25 species in the tropics and subtropics.

### Ecology

Stems take root when touching the soil. Prolific growth in the sun in cultivation.

### Population data/health

Rare on Lord Howe Island and only known from four localities. There is possibly only 1 plant at each locality, sprawling over an area of some square metres.

### Habitat

The three mountain localities are in open, sunny moist areas near semi-permanent water flows. The Old Settlement population is growing on a south facing slope in amongst introduced Kikuyu grass on the edge of *Drypetes/Cryptocarya* forest.

### Threats

Low numbers and small range. The Dawson's Ridge population is under threat from introduced kikuyu grass, and does not flower. The mountain populations are under threat from introduced plants, particularly Crofton Weed.

### References

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.
- Hutton I. & Telford I. 1999. Report on *Calystegia affinis* on Lord Howe Island.



Photo: Ian Hutton

*Calystegia affinis*

## *Carmichaelia exsul*

**Family** FABACEAE

### Description

Broom-like leafless shrub with small white and purple pea flowers.

### Conservation significance

A rare endemic species. Listed as Endangered on the NSW TSC Act. Protected within the Permanent Park Preserve.

### Distribution

Restricted to the southern mountains mainly around the 450-600m level, below the main cliffs of the mountains. Largest population at west end of Mount Gower north face, north edge of Big Pocket and near bottom of the Razorback.

From a genus of 41 species all restricted to New Zealand except for this species.

### Ecology

Grows well in exposed areas. Bird dispersed seeds.

### Population data/health

Low numbers of individual plants found in surveys 2001/2003. Main concentration of plants found at Mount Gower north face (21 plants); Big Pocket north edge (8 plants); edge of north face of Razorback near bottom (6 plants).

Other populations consist of scattered individuals or two or three together.

### Habitat

Open sunny areas, mainly at top of treeline of forested mountain slopes/ bottom main cliffs of mountains slopes.

### Threats

Low numbers.

Introduced weeds, especially Crofton Weed.

Previously were threatened by browsing by goats, however, this is no longer a threat.

### References

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

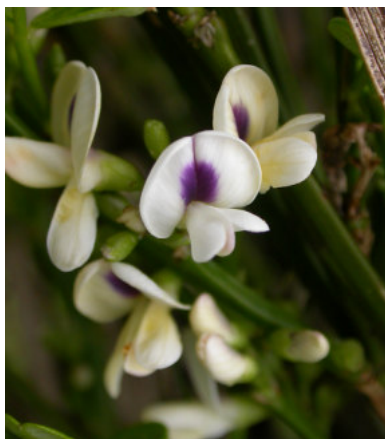


Photo: Ian Hutton

*Carmichaelia exsul*



Photo: Ian Hutton

*Carmichaelia exsul*

***Cassinia tenuifolia*****Bully Bush**

**Family** ASTERACEAE

**Description**

A compact bush to 2m high, with dense foliage of small, pale green, narrow leaves.

**Conservation significance**

Endemic species, widespread and common. Protected within the Permanent Park Preserve.

**Distribution**

Common and widespread in the lowlands and exposed open area (e.g. cliffs) to about 600m. Genus of 21 species in Australia and New Zealand.

**Ecology**

This species is the most common species to recolonise disturbed areas such as landslips, tree fall clearings, lightning strikes, etc on the Lord Howe Island Group. It has wind-dispersed seeds.

**Population data/health**

Widespread and common.

**Habitat**

Prefers exposed sites, forest edges and new clearings. Occurs on both basalt and calcarenite soils.

**Threats**

None known

**Other comments**

This species is a very useful plant for revegetation, being fast growing and providing dense foliage as a good windbreak. It is propagated at the Lord Howe Island nursery for revegetation projects.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Celtis conferta* ssp. *amblyphylla*****Cotton Wood**

**Family** *ULMACEAE*

**Description**

A tall tree to 16m with whitish bark. The leathery leaves are distinct with their three veins from the base and fine reticulate venation.

**Conservation significance**

A common endemic subspecies. The other subspecies *Celtis conferta* ssp. *conferta* is confined to New Caledonia. Protected within the Permanent Park Preserve.

**Distribution**

Common and widespread in the lowland forests to about 200m altitude. The genus is cosmopolitan with one species in the rainforests of eastern Australia.

**Ecology**

On both basalt and calcarenite soils. Dioecious. Bird dispersed seeds.

**Population data/health**

Widespread throughout its range, reasonably common.

**Habitat**

Sheltered rainforest.

**Threats**

Rodents eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Cephalomanes bauerianum***

**Family** HYMENOPHYLLACEAE

**Description**

A relatively large terrestrial or lithophytic filmy fern, with very fine, much divided lacy fronds to 50cm long.

**Conservation significance**

Endemic to Lord Howe and Norfolk Islands. Lord Howe Island has the most significant populations. Protected within the Permanent Park Preserve.

**Distribution**

Common in the southern mountains mainly on the summits but going down to almost sea level in moist gullies. From a small genus of about 10 species, with one extending to the Australian mainland, widespread mostly in subtropical humid habitats; this species is also found on Norfolk Island.

**Ecology**

The fronds are delicate but somewhat harsh textured, particularly when its habitat becomes dry.

**Population data/health**

Abundant and widespread on the mountain summits and in moist gullies at lower elevations.

**Habitat**

This fern grows prolifically, lining the banks of moist, deeply shaded creek beds and soaks.

**Threats**

Climate change may alter the moisture conditions of the cloud forest on Mount Gower.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Chamaesyce psammogeton***

**Family** EUPHORBIACEAE

**Description**

Perennial herb, glabrous. The reddish-purple stems are prostrate, to 35 cm or more. Exudes milky sap when damaged.

**Conservation significance**

Rare on Lord Howe Island. Listed as Endangered on the NSW TSC Act, also found in coastal NSW north to Queensland.

**Distribution**

Coastal dune at Blinkie Beach.

**Ecology**

Well adapted for growth on low nutrient sand dunes affected by wind and salt spray.

**Population data/health**

Surveys carried out in 2002 indicate the species is restricted to one location at Blinkie Beach. It was previously recorded from North Beach, but not relocated in the 2002 surveys.

**Habitat**

Sand dune above high tide line, in amongst *Spinifex hirsutus*.

**Threats**

Kikuyu and Buffalo Grass growing behind the dune, may threaten the habitat of the species.

Possible invasion of the dune by the exotic plant *Euphorbia paralias*. This weed is established on Lagoon Beach dune, and is a major weed on the dunes on the south coast of NSW and Victoria.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.



Photo: Ian Hutton

*Chamaesyce psammogeton*

***Chionanthus quadristamineus*****Blue Plum**

**Family** NYCTAGINACEAE

**Description**

A large tree to 16m high with whitish bark. The fruit is a large purple drupe 5cm long with one large seed inside, encased in a hard endocarp.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Common in the sheltered forests of the mountains and Intermediate Hill from sea level to 400m. A genus of about 100 species from tropical America, Asia and Africa, with a few species in Australia and the Pacific.

**Ecology**

The fruit is probably water dispersed.

**Population data/health**

Very common and abundant.

**Habitat**

Sheltered tall forest on slopes of mountains and Intermediate Hill.

**Threats**

Rats eat the seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Chionochloa howensis***

**Family** POACEAE

**Description**

Erect, tussocky perennial grass to 1m tall.

**Conservation significance**

Endemic species with restricted range. Protected within the Permanent Park Preserve.

**Distribution**

Only known on or near cliffs of Mounts Lidgbird and Gower.

**Ecology**

Able to grow on cliff ledges.

**Population data/health**

Unknown.

**Habitat**

Open rocky cliff ledges at high mountain elevations.

**Threats**

None known.

**Other comments**

Discovered in 1970 by J. Pickard.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.



## ***Coprosma huttoniana***

**Family RUBIACEAE**

### **Description**

Shrub or small tree 1-2m, sometimes 3m. Young stems and leaves are hairless. The indistinct flowers are green. The opposite leaves have a somewhat unpleasant smell when crushed.

### **Conservation significance**

An endemic species. Protected within the Permanent Park Preserve.

### **Distribution**

Common in the mountains from 500m. An endemic species from a genus of 90 species from Borneo to Australia, New Zealand and Pacific Islands.

### **Ecology**

Dioecious. Wind pollinated flowers. Bird dispersed seeds.

### **Population data/health**

Common throughout its range

### **Habitat**

Open areas around cliffs and rock ledges of mountains.

### **Threats**

None known

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Coprosma inopinata*****Family RUBIACEAE****Description**

A compact, prostrate shrub to 0.5m with light green lanceolate, opposite leaves.

**Conservation significance**

Endemic species. Listed as Endangered on the NSW TSC Act. Protected within the Permanent Park Preserve.

**Distribution**

Only found on two remote ridges off the southern mountains. From a genus of 90 species from Borneo to Australia, New Zealand and the Pacific Islands.

**Ecology**

Dioecious. Wind pollinated flowers. Bird dispersed seeds.

**Population data/health**

Rare. Only known from remote ridges off southern mountains at two localities: the Razorback on Mount Gower and the south east ridge off Mt Lidgbird.

Only 29 plants located in surveys 2001.

**Habitat**

Highly restricted habitat on Lord Howe Island. Remote, exposed, rocky ridges with shaded southerly aspect. The habitat is significant in that it contains several rare plant species, e.g. *Gonocarpus* sp., *Xylosma parvifolium*, *Geniostoma huttonii*.

**Threats**

Small numbers of known individual plants.

The ridges which are the main habitat for this species are very narrow, and walkers accessing these areas can trample this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



Photo: Ian Hutton

*Coprosma inopinata*

## ***Coprosma lanceolaris***

**Family RUBIACEAE**

### **Description**

Shrub 1-2m, occasionally 3m. Underside of opposite leaves have small domatia pits.

### **Conservation significance**

An endemic species common in its range. Protected within the Permanent Park Preserve.

### **Distribution**

Common in the southern mountains from 500m. An endemic species from a genus of 90 species from Borneo to Australia, New Zealand and the Pacific Islands.

### **Ecology**

Dioecious. Wind pollinated flowers. Bird dispersed seeds.

### **Population data/health**

Common throughout its range.

### **Habitat**

Sunny open, but protected areas around cliffs and rock ledges.

### **Threats**

None known

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Family RUBIACEAE****Description**

A shrub to 2m high with bright green shiny, opposite leaves.

**Conservation significance**

Endemic species. Some plants protected within the Permanent Park Preserve.

**Distribution**

Found mainly in coastal lowland areas, but some grow on edge of the Little Pocket at an altitude of 600m. Genus of about 90 species from Borneo to Australia, New Zealand and the Pacific Islands.

**Ecology**

Dioecious. Wind pollinated flowers. Bird dispersed seeds.

**Population data/health**

Common throughout its range.

**Habitat**

On lowlands more common on calcarenite soils; in sunny locations.

**Threats**

None known.

**Other comments**

This species is propagated at the island nursery as a plant for landscaping around the lowlands.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Coprosma putida*****Stinkwood**

**Family RUBIACEAE**

**Description**

Bush to small tree 4m high. The large, opposite leaves emit a putrid odour when bruised or crushed. Fruits are red and occur in winter to spring.

**Conservation significance**

Endemic species. Widespread on Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Widespread and common in sheltered forests from sea level to the mountain tops. From a genus of approximately 90 species from Borneo to Australia, New Zealand and the Pacific Islands.

**Ecology**

Dioecious. Wind pollinated flowers. Bird dispersed seeds.

**Population data/health**

Common throughout its range.

**Habitat**

Widespread in open areas and in open forest, on basalt soil.

**Threats**

None known

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Coprosma sp. nov.****Family RUBIACEAE****Description**

Straggling shrub to 1m high. Leaves opposite.

**Conservation significance**

Rare. Only located during rare plant surveys in 2001. Possibly a new species, and probably endemic to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Mount Lidgbird north face, mainly around base of Greyface on Mount Lidgbird. Genus of 90 species from Borneo to Australia, New Zealand and the Pacific Islands.

**Ecology**

Most *Coprosma* species are dioecious, have wind pollinated flowers and bird dispersed seeds.

**Population data/health**

Recorded from a restricted area.

**Habitat**

Scrambling amongst native grasses and low shrubs of *Metrosideros nervulosa*, *Cassinia tenuifolia*, and *Dodonaea viscosa*.

**Threats**

None known.

**Other comments**

This plant has characteristics of both *Coprosma lanceolaris* and *Coprosma huttoniana*, but is distinct from both.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

Hutton, I (2005) *Rare Plant Surveys of Lord Howe Island 2*. Report prepared for the Biodiversity Conservation Science Section, Dept of Environment and Conservation.

***Corokia carpodetoides***

**Family** ESCALLONIACEAE

**Description**

A small tree to 5m high. Masses of tiny yellow flowers cover the plant in summer.

**Conservation significance**

Rare endemic species restricted to mountain tops. Protected within the Permanent Park Preserve.

**Distribution**

Mainly on the summits of Mounts Gower and Lidgbird, where it is locally common; a few plants lower down to about 700m. From a genus of 6 species, 2 in New Zealand, one each Rapa, Chatham Islands and the Nightcap Range in NSW on the Australian mainland.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Locally common on the summit of Mount Gower.

**Habitat**

Mountain summits and ridges in open sun.

**Threats**

None known

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Family LAURACEAE**

### **Description**

A tree to 12m high with attractive, thick, leathery round leaves. Fruit is black and globular, about 4cm in diameter, with thick flesh inside.

### **Conservation significance**

Uncommon endemic species. Protected within the Permanent Park Preserve.

### **Distribution**

Uncommon but locally abundant on the summit of Mt Gower. There are a few near the Goat House, the Saddle and the flanks of Mt Lidgbird. From a genus of 200-300 species in the tropics and subtropics.

### **Ecology**

More common in moist environments. Has a large seed, which provides food for the seedling in shaded forest floor.

### **Population data/health**

Uncommon but locally abundant.

### **Habitat**

Thrives in moist sheltered areas.

### **Threats**

None known

### **References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



## ***Cyathea brevipinna***

**Family** CYATHEACEAE

### **Description**

A tree fern with a trunk 1.5 to 3m high; leaf scars on the trunk are more or less fibrous.

### **Conservation significance**

Common endemic fern. Protected within the Permanent Park Preserve.

### **Distribution**

Common in the southern mountains above 700 metres. From a mainly tropical genus of about 600 species, extending south to New Zealand, Chile and South Africa. Eleven species on mainland Australia, all on the east coast.

### **Ecology**

Prefers moist shaded environments.

### **Population data/health**

Widespread and common its range.

### **Habitat**

Within moist shaded rainforest of southern mountain summits.

### **Threats**

Climate change.

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Cyathea howeana***

**Family** CYATHEACEAE

**Description**

A medium sized tree fern with a trunk 2 to 3m high. The fronds fall off cleanly, leaving a bare trunk.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Generally common on the upper slopes of the southern mountains, mainly above 700m., some lower. From a mainly tropical genus of about 600 species, extending south to New Zealand, Chile and South Africa. Eleven species occur on mainland Australia, all on the east coast, in tropical and temperate regions.

**Ecology**

No specific information available.

**Population data/health**

Common across its range.

**Habitat**

Rainforest of the southern mountains, sometimes in the open.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Cyathea macarthurii***

**Family** CYATHEACEAE

**Description**

A tall endemic tree fern with a trunk 2 to 4 metres high, shaggy from persistent frond bases.

**Conservation significance**

Common endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Common in the southern mountains from sea level to mountain tops. From a mainly tropical genus of about 600 species, extending south to New Zealand, Chile and South Africa. Eleven species on mainland Australia, all on the east coast, tropical and temperate.

**Ecology**

No specific information available.

**Population data/health**

Common and widespread in its range.

**Habitat**

Moist shaded areas of the southern mountains.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Cyathea robusta***

**Family** CYATHEACEAE

**Description**

A tall tree fern with a trunk to 5 metres high; leaf bases persistent on trunk at first.

**Conservation significance**

Common endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Found around the southern mountains from sea level to the summits, and on Intermediate Hill. From a mainly tropical genus of about 600 species, extending south to New Zealand, Chile and South Africa. Eleven species on mainland Australia, all on the east coast, in tropical and temperate regions.

**Ecology**

No specific information available.

**Population data/health**

Common and widespread.

**Habitat**

Moist shaded areas, creek gullies.

**Threats**

None known.

**Other comments**

Live plants exported in late 1800's. Currently in the nursery trade on mainland Australia.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Dendrobium macropus ssp. howeanum***

**Family** ORCHIDACEAE

**Description**

An epiphytic orchid, usually occurring in large clumps.

**Conservation significance**

An endemic subspecies, widespread. Protected within the Permanent Park Preserve.

**Distribution**

Common in the lowland forests up to 450m. This species is also found in New Caledonia and Fiji. Genus of 1400 species in Australia, New Zealand, the Pacific Islands, Asia and Malesia.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Widespread and common throughout its range.

**Habitat**

Epiphytic on trees or rocks.

**Threats**

Goats browse on leaves.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Dendrobium moorei*****Family ORCHIDACEAE****Description**

Epiphytic, mainly on tree branches and occasionally on rocks. Flowers most of the year.

**Conservation significance**

Endemic species; locally abundant. Protected within the Permanent Park Preserve.

**Distribution**

Common in the southern mountains from 350m to summits, occasionally down to 150m, and rarely down to 50m (Malabar). From a genus of 1400 species in Australia, New Zealand, the Pacific Islands., Asia and Malesia.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Common throughout its range. Very common on the summit of Mount Gower.

**Habitat**

Epiphytic, mainly on tree branches 2 to 3 m above ground level, occasionally on rocks or cliffs.

**Threats**

None known

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Dianella intermedia***

**Family** LILIACEAE

**Description**

Rhizotamous evergreen herb, leaves to 40cm long.

**Conservation significance**

Widespread but uncommon, endemic to Lord Howe and Norfolk Islands. Protected within the Permanent Park Preserve.

**Distribution**

Lowland ridges to higher mountain elevations around 600m.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Widespread but not common.

**Habitat**

Open, grassy, rocky areas.

**Threats**

None known.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Dietes robinsoniana*****Wedding Lily**

**Family** IRIDACEAE

**Description**

A perennial herb with blue-green strap-like leaves to 1m long. Flowers are white with purple markings.

**Conservation significance**

An endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Uncommon, but locally abundant in the southern mountains and now cultivated widely in the settlement. From a genus of six species, the other five being in southern Africa.

**Ecology**

Thrives in open sunny areas such as cliff ledges. Prolific seed producer.

**Population data/health**

Widespread across its habitat.

**Habitat**

Southern mountain cliff ledges and ridges in the open.

**Threats**

Rats eat seeds, leaves and also dig up roots. Introduced *Dietes* species used in some island gardens have the potential to cross-pollinate with this endemic species.

**Other comments**

Used widely in the settlement and rehabilitation sites.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Diplazium melanochlamys***

*Family* ATHYRIACEAE

**Description**

A large terrestrial fern with bright green fronds.

**Conservation significance**

Reasonably common endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Widespread in the southern half of the Island. From a large genus of about 400 species widely distributed in the tropics; 8 species in Australia.

**Ecology**

No specific information available.

**Population data/health**

Occasional or locally abundant, widespread in the southern mountains and Intermediate Hill.

**Habitat**

Moist shaded habitats, such as creek gullies and under tall closed forest.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Dracophyllum fitzgeraldii*****Fitzgeraldii Tree**

**Family EPACRIDACEAE**

**Description**

A spreading tree to 15m with long, narrow leaves in rosettes at the ends of branches forming a dense canopy. The attractive flowers occur in a terminal spike to 12cm long made up of 100 or so small white flowers.

**Conservation significance**

An endemic species widespread in its range. Protected within the Permanent Park Preserve.

**Distribution**

Occurs in the southern mountains from 120m. The genus has 35 species in New Zealand, and a further 13 in Australia and New Caledonia.

**Ecology**

An unusual tree-sized member of its family. This species flowers first on the mountain summits and later at the lower altitudinal range. Rarely flowers at altitudes below 400m.

**Population data/health**

Widespread and common in its range.

**Habitat**

Prefers exposed sites on ridges and at the edges (particularly top edge) of rainforest on steep slopes of both mountains – not as common in the middle of the rainforest.

**Threats**

Epacrids in general, and a *Dracophyllum* species in Tasmania, are highly susceptible to the pathogen *Phytophthora cinnamomi*. This pathogen has been recorded at a low altitude site on Lord Howe Island. The risk of significant decline in the species if the pathogen is introduced to its habitat is very high.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Drypetes deplanchei* ssp. *affinis***

Greybark

*Family EUPHORBIACEAE***Description**

A handsome tall tree to 16m with light grey bark often mottled pink with lichen. Leaves are 6cm x 3cm and the 2cm long fruit is bright orange to yellow and globular.

**Conservation significance**

Endemic subspecies common and widespread. Some areas protected within the Permanent Park Preserve.

**Distribution**

One of the most common lowland trees on Lord Howe Island; occasionally found to 600m especially on ridges and drier areas. Also found in north and east Australia. Genus of about 200 species distributed mainly in the Old World tropics.

**Ecology**

Dioecious. Bird dispersed seeds

Lowland calcarenite *Drypetes* forest is rich and diverse in invertebrates, including an important habitat for the large endangered land snail *Placostylus bivaricosus*.

**Population data/health**

Common and widespread across its range.

**Habitat**

Thrives in drier rainforest habitats of the lowlands and ridges. On both basalt and calcarenite soils.

**Threats**

Clearing for future development in the settlement area. Rats eat seeds. In lowland areas north of Intermediate Hill the habitat is invaded by weeds such as Cherry Guava, Sweet Pittosporum, Climbing Asparagus, Ground asparagus, Bridal Creeper and Ochna.

**Other comments**

Propagated on the Island as an ornamental plant and used widely in the settlement and rehabilitation sites.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Dysoxylum pachyphyllum***  
**Apple****Island**

**Family** MELIACEAE

**Description**

A tree to 8m, occasionally taller.

**Conservation significance**

Common and widespread endemic species. Protected within the Permanent Park Preserve.

**Distribution**

From sea level to the summits in wet forest areas. Genus of rainforest trees from north east Australia, south west Pacific Islands, south Asia, Malesia and New Zealand.

**Ecology**

Exhibits cauliflory (where floral stalks come out of the trunk and branches). This is especially prominent when in fruit. Currawongs eat seeds and disperse.

**Population data/health**

Common and locally abundant, e.g. Mount Gower summit, and the west edge of the north face around 300m. Mount Lidgbird sea level to summit. Intermediate and Transit Hills.

**Habitat**

Thrives in moist sheltered areas. Largest trees in Big Pocket and valley on ridge off south east corner Mount Lidgbird.

**Threats**

Rats eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Elaeocarpus costatus*****Family ELAEOCARPACEAE****Description**

A rainforest tree to 8m in height. The leaf margins are toothed and dark green. Flowers are white in clusters of 8 to 10.

**Conservation significance**

An uncommon endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Mainly in the higher parts of the southern mountains. From a genus of some 350 species which is found in tropical and subtropical regions.

**Ecology**

Largest individuals occur on the sheltered slopes of mountains and on the summit of Mount Gower; stunted on ridges. Individual trees do

not flower each year. Bird dispersed seeds. Seeds of this genus known to be difficult to germinate.

**Population data/health**

Uncommon. The greatest numbers of this species occur on the summit of Mount Gower.

**Habitat**

Grows in moist locations on basalt soil.

**Threats**

Rats eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Elatostema grande***

*Family URTICACEAE*

**Description**

Fleshy perennial herb.

**Conservation significance**

Endemic species, common. Protected within the Permanent Park Preserve.

**Distribution**

Widespread in the southern mountains in moist, shaded situations. From a genus of about 200 species in the Old World tropics.

**Ecology**

Often forms dense patches of many plants. Monoecious.

**Population data/health**

Widespread and common in its range.

**Habitat**

Moist shaded sites, creek gullies, cliffs with waterfalls.

**Threats**

Crofton Weed invasion poses a threat to the habitat of this species, particularly in gullies at the base of major cliffs of the southern mountains. This is particularly apparent on the east face of Mount Lidgbird.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

## ***Exocarpus homalocladus***

**Family** SANTALACEAE

### **Description**

A broom-like shrub or tree 2- 4m in height. Adults are mainly leafless with flattened branchlets.

### **Conservation significance**

An endemic species, uncommon but widespread. Protected within the Permanent Park Preserve.

### **Distribution**

Found from sea level to the mountain tops. The genus has 16 species in Malaya, Norfolk Island, New Caledonia, Fiji, Polynesia, Madagascar, New Zealand and Australia.

### **Ecology**

Members of the genus *Exocarpus* on the mainland are known to be parasitic on the roots of other

plant species. Bird dispersed seeds. Not often seen with mature fruits.

### **Population data/health**

Not common but widespread.

### **Habitat**

Well-drained hillsides with good soil.

### **Threats**

None known

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Ficus macrophylla* ssp. *columnaris*****Banyan**

**Family MORACEAE**

**Description**

A tall tree to 20m high, with roots hanging from the branches, which eventually touch the ground and form new trunks, so one tree can have up to 40 trunks or more.

**Conservation significance**

A common endemic subspecies of the species found on mainland Australia. Protected within the Permanent Park Preserve.

**Distribution**

Common in lowland parts all across the main island, occasionally found to 500m altitude. Genus of 600-800 species in tropics & subtropics.

**Ecology**

Grows well on basalt or calcarenite soil. Pollinated by the wasp *Pleistodontes froggatti*, the same species that pollinates *Ficus macrophylla* ssp. *macrophylla* on mainland Australia. Bird dispersed seeds. Coloniser of land slips. Prone to canopy dieback as a result of windshear.

**Population data/health**

Common across the island. Historic photographs from the 1880's indicate there were more individuals of this species growing around the settlement area, but removal of their protective surrounding forest has resulted in loss of individuals.

**Habitat**

Requires protection from the elements provided by closed forest. Where the closed forest has been removed, trees gradually die due to exposure to strong winds. Trees on ridges are somewhat stunted.

**Threats**

Clearing causing trees to die.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Gahnia howeana***

**Family** CYPERACEAE

**Description**

A perennial saw sedge forming a robust tussock.

**Conservation significance**

Endemic species, uncommon but widespread in southern mountains. Protected within the Permanent Park Preserve.

**Distribution**

Found mainly in southern mountains down to 100m. An endemic species from a genus with about 40 species in Australia, New Zealand, Asia, Pacific.

**Ecology**

Prefers moist environments.

**Population data/health**

Uncommon throughout its range

**Habitat**

Grows in partly shaded moist forests of the southern mountains.

**Threats**

The closely related *Gahnia xanthocarpa* from New Zealand is known to be highly susceptible to the pathogen *Phytophthora cinnamomi*. This pathogen has been recorded at a low altitude site on Lord Howe Island. The risk of significant decline in the species if the pathogen is introduced to its habitat is very high. Impact on other species.

**Other comments**

Previously *Gahnia xanthocarpa* of New Zealand, newly described in 1997.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Geniostoma huttonii***

**Family** LOGANIACEAE

**Description**

A rare scrambling shrub to 1m high, which sprawls over other shrubs.

**Conservation significance**

Endemic species, very restricted in its range. Listed as Endangered on NSW TSC Act. Protected within the Permanent Park Preserve.

**Distribution**

Mainly found on the remote ridges off the southern mountains. On Mt Lidgbird it occurs on the south east corner at about 500m altitude. On Mount Gower it occurs on the cliff which leads into Little Pocket. This species was recently discovered in 1990. From a genus of some 35 species found in Madagascar, Mauritius, Malaya, Australia and New Zealand.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Rare and very localised and restricted in its range:

About 100 plants on the ridge off the south east summit of Mt Lidgbird

Two plants recorded on the north face of Mt Gower.

About 30 plants recorded on the Razorback off Mt Gower.

One plant at the base of the 2<sup>nd</sup> waterfall on Mount Gower.

**Habitat**

Grows on south and east facing shaded cliffs in amongst open stunted shrubs, or in shade.

**Threats**

Low numbers and limited range. The ridges where this plant mainly grows are very narrow, and walkers accessing these areas can trample this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



Photo: Ian Hutton

*Geniostoma huttonii*

***Geniostoma petiolosum***

**Family** LOGANIACEAE

**Description**

A small tree to 4m. Flowers very pungently-scented.

**Conservation significance**

Endemic species widespread but not common. Protected within the Permanent Park Preserve.

**Distribution**

Sheltered forests below 450m, mainly in the southern mountains, but also Transit Hill and Intermediate Hill. From a genus of 25 species found in Japan, Malesia, Australia, New Zealand and the Pacific Islands.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Uncommon

**Habitat**

Sheltered open forest.

**Threats**

None known

**Other comments**

Very conspicuous when in flower, as the flowers emit a strong, pungent odour, detectable from 10 metres away when in full flower; presumably to attract flies for pollination.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Gonocarpus sp.****Family HALOGORACEAE****Description**

Perennial squat herb, forming large plants to 50cm diameter.

**Conservation significance**

Rare on Lord Howe Island, only collected in 2001. Possibly a new species or subspecies. Protected within the Permanent Park Preserve.

**Distribution**

The Razorback Ridge off south west corner of Mount Gower summit. The genus has 41 species worldwide in Australia, New Zealand and Malesia. Australia has 36 species in all States.

**Ecology**

No specific information available.

**Population data/health**

Known only from one locality. Surveys in 2001 recorded several plants of this species growing on two flat sections of the Razorback.

**Habitat**

On the flatter sections of the Razorback Ridge, amongst short grass, along with patches of *Cassinia tenuifolia* and *Metrosideros nervulosa*.

**Threats**

The ridge where this plant mainly grows is very narrow, and walkers accessing this area can trample this species.

**Other comments**

Currently seeking correct identification for this species. It has been identified as *G. humilis* and *G. tetragynus*, both of which occur in eastern Australia. However the specimens on Lord Howe Island are more robust and further taxonomic work is warranted.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

Hutton, I (2005) *Rare Plant Surveys of Lord Howe Island 2*. Report prepared for the Biodiversity Conservation Science Section, Dept of Environment and Conservation.

***Grammitis diminuta***

**Family** GRAMMITIDACEAE

**Description**

A small epiphytic or lithophytic fern with thin textured, simple fronds.

**Conservation significance**

Endemic species common in its range. Protected within the Permanent Park Preserve.

**Distribution**

Abundant in the southern mountains especially above 500m, occasionally down to 200m Genus is pantropical with about 160 species; generally occupying cool mountain cloud forests.

**Ecology**

No specific information available.

**Population data/health**

Widespread and abundant in its range.

**Habitat**

Found in moist habitats, usually growing on basalt rocks, cliffs, logs and tree fern trunks.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Grammitis nudicarpa***

*Family* GRAMMITIDACEAE

**Description**

A very small epiphytic fern with simple fronds.

**Conservation significance**

Rare endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

This endemic species is confined to the summits of the southern mountains.

**Ecology**

No specific information available.

**Population data/health**

Rare and restricted in its range.

**Habitat**

Densely shaded, moist forests of the southern mountain summits.

**Threats**

Climate change which may impact upon the species' cloud forest habitat.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Grammitis wattsii***

*Family* GRAMMITIDACEAE

**Description**

Small fern with simple fronds, epiphytic on logs and tree trunks.

**Conservation significance**

Common endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

This species is confined to the top of Mounts Gower and Lidgbird.

**Ecology**

No specific information available.

**Population data/health**

Common in its range.

**Habitat**

Moist cloud forests of the southern mountains.

**Threats**

Climate change which may impact upon the species' cloud forest habitat.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Guioa coriacea*****Island Cedar**

**Family** SAPINDACEAE

**Description**

Tall tree to 15m high. The leaf margins are rolled under. A 3-lobed woody seed case encloses orange fleshy seeds.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Common in the sheltered mountain forests below 500 m, and Intermediate and Transit Hills; a few in the northern hills. From a genus found in eastern Australia, the south west Pacific, Southern Asia and Malesia.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Common and abundant.

**Habitat**

Sheltered tall forest in wetter parts, on basalt soil.

**Threats**

None known

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Hedyscepe canterburyana*****Big Mountain Palm**

**Family** ARECACEAE

**Description**

A compact, feather-leaved palm to 10m high.

**Conservation significance**

A monotypic genus endemic to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Common in the southern mountains, from 350m to the summits, where it is a conspicuous element of the flora.

**Ecology**

Generally specimens grow better in protected forest, but also grows in exposed situations such as ridges.

**Population data/health**

Common and abundant in its range. There are several areas where it is the dominant tree

species of the forest such as Little Pocket and Big Pocket on Mount Gower; and the small valley on the south east ridge off Mount Lidgbird.

**Habitat**

Mountain slopes and summits with good soil.

**Threats**

Rats are known to eat the seed and leaf stems of this species.

**Other comments**

Small numbers of seeds harvested for export.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Family ARECACEAE****Description**

A tall palm with a trunk to 12m high, ringed by leaf scars.

**Conservation significance**

A common and widespread endemic species from a genus restricted to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Common on sloping sites with basalt soils, up to about 400m. Genus of two species only on Lord Howe Island.

**Ecology**

Prefers basalt soil. Only occasionally in dense stands, more usually scattered through rainforest.

**Population data/health**

Common and abundant.

**Habitat**

Slopes and ridges of lowland hills and mountains to 500m.

**Threats**

Rats eat seeds and leaf stems of this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Howea forsteriana*****Kentia Palm****Family ARECACEAE****Description**

A tall palm with a trunk to 15m, with a graceful, hanging crown. Fruit are red when ripe.

**Conservation significance**

A common and widespread endemic species from a genus restricted to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Widespread in the lowlands, preferring flat sites with sandy soils, usually in dense stands. Some notable large stands on basalt soil are located at Greyface, the north slope of Mt Gower around 100m, and Dinner Run.

**Ecology**

The largest stands grow on sandy soil of the lowlands. Usually forms large monoculture stands.

**Population data/health**

Common and abundant.

**Habitat**

Mainly occurs on flat areas of lowlands on sandy soil, growing right to the coast edge.

**Threats**

Rats eat seeds and stems of this species.

**Other comments**

This endemic palm has long been favoured as an indoor potted plant. Seed has been harvested from Island forests since 1870. A palm nursery on the Island now germinates the seeds and markets seedlings.

Plantations of palms have been grown on the Island from 1984. Plantations have also been established in other countries as a commercial species, notably Norfolk Island and the Canary Islands.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

## ***Hymenophyllum howense***

**Family** HYMENOPHYLLACEAE

### **Description**

A small epiphytic filmy fern with bright green, delicate, lacy fronds 4 to 6cm long. The filmy ferns have a membranous frond lamina just one cell thick.

### **Conservation significance**

An endemic species widespread and abundant in its habitat, but this is restricted to the southern mountain summits. Protected within the Permanent Park Preserve.

### **Distribution**

Restricted to the very mountain summits, only occasionally lower in very damp microhabitats. From a genus of about 300 species distributed widely in humid habitats.

### **Ecology**

Restricted to the wettest, shaded environments as found on the mountain summits.

### **Population data/health**

Abundant in its range.

### **Habitat**

Found mainly growing on tree trunks, particularly tree fern trunks, where they often form a dense covering for most of the length of the trunk.

### **Threats**

Climate change which may impact upon the species' cloud forest habitat.

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Hymenophyllum moorei***

**Family** HYMENOPHYLLACEAE

**Description**

A small epiphytic filmy fern with bright green, delicate, lacy fronds 1-3cm long. The filmy ferns have a membranous frond lamina just one cell thick.

**Conservation significance**

An endemic species widespread and abundant in its habitat, but this is restricted to the southern mountain summits. Protected within the Permanent Park Preserve.

**Distribution**

Restricted to the mountain summits, and occasionally lower in very damp microhabitats. From a genus of about 300 species distributed widely in humid habitats.

**Ecology**

Wet, shaded environments such as found on the mountain summits.

**Population data/health**

Abundant in its range.

**Habitat**

Found growing adpressed on tree trunks, particularly tree fern trunks, where they often form a dense covering for most of the length of the trunk.

**Threats**

Climate change which may impact upon the species' cloud forest habitat.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Korthalsella emersa***

**Family** VISCACEAE

**Description**

Parasitic plant to 15cm tall.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Widespread over all areas of the Island. From a genus of about 30 species Africa, Himalayas, Japan, Australia, New Zealand.

**Ecology**

Recorded growing on a variety of native plants including *Elaeodendron curtispiculum*, *Jasminum simplicifolium*. Bird dispersed seeds.

**Population data/health**

Common and widespread.

**Habitat**

On branches of native trees, shrubs and creepers.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Lastreopsis nephrodioides***

*Family DRYOPTERIDACEAE*

**Description**

Terrestrial or epiphytic fern with a semi-creeping rhizome covered in dark brown scales. Fronds are 10-40cm long.

**Conservation significance**

Endemic species

**Distribution**

Occurs on the southern parts of Lord Howe Island, especially at higher altitudes.

**Ecology**

No specific information available.

**Population data/health**

No specific information available.

**Habitat**

Occurs in moist forest.

**Threats**

Weed invasion, climate change.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Lepidium howei-insulae***

**Family** BRASSICACEAE

**Description**

Perennial subshrub to about 1m tall. Stems sometimes partially creeping.

**Conservation significance**

Endemic species.

**Distribution**

Scattered distribution. Known from Middle Bay, Signal Point and Balls Pyramid.

**Ecology**

No specific information available.

**Population data/health**

No specific information available.

**Habitat**

Grows on rocky ledges and in sandy pockets near the sea.

**Threats**

Climate change, weed invasion.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.



***Lepidium nesophilum***

**Family** BRASSICACEAE

**Description**

Perennial herb or subshrub, with a trailing stem growing to 1.5m. The leaves are 3-12cm long and 0.5-2cm wide. The small white flowers are green with white margins.

**Conservation significance**

Endemic species.

**Distribution**

Southern mountains.

**Ecology**

Grows on rocky basalt ledges at low elevations.

**Population data/health**

No specific information available.

**Habitat**

No specific information available.

**Threats**

Weed invasion.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Lepidorrhachis mooreana*****Little Mountain Palm**

**Family** ARECACEAE

**Description**

A stout, dwarf palm with a trunk to 2m high.

**Conservation significance**

A monotypic genus endemic to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Confined to higher elevations in the southern mountains, mainly above 750m altitude. A conspicuous component of the Mount Gower cloud forest.

**Ecology**

Prolific seed producer.

**Population data/health**

Abundant in its range. Observations indicate that there are two distinct size classes on Mount Gower; tall mature palms, and very small

seedlings that may have only recruited since the rodent poison program began on the summit about 1987.

**Habitat**

Sheltered closed forest of the mountain summits, rarely lower.

**Threats**

Rats are known to predate heavily on the developing seeds, and also chew the stems of leaf fronds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Leptopteris moorei***

**Family** OSMUNDACEAE

**Description**

Fern with a trunk 20-30cm tall. The delicate lacy fronds are 0.5-1m long.

**Conservation significance**

Rare endemic fern. Protected within the Permanent Park Preserve.

**Distribution**

Confined to the summit of Mount Gower. From a genus of 7 species from New Guinea, Eastern Australia, New Zealand, Vanuatu and Samoa; characteristic of very damp, shady humid forests.

**Ecology**

These ferns lack mesophyll and stomata and appear almost transparent.

**Population data/health**

Rare and only in a very restricted habitat on the summit of Mount Gower.

**Habitat**

Damp shaded cliffs and soil banks in the cloud forest on Mount Gower summit.

**Threats**

Low numbers, making the species susceptible to stochastic (chance) events. Climate change may change the moisture conditions of the cloud forest on Mount Gower summit and threaten this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Leptospermum polygalifolium* ssp. *howense*****Tea Tree****Family MYRTACEAE****Description**

Bushy shrub or spreading small tree to 5m. Leaves are narrow and pointed. Flowers are white and followed by a woody capsule 5-7mm in diameter.

**Conservation significance**

Endemic subspecies, mainly confined to mountain summits. Protected within the Permanent Park Preserve.

**Distribution**

Southern mountains, mainly summits, down to 750m, with only a few lower, e.g. Mutton Bird Point track. An endemic subspecies, from a genus of 35 species, mainly Australian, with a few species in New Caledonia, New Zealand and Malaysia.

**Ecology**

Many very large, old, gnarled trees on Mt Gower summit where it is one of the major components of the canopy. Wind dispersed seeds.

**Population data/health**

Common in its range, but quite a restricted range.

**Habitat**

Montane forest.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Lordhowea insularis***

**Family** ASTERACEAE

**Description**

A tall, erect, woody herb 1-2m high with distinctive large, deeply toothed leaves and clusters of yellow flowers.

**Conservation significance**

A monotypic genus endemic to Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Widespread in the southern mountains at higher elevations above 400m, but occasionally lower-Intermediate Hill, Kim's Lookout.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Common in its range. Particularly abundant on the Razorback, and the ridge south east off Mount Lidgbird.

**Habitat**

Grows mainly on open sunny ridges, also in light canopy forest. Basalt soil only.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Luzula longiflora*****Family JUNCACEAE****Description**

Herb 10-30cm high, with narrow, tufted leaves that are 5-35cm long and ribbed on the underside.

**Conservation significance**

Uncommon endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Grows on upper slopes of Mount Gower and Mount Lidgbird.

**Ecology**

No specific information available.

**Population data/health**

Common in its range.

**Habitat**

Cliff ledges and crevices.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Machaerina insularis***

**Family** CYPERACEAE

**Description**

Tufted perennial with long leaves 1 to 1.8 m long, 2 to 3cm broad.

**Conservation significance**

Uncommon but widespread endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Grows on cliffs, ledges in gullies of Mount Gower and Mount Lidgbird.

**Ecology**

No specific information available.

**Population data/health**

Widespread but uncommon.

**Habitat**

Cliffs and ledges, moist gullies, waterfalls.

**Threats**

Invasion by Crofton Weed.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Macropiper excelsum ssp. psittacorum***

Kava

**Family** PIPERACEAE**Description**

Woody shrub to 1.5m with heart-shaped, pointed leaves. The fruits are small, orange fleshy berries.

**Conservation significance**

Lord Howe Island and Norfolk Island are the only locations in Australia. Protected within the Permanent Park Preserve.

**Distribution**

Common on the lowlands, ranging to the mountain. This subspecies is also found on Norfolk Island, Kermadec Island; the genus occurs in the South Pacific, Micronesia and New Zealand.

**Ecology**

A common understorey plant. Dioecious. Bird-dispersed seeds.

**Population data/health**

Widespread and common.

**Habitat**

Shaded understorey of moister forest situations. Basalt and calcarenite soils.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Macropiper hooglandii***

Kava

**Family** PIPERACEAE**Description**

A woody shrub 2 -3m. The heart-shaped leaves are strongly aromatic and peppery. The fruit is a small, red fleshy berry.

**Conservation significance**

Endemic and locally abundant. Protected within the Permanent Park Preserve.

**Distribution**

Locally common and abundant in damp shaded areas on the southern mountain slopes to summits.

**Ecology**

Dioecious. Bird dispersed seeds.

**Population data/health**

Common and locally abundant. Common on east side of Mount Lidgbird below cliff at 500m. Two areas where it is particularly abundant are Little

Pocket (31 35 30.9S 159 04 22.4E ) and the valley between Mount Lidgbird summit and the SE “pimple” (31 34 18.6S 159 05 00.9E). At these locations it is the main understorey plant, below *Hedyscepe canterburyana* canopy.

**Habitat**

Thrives in moist shaded areas as an understorey plant.

**Threats**

Crofton Weed crowds out this species in gullies at bases of waterfalls off east side of Mount Lidgbird.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

## ***Marattia howeana***

**Family** MARATTIACEAE

### **Description**

A large robust fern with shiny, black, fleshy stipes, and shiny fronds up to 4 metres long.

### **Conservation significance**

Rare endemic species. Protected within the Permanent Park Preserve.

### **Distribution**

Grows in the southern mountains above 200 metres. From a genus of about 60 species distributed in most tropical countries, reaching Japan and New Zealand.

### **Ecology**

Found in moist shaded areas.

### **Population data/health**

Surveys conducted in 2002 indicates that the species may be eligible for listing as endangered.

Main localities are in Little Pocket and off the south east corner of Mount Lidgbird. At these locations it is reasonably common, otherwise

sparsely scattered on slopes of the two southern mountains.

### **Habitat**

Heavily shaded gullies and moist areas in the mountains.

### **Threats**

Low numbers.

### **Other comments**

Pickard (1983) reported in this species almost eradicated by pigs, but now increasing with the removal of pigs in 1979.

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Pickard, J. 1983. Vegetation of Lord Howe Island, *Cuninghamia* Vol. 1(2), pp. 133-266.

***Marsdenia tubulosa***

**Family** ASCLEPIADACEAE

**Description**

Leaf semi-circular and about 4.5cm long. Small, tubular flower to about 2mm. Fruit unknown.

**Conservation significance**

An endemic species only collected once in 1871. Possibly extinct.

**Distribution**

Mount Gower summit.

**Ecology**

No specific information known.

**Population data/health**

One collection only.

**Habitat**

Unknown.

**Threats**

Unknown.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

**Melaleuca howeana****Tea Tree****Family MYRTACEAE****Description**

A low shrub to small tree, with thin, flaky bark and small linear leaves.

**Conservation significance**

Endemic species common and widespread. Protected within the Permanent Park Preserve.

**Distribution**

Common especially around the coast and low exposed ridges, sometimes in dense patches excluding all other species; stunted on the rocky seashore. From a genus of 100 species, mainly Australian, with a few in southern Asia, New Caledonia and Malesia.

**Ecology**

Can withstand wind and saltspray, and is common on exposed, coastal sites. Leaf litter can

exclude other plant species and form a monoculture. Wind dispersed seeds.

**Population data/health**

Widespread and common throughout its range.

**Habitat**

Coastal cliffs and low areas exposed to harsh salt spray. Exposed windblown ridges and cliffs.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Melicope contermina*****Family** RUTACEAE**Description**

Small spindly tree to 5m. Leaves are arranged in 3 pointed leaflets. Masses of white flowers occur in spring and summer.

**Conservation significance**

Rare endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Scattered distribution on the slopes and summits of the southern mountains. From a genus of 20 species in east Australia, the south west Pacific, Malesia & New Zealand.

**Ecology**

Basalt soil only.

**Population data/health**

Very few plants recorded. It is difficult to survey as it is scattered across a large area of mountain slopes. Unless it is dropping flowers, it is easy to bypass, as its trunk is fairly nondescript. The

largest plants seen are on the summit of Mount Gower.

**Habitat**

Tall closed forest of mountain slopes and summits.

**Threats**

Small population size making the species subject to stochastic (chance) events. Some trees show old scars of grazing by goats. One of only two known individuals growing on the Mount Gower track died in the 1990's as a result of grazing by goats.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Melicope polybotrya***

**Family** RUTACEAE

**Description**

A small tree to 8m. The leaves are distinctive, large leaves are grouped in threes and are heart-shaped. The flowers are tiny and green and followed by a brown capsule which splits to reveal one black seed.

**Conservation significance**

Endemic species, not common, but widespread across sheltered forest areas. Protected within the Permanent Park Preserve.

**Distribution**

Reasonably common in the sheltered forests to about 700m; also along exposed ridges such as Razorback and the ridge south east off Mount Lidgbird. An endemic species from a genus of 20 species in east Australia, south west Pacific, Malesia & New Zealand.

**Ecology**

Prefers sheltered forest, although some stunted bushes grow on exposed ridges.

**Population data/health**

Not common, but widespread in its range.

**Habitat**

Mainly in sheltered forests, but some stunted bushes on exposed ridges.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Melicytus novae-zelandiae* ssp. *centurionis*****Family VIOLACEAE****Description**

A low bush, occasionally small tree 5m. The leaves have a serrated margin and are 6cm x 2.5cm. The fruit is a purple berry 6mm in diameter.

**Conservation significance**

Endemic subspecies. Rare but scattered across Lord Howe Island. Protected within the Permanent Park Preserve.

**Distribution**

Found scattered across Lord Howe Island, mainly in the southern mountains. The genus of 14 species are mainly in New Zealand, the Chatham Islands, Kermadec Islands, Norfolk Island, Tonga and Fiji.

**Ecology**

Dioecious. Bird dispersed seeds.

**Population data/health**

Rare. Plants have been recorded near Kim's Lookout, Erskine valley, Goat House and Eddie's Cave.

**Habitat**

Open forest on basalt soil.

**Threats**

Small population size leaves the species subject to stochastic (chance) events. Fruits not often seen. Rats could eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Metrosideros nervulosa*****Mountain Rose****Family MYRTACEAE****Description**

Ranges in form from a stunted bush 1m high on exposed ridges, to a tree 8m high in the protected forest. The stamens of the flowers are deep red and showy, however, several individuals produce a yellow flower.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Southern mountains, mainly from around 350m to the summits, occasionally lower. An endemic species from a genus of 50 from N.Z. to Malaya, Pacific Islands including Hawaii; and one species in South Africa.

**Ecology**

On the summit of Mount Gower, in protected areas, the branches drop aerial roots, which sometimes strike when touching the soil. Wind dispersed seeds.

**Population data/health**

Common and widespread in the mountains.

**Habitat**

Prefers sunny positions, either on dry exposed ridges or as a canopy tree on the summits of the mountains.

**Threats**

The introduced *Metrosideros excelsum* from New Zealand is grown as an ornamental plant in the settlement area and may cross-pollinate with this endemic species. At least one *M. excelsum* has naturalised on the side of Intermediate Hill, close to the natural range of *M. nervulosa*.

Other members of this genus from Hawaii are highly susceptible to the pathogen *Phytophthora cinnamomi*. This pathogen has been recorded at a low altitude site on Lord Howe Island. The risk of significant decline in the species if the pathogen is introduced to its habitat is very high.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Metrosideros sclerocarpa*****Mountain Rose****Family MYRTACEAE****Description**

A small tree to 10m high with the stamens of the flowers being red.

**Conservation significance**

An endemic species, locally common in its range. Protected within the Permanent Park Preserve.

**Distribution**

Grows mainly in moist gullies of the southern mountains from sea level to about 500m. From a genus of 50 from New Zealand to Malaya, the Pacific Islands including Hawaii; and one species in South Africa.

**Ecology**

Mainly prefers wet sites. Sometimes grows in small monocultures. Wind dispersed seeds.

**Population data/health**

Common and abundant in its range.

**Habitat**

Mainly grows in creek gullies and other moist areas of the mountains.

**Threats**

The introduced *Metrosideros excelsum* from New Zealand is grown as an ornamental plant in the settlement area and may cross-pollinate with this endemic species. At least one *M. excelsum* has naturalised on the side of Intermediate Hill, close to the natural range of *M. nervulosa*.

Other members of this genus from Hawaii are highly susceptible to the pathogen *Phytophthora cinnamomi*. This pathogen has been recorded at a low altitude site on Lord Howe Island. The risk of significant decline in the species if the pathogen is introduced to its habitat is very high.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Negria rhabdothamnoides*****Pumpkin Tree**

**Family** GESNERIACEAE

**Description**

A tree to 8m with white corky bark and large glossy leaves. The large flowers are orange with small red dots and are followed by a black capsule 15mm long which contains numerous minute seeds.

**Conservation significance**

A monspecific endemic genus widespread and common in the higher elevations of the southern mountains. Protected within the Permanent Park Preserve.

**Distribution**

Common from 500m to the summit, and occasionally lower. An endemic genus with only one species.

**Ecology**

This is an unusually large tree-sized member of the African Violet family. Wind dispersed seeds.

**Population data/health**

Common and widespread in its range. A conspicuous component of the flora on Mount Gower summit.

**Habitat**

Sheltered forests at higher elevations in the mountains, in sheltered valleys lower down.

**Threats**

Climate change.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

## ***Olearia ballii***

### **Mountain Daisy**

**Family** ASTERACEAE

#### **Description**

A dense shrub to 1m high with glossy, dark green, linear leaves. The white daisy flowers are very showy and appear over a long period.

#### **Conservation significance**

An endemic species restricted to the southern mountains. Protected within the Permanent Park Preserve.

#### **Distribution**

Found widely in the southern mountains from about 400m to the summits. From a genus of 180 species in Australia, Papua New Guinea & New Zealand.

#### **Ecology**

Wind dispersed seeds.

#### **Population data/health**

Abundant in its range.

#### **Habitat**

Open sunny ridges and cliff ledges of the southern mountains.

#### **Threats**

None known.

#### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Olearia elliptica ssp. praetermissa***

**Family** ASTERACEAE

**Description**

A stunted bush to 1m high. The 3cm long leaves are light green and sometimes sticky below. Flowers are white and about 1cm across.

**Conservation significance**

An endemic subspecies of a species found in eastern New South Wales and south east Queensland. Protected within the Permanent Park Preserve.

**Distribution**

Mainly found on rocky ledges of the mountains at higher elevations, e.g. Goat House, Eddies Cave. From a genus of 180 species in Australia, PNG & N.Z.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Reasonably common and abundant in its range.

**Habitat**

Grows well on open sunny cliff ledges, with both northern and southern aspects.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Olearia mooneyi***

**Family** ASTERACEAE

**Description**

A small tree to 4m high with a dense foliage of shiny dark leaves. The numerous white daisy flowers are about 8mm across.

**Conservation significance**

Rare endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Found from 750m to the mountain tops, where it is common and conspicuous. An endemic species from a genus of 180 species in Australia, Papua New Guinea & New Zealand.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Common in its restricted range.

**Habitat**

Sheltered forests of the mountain tops.

**Threats**

None known.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Pandanus forsteri*****Forked Tree****Family PANDANACEAE****Description**

A very tall Pandanus, growing to 13m, with distinctive prop roots 3 to 7m long for support.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Common on the lowlands, northern hills, and mountains. It is mainly found in creeks, gullies and soaks and up to 400m altitude. The genus of 700 species is distributed in the tropical and subtropical Old World.

**Ecology**

Adapted to grow in semi-waterlogged situations. Dioecious. Water dispersed seeds.

**Population data/health**

Common and abundant, often forming a monoculture in some areas.

**Habitat**

Wet areas. Usually grows in lines along creeks or soaks.

**Threats**

Rats eat seeds.

**Other comments**

Leaves are collected and dried, used in local craft cottage industry to make baskets for local use and tourist trade.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Pandorea pandorana ssp. austrocaledonia*****Family** BIGNONIACEAE**Description**

A strong woody climber with leaves comprised of 5-9 oval-shaped leaflets. Flowers are cream with dark red spots in the throat.

**Conservation significance**

Lord Howe Island is the only Australian location for this subspecies. Protected within the Permanent Park Preserve.

**Distribution**

This species is common growing over trees on the lowland ridges to 500m. It is found in Australia, Papua New Guinea, New Caledonia, and the Lesser Sunday Islands. This subspecies is also found in New Caledonia. and Vanuatu.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Common in its range.

**Habitat**

Usually in sheltered forest, on basalt and calcarenite soil.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Parsonsia howeana***

**Family** APOCYNACEAE

**Description**

A tall twining climber. The young stems are finely hairy and the leaves are glossy above.

**Conservation significance**

Endemic species widespread and common. Protected within the Permanent Park Preserve.

**Distribution**

Found in the forest from sea level to about 800m. An endemic species from a genus of 80 species in Australia, New Zealand, south west Pacific Islands and Malaysia.

**Ecology**

Thrives in sunlight, and often invades cleared areas as a colonising plant, growing profusely in these situations. Climbs vigorously over small trees. Wind dispersed seeds.

**Population data/health**

Abundant over many forest types.

**Habitat**

Any sunny areas, on basalt and calcarenite soils.

**Threats**

None known

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Passiflora herbertiana* ssp. *insulae-howei*****Family** PASSIFLORACEAE**Description**

Herbaceous climber with a woody base. The deeply-lobed leaves are 1.5-2cm long, with 2 glands towards the top. Flowers are green on the outside and white and violet on the inside.

**Conservation significance**

Rare on Lord Howe Island. Some plants protected within the Permanent Park Preserve.

**Distribution**

Found on lowlands and elevations to 200m on Intermediate Hill, Transit Hill and Mt Lidgbird. The species is common in rainforest of east Australia. Genus of 370 species in east Australia, south west Pacific Islands, Malesia, South Asia, and the Americas.

**Ecology**

Found on basalt and calcarenite soils.

**Population data/health**

Surveys carried out 2002. Nominated for listing as an endangered species due to low number of plants.

**Habitat**

Open forest of lowland hills, usually with light canopy.

**Threats**

Possibly rodents eat seeds. Critically low numbers known on the Island.

**Other comments**

References Green, P. S. 1994. *Flora of Australia, Oceanic Islands 1*, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

Hutton, I (2005) *Rare Plant Surveys of Lord Howe Island 2*. Report prepared for the Biodiversity Conservation Science Section, Dept of Environment and Conservation.

***Phymatosorus pustulatus* ssp. *howensis***

**Family** POLYPODIACEAE

**Description**

A terrestrial or lithophytic fern with glossy dark green fronds, which are deeply lobed. The lobes have pronounced "blisters" on top, formed from the sori (spore cases) below. A creeping rhizome allows it to spread over a large area.

**Conservation significance**

Endemic subspecies widespread and abundant across the island. Protected within the Permanent Park Preserve.

**Distribution**

From sea level to the mountain tops. Genus of about 12 species extending from Africa to Australia, New Zealand and parts of Polynesia; about 3 species in Australia.

**Ecology**

Forms large open clumps.

**Population data/health**

Widespread and abundant.

**Habitat**

Occurs on basalt and calcarenite soil, in all plant communities.

**Threats**

Rodents are known to chew stems.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra..

***Pimelea congesta***

**Family** THYMELAEACEAE

**Description**

Small spindly shrub to 1m high with white flowers held in terminal heads.

**Conservation significance**

Endemic species common in its range. Protected within the Permanent Park Preserve.

**Distribution**

Widespread, both in the lowlands and the mountains. From a genus of some 80 species, mainly Australian, but some in New Zealand, Papua New Guinea, Lesser Sunda Islands, and the Chatham Islands.

**Ecology**

Grows well on exposed ridges.

**Population data/health**

Common in its range, which is fairly restricted.

**Habitat**

Open sunny dry ridges.

**Threats**

Weed invasion from seeds introduced by walkers.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Pittosporum erioloma***

**Family** PITTOSPORACEAE

**Description**

A small tree to 8m. The margins of the 5cm x 1.5cm leaves are recurved and pale green. Flowers are lilac with white tips and are followed by a green, thick-walled capsule.

**Conservation significance**

Endemic species, widespread but not common. Protected within the Permanent Park Preserve.

**Distribution**

Found in the southern mountains from 450m to the mountain tops, and occasionally lower. From a genus of about 100 species, ranging from Africa, New Zealand, Asia, Australia and the Pacific Islands.

**Ecology**

Seeds dispersed by birds via ingestion or sticking to feathers.

**Population data/health**

Uncommon but widespread in the southern mountains. More common on the summit of Mount Gower.

**Habitat**

Prefers moist, sheltered rainforest sites.

**Threats**

Rats eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Plantago hedleyi***

**Family** PLANTAGINACEAE

**Description**

Erect perennial herb, leaves to 20cm long.

**Conservation significance**

Uncommon endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Scattered in southern mountains above 300m. Genus of about 250 species in temperate areas and mountain regions in tropics.

**Ecology**

No specific information available.

**Population data/health**

Widespread in its range, but not common.

**Habitat**

Shaded, moist rocky ledges in the southern mountains.

**Threats**

Climate change.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Plectorrhiza erecta*****Family ORCHIDACEAE****Description**

Small ground orchid, occasionally epiphytic with an erect wiry stem to 30cm long, supported by thick white roots arising from below the leaves. The flowers are yellow-orange with small purple blotches inside.

**Conservation significance**

Endemic species, rare but locally abundant. Protected within the Permanent Park Preserve.

**Distribution**

Sparsely scattered across Lord Howe Island, but locally abundant, for example, on Malabar Ridge. Genus of three species, two on the east coast of Australia.

**Ecology**

Many plants often form a tangled mass. Wind dispersed seeds.

**Population data/health**

Major locality on northwest side of Malabar spur, where it is prolific; otherwise scattered occurrences.

**Habitat**

Open forest with light canopy.

**Threats**

The weed Ground Asparagus *Protasparagus aethiopicus* is invading this species' habitat at its main locality on Malabar spur.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Polyscias cissodendron*****Island Pine**

**Family** ARALIACEAE

**Description**

An attractive tree to 12m, with distinctive light green pinnate leaves and fissured bark. The leaves are compound and 10-35cm long, usually with 11 leaflets. The fruit is brown and bead like in a large terminal cluster.

**Conservation significance**

Lord Howe Island is the only Australian location for this species. Protected within the Permanent Park Preserve.

**Distribution**

Reasonably common from sea level to about 400m, mainly in sheltered forests. Also found in New Caledonia and Vanuatu. Genus of 100 species in tropical and subtropical Old World.

**Ecology**

Dioecious. Bird dispersed seeds.

**Population data/health**

Common in its range.

**Habitat**

Usually in sheltered forest, on basalt and calcarenite soil.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Polystichium moorei***

**Family** DRYOPTERIDACEAE

**Description**

A small, hardy, lithophytic fern, with tough, leathery fronds, crowded together, forming a spreading crown.

**Conservation significance**

Rare endemic species. Listed as Endangered on the NSW TSC Act. Protected within the Permanent Park Preserve.

**Distribution**

Found on rock ledges of the southern mountains, and calcarenite outcrops at the mouth of Soldiers Creek. From a large cosmopolitan genus of about 175 species, usually in mountain areas of the tropics.

**Ecology**

Grows clinging under overhangs on rocky ledges.

**Population data/health**

Populations are known from:

Mount Gower on rock ledge Erskine Valley to Little Slope. 13 plants.

Mount Lidgbird - base of cliff at 400m facing south west. 17 plants.

Mount Lidgbird on south east route to summit; 5 plants.

Mount Lidgbird Lower Road near southern end of ledge; 1 plant.

Soldiers Creek on calcarenite outcrop near mouth of creek; 12 plants.

**Habitat**

Rocky overhangs above ground level. On basalt in the southern mountains and calcarenite outcrops adjacent to Soldiers Creek.

**Threats**

Small numbers increasing the threat from stochastic (chance) events.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



Photo: Ian Hutton

*Polystichium moorei*



***Polystichium whiteleggei***

**Family** DRYOPTERIDACEAE

**Description**

A hardy, medium sized terrestrial or lithophytic fern with tough leathery fronds forming a compact shape.

**Conservation significance**

Common endemic. Protected within the Permanent Park Preserve.

**Distribution**

Found on the slopes of the southern mountains from sea level to near the summits.

**Ecology**

No specific information available.

**Population data/health**

Common on slopes of the southern mountains.

**Habitat**

Understorey of forest in light shade.

**Threats**

None known.

**References**

- Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.
- Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Pouteria myrsinoides ssp. reticulata*****Axe-handle Wood**

**Family** SAPOTACEAE

**Description**

A small tree to 6m high with shiny leathery leaves which exude a watery latex when cut. New shoots are covered in red hairs.

**Conservation significance**

Common. Lord Howe Island is the only Australian location for this subspecies. Protected within the Permanent Park Preserve.

**Distribution**

Common on the lowlands and ridges. Also found in New Caledonia. Genus of 300 species from Asia to New Zealand, Australia, Seychelles and South America.

**Ecology**

No specific information available.

**Population data/health**

Widespread and common in its range.

**Habitat**

Usually in sheltered forest, on basalt and calcarenite soil.

**Threats**

Weed invasion.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Psychotria carronis*****Black Grape**

**Family** RUBIACEAE

**Description**

A small tree to 8m with a dark trunk, large glossy leaves and black, grape-sized fruit.

**Conservation significance**

An uncommon endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Found mainly from 100 to 400m in the moist forests of the southern mountains, with a few plants on Intermediate Hill, Transit Hill and the Northern Hills. From a genus of over 1500 species widely in the tropics and subtropics.

**Ecology**

Bird dispersed seeds.

**Population data/health**

Uncommon, scattered occurrence throughout range.

**Habitat**

Moist sheltered forests at lower elevations.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Pteris microptera*****Family PTERIDACEAE****Description**

A tall terrestrial fern growing to two metres high, with dark green, lacy, tripinnate fronds.

**Conservation significance**

Common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Widespread on the lowlands. This endemic species is part of the widespread *Pteris comans* group found in eastern Australia, New Zealand and the Pacific Islands. The genus is large with a worldwide distribution of about 250 species, 80 of which are in Australia.

**Ecology**

Wind dispersed spores.

**Population data/health**

Common and widespread.

**Habitat**

Damp shaded understorey.

**Threats**

Climate change.

**Other comments**

A rare form of this species was described from Lord Howe Island material as *P. comans* var *furcata* Bonap Notes Pteridologiques 5: 128 (1917)

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Rapanea mcommishii***

**Family** MYRSINACEAE

**Description**

A tree to 13m high. Leaves are 12cm x 4cm with raised pits on the undersurface. Flowers are minute, and the fruit is 5mm in diameter and is a globular fleshy drupe.

**Conservation significance**

Uncommon endemic tree species. Protected within the Permanent Park Preserve.

**Distribution**

Ranges across the island, from sea level to the summits, both north and south ends of the Island. The genus ranges through the tropics and subtropics.

**Ecology**

Prefers sheltered forest in moist areas. Bird dispersed seeds.

**Population data/health**

Scattered across the island. This species may be more common than thought, as its tall trunk is fairly indistinguishable from many forest trunks and therefore is easy to miss.

**Habitat**

Sheltered forests, usually on hill slopes.

**Threats**

Climate change, weed invasion.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

## ***Rapanea myrtilina***

**Family MYRSINACEAE**

### **Description**

Small tree to 4m high. Leaves are small and 11mm x 4mm, with brown dots on the surface. The minute flowers are cream with dark pink spots, and are followed by a purple globular fruit.

### **Conservation significance**

Uncommon endemic species. Protected within the Permanent Park Preserve.

### **Distribution**

Found mainly on the mountain summits, and occasionally down to 400m. From a genus of 150-200 species widespread in the tropics and subtropics.

### **Ecology**

Grows in sheltered forests. Bird dispersed seeds.

### **Population data/health**

Uncommon but scattered across a wide area of the southern mountains.

### **Habitat**

Stunted forest of mountain ridges and summit forest.

### **Threats**

Climate change.

### **References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Rapanea platystigma***

**Family MYRSINACEAE**

**Description**

A bush or occasionally a small tree to 6m. The leaves are dense with wavy edges and sometimes slightly rolled under. The minute flower is greenish with red spots and numerous on the stems. The 4mm fruit is rounded and purple when ripe.

**Conservation significance**

A common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Widespread on the lowlands and ridges to about 400 m. From a genus of 150-200 species widespread in tropics and subtropics.

**Ecology**

Grows on basalt and calcarenite soils. Bird dispersed seeds.

**Population data/health**

Widespread and abundant.

**Habitat**

Grows on drier areas on both basalt and calcarenite.

**Threats**

Rats eat seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Rytidosperma unarede***

**Family** POACEAE

**Description**

Slender, perennial grass to 45cm tall. The leaf blades are narrow and up to 40cm long and 3.5mm wide or tightly inrolled.

**Conservation significance**

Locally rare on Lord Howe Island and the only Australian location. Protected within the Permanent Park Preserve.

**Distribution**

Southern mountains. Also found in New Zealand. From a genus of about 90 species mainly New Zealand, Australia and southern Africa.

**Ecology**

No specific information available.

**Population data/health**

Rare. Recorded from Eddie's Cave on Mount Gower.

**Habitat**

Rocky ledge.

**Threats**

Weed invasion, particularly by Crofton Weed.

**Other comments**

First recorded on Lord Howe Island in 1971.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.



***Scaevola taccada***

*Family GOODENIACEAE*

**Description**

Spreading shrub to 3m tall. The leaves are somewhat thick, shiny and leathery with tufts of hairs in the leaf axils. Flowers are white streaked with purple.

**Conservation significance**

Probably extinct. Recorded in 1870, but no recent records. Lord Howe Island is the only Australian location.

**Distribution**

Genus of about 96 species in subtropics of southern hemisphere and Caribbean.

**Ecology**

No specific information available.

**Population data/health**

No information available.

**Habitat**

Unknown.

**Threats**

Unknown.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Senecio howeanus***

**Family** ASTERACEAE

**Description**

Annual herb or short-lived perennial, spreading or erect to 40cm high, with scattered, wispy hairs..

**Conservation significance**

Widespread endemic species. Protected in Permanent Park Preserve.

**Distribution**

Common near seashore around Lord Howe Island and offshore islets. Scattered at higher elevations and into the mountains.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Scattered and widespread.

**Habitat**

On cliffs, ledges and open grassy areas in open sun. On basalt and calcarenite rock.

**Threats**

Introduced species such as *Senecio elegans* in some places.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Senecio pauciradiatus***

**Family** ASTERACEAE

**Description**

Annual herb, erect to 25cm high. Leaves are 5-6cm long and 1cm wide.

**Conservation significance**

Rare endemic species with very restricted range.

**Distribution**

Middle Beach and Steven's Point.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Rare.

**Habitat**

On cliffs and in pockets of calcarenite rock in open sun.

**Threats**

Introduced species such as *Senecio elegans*.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

***Solanum bauerianum***

**Family** SOLANACEAE

**Description**

Shrub or small tree to 3m.

**Conservation significance**

Species endemic to Lord Howe and Norfolk Islands. Presumed extinct on both islands. Not collected on Lord Howe Island since 1949.

**Distribution**

Recorded at North Bay, cliffs above Ned's Beach, Steven's Reserve, top of Middle Beach Road, Little Muttonbird Ground.

**Ecology**

Appears to have preferred sandy soil.

**Population data/health**

Last collected on Lord Howe Island in 1949. Also extinct Norfolk Island. Surveys on Lord Howe Island in 2002 failed to relocate this species.

**Habitat**

Sandy calcarenite soils.

**Threats**

Rats probably were responsible for its apparent disappearance by eating seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. *Rare plant surveys of Lord Howe Island*. Report prepared for the NSW Scientific Committee, Hurstville.

***Sophora howinsula*****Lignum Vitae**

**Family** FABACEAE

**Description**

A tree to 13m high with soft pinnate leaves and rough bark.

**Conservation significance**

An endemic species, widespread, uncommon but locally abundant. Protected within the Permanent Park Preserve.

**Distribution**

Scattered occurrence on the lowland hills, locally common e.g. Transit Hill, Intermediate Hill, Dinner Run; the northern hills. From a genus of 50 species in tropics and subtropics.

**Ecology**

Seeds have a hard outer coat for water dispersal. Seeds last a long time in soil.

**Population data/health**

Uncommon across its range, but locally common.

**Habitat**

Well drained hillsides with good soil.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Stephania japonica* var. *timoriensis***

**Family** MENISPERMIACEAE

**Description**

A slender herbaceous climber with soft round leaves.

**Conservation significance**

Common. Lord Howe Island is the only NSW location for this subspecies. Protected within the Permanent Park Preserve.

**Distribution**

Lowland forests up to 500m altitude. The species is also found in north east Australia, New Caledonia, Samoa, Tahiti, Malesia and south east Asia. Genus of about 40 species in Old World tropics.

**Ecology**

Can climb vigorously over small shrubs and trees in clearings from tree falls and landslips. Bird dispersed seeds.

**Population data/health**

Widespread, locally common.

**Habitat**

Moist sheltered forests.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Symplocus candelabrum***

**Family SYMPLOCACEAE**

**Description**

A tall tree to 13m, preferring sheltered forest conditions. The large leaves (13cm x 5cm) have a smooth or slightly toothed margin and taper to a long point. The flowers are white with yellow tips and are followed by a bluish, rounded fruit.

**Conservation significance**

An uncommon endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Found in the sheltered forests of Intermediate Hill and the southern mountains from sea level to about 500m altitude. It is more common in higher altitudes. This family has only one genus of about 250 species distributed in the tropics and subtropics. Several species are rainforest species of eastern Australia.

**Ecology**

Currawongs disperse the fruits.

**Population data/health**

Uncommon across its range, but locally common in certain areas.

**Habitat**

Sheltered forests of the southern hills and mountains.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Syzygium fullagarii*****Scalybark****Family MYRTACEAE****Description**

A tall tree to 20m with massive spreading limbs and prominent buttresses. The 9cm x 3cm leaves are shiny and mid-green. The flowers have prominent cream stamens, are 25mm long and occur in terminal clusters. The fruits are deep red and fleshy.

**Conservation significance**

A common endemic species. Protected within the Permanent Park Preserve.

**Distribution**

Moist sheltered forests from sea level to about 400m. The genus is distributed in northern Australia, Malesia, the south west Pacific Islands and Asia.

**Ecology**

One of the largest trees on the Island. Bird dispersed fruits.

**Population data/health**

Common and widespread in the southern mountains.

**Habitat**

Sheltered slopes of the southern mountains, and occasionally in sheltered sites in the northern hills.

**Threats**

Rodents eats fruits.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



***Trophis scandens ssp. megacarpa*****Family MORACEAE****Description**

A strong climber reaching the treetops of tall forest trees. Leaves are stiff and 8-11 cm long x 4-5 cm wide. The fruit is bright red and solitary.

**Conservation significance**

Endemic subspecies of a species found in eastern Australia, western Pacific Islands, Malesia and Southern Asia. Protected within the Permanent Park Preserve.

**Distribution**

Widespread across the island from sea level to the mountain summits. From a genus of 9 species in America, Madagascar, south east Asia, New Caledonia and Australia.

**Ecology**

Dioecious. Currawongs disperse fruits.

**Population data/health**

Widespread and abundant.

**Habitat**

Grows in tall sheltered forest, climbing the tallest of trees. On basalt and calcarenite soils.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Uncinia debilor***

**Family** CYPERACEAE

**Description**

Tufted perennial sedge-like plant, leaves grass-like and up to 10cm by 0.5 – 1mm wide.

**Conservation significance**

Endemic species restricted to the summits of the southern mountains. Protected within the Permanent Park Preserve.

**Distribution**

On or near summits of Mounts Gower and Lidgbird.

**Ecology**

No specific information available.

**Population data/health**

Not known.

**Habitat**

Grows in low cloud forest.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Wahlenbergia insulae-howei***

**Family** CAMPANULACEAE

**Description**

Perennial herb to 15cm tall. The narrow leaves are usually hairless and 0.5 – 2cm long x 0.1 – 0.6cm wide. The flowers usually grow in groups of 1-3 and are blue.

**Conservation significance**

Endemic species. Protected within the Permanent Park Preserve.

**Distribution**

The northern hills.

**Ecology**

Wind dispersed seeds.

**Population data/health**

Scattered occurrence throughout its range.

**Habitat**

Open rocky areas on basalt rock.

**Threats**

Introduced grass can compete with this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

***Westringia viminalis***

**Family** LAMIACEAE

**Description**

A low compact shrub, sometimes scrambling, less than 0.5 metre high. The flowers are white, sometimes with pink spots inside the throat.

**Conservation significance**

An endemic species common in its restricted range. Protected within the Permanent Park Preserve.

**Distribution**

Found mainly on open ledges and cliffs of the southern mountains at 350-450m. It also occasionally grows on exposed ridges of the northern hills, particularly Mt Eliza and North Head. From a genus of 25 species, all of which occur in Australia.

**Ecology**

Can survive in thin soil on exposed, windblown rocky ledges.

**Population data/health**

Common throughout its range, but a fairly narrow altitudinal range.

**Habitat**

Prefers open sunny areas, particularly cliffs.

**Threats**

Weed invasion.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

***Xylosma maidenii***

**Family** FLACOURTIACEAE

**Description**

A small tree to 5m, sometimes 10m in sheltered locations. In the open can be stunted. The 6cm x 3cm leaves are toothed and thin with wavy edges. The tiny flowers grow in leaf axils on bare twigs and are green. The fruit is purple and rounded.

**Conservation significance**

Endemic species common across the island. Protected within the Permanent Park Preserve.

**Distribution**

Common in all forest types, from sea level to about 400m. From a genus of about 100 species is distributed in the tropical Pacific, Queensland, Malesia, south east Asia and South and Central America.

**Ecology**

Dioecious. Bird dispersed seeds.

**Population data/health**

Common and abundant across the Island.

**Habitat**

Grows in many forest types over a wide range of conditions, on both basalt and calcarenite soils.

**Threats**

Rats predate on seeds.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.

**Xylosma parvifolium**

*Family* FLACOURTIACEAE

**Description**

Shrub to 2 m high. Leaves are rounded and 12mm x 8mm in size with toothed margins. The 5mm diameter fruit is globular and purple.

**Conservation significance**

A rare endemic species. Listed as Endangered on the NSW TSC Act. Protected within the Permanent Park Preserve.

**Distribution**

Restricted to the remote ridges in the southern mountains.

**Ecology**

Bird dispersed fruits.

**Population data/health**

Main locations are on ridges off the southern mountains at two localities: The Razorback on Mount Gower and the south east ridge off Mt Lidbird.

Several plants also occur on the ridge above Goathouse Cave on Mount Lidbird; several at "Get up Place" on Mount Gower.

**Habitat**

Grows on ridges in open low shrub vegetation in the open sun.

**Threats**

Low numbers and restricted habitat. The ridges where this plant mainly grows are very narrow, and walkers accessing these areas can trample this species.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2001. Rare plant surveys of Lord Howe Island. Report prepared for the NSW Scientific Committee, Hurstville.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.



Photo: Ian Hutton

*Xylosma parvifolium*

**Zygogynum howeanum**

Hotbark

*Family WINTERACEAE***Description**

Tree to 13m with a dark, smooth trunk. The large leaves are bluntly pointed, dark green on the top surface and pale underneath. The flowers are white and 20mm across. The fruit is a round black berry 8mm in diameter, and contains 5 – 15 small seeds.

**Conservation significance**

A common and widespread endemic species. Protected within the Permanent Park Preserve.

**Distribution**

The southern mountains. This species forms a distinctive component of the flora here from sea level to the mountain tops. Small numbers also occur in isolated moist pockets on Transit Hill and then northern hills. From a genus found in Queensland, Papua New Guinea and New Caledonia.

**Ecology**

From an ancient family of flowering plants, and apparently pollinated by a range of insects.

**Population data/health**

Common and locally abundant.

**Habitat**

Thrives in moist sheltered areas.

**Threats**

None known.

**References**

Green, P. S. 1994. *Flora of Australia*, Oceanic Islands 1, Vol. 49, Australian Government Publishing Service, Canberra.

Hutton, I. 2002. *A Field Guide to the Plants of Lord Howe Island*. Hutton, Lord Howe Island.