











What is Bush Blitz?

Bush Blitz is a four-year, multi-million dollar partnership between the Australian Government, BHP Billiton and Earthwatch Australia to document plants and animals in selected properties across Australia's National Reserve System.

This innovative partnership harnesses the expertise of many of Australia's top scientists from museums, herbaria, universities, and other institutions and organisations across the country.

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Abbreviations

ANHAT

Australian Natural Heritage Assessment Tool

FPBC Act

Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)

NICA

Nature Conservation Act 1992 (Queensland)

NRS

National Reserve System





Summary

A Bush Blitz survey was conducted in the Cape York Peninsula, Einasleigh Uplands and Wet Tropics bioregions of Queensland during April, May and July 2010. Results include 1,186 species added to those known across the reserves. Of these, 36 are putative species new to science, including 24 species of true bug, 9 species of spider, 1 triggerplant and 2 species of fungi. The results include the first record for Australia of an ant-mimetic Halticine (true bug).

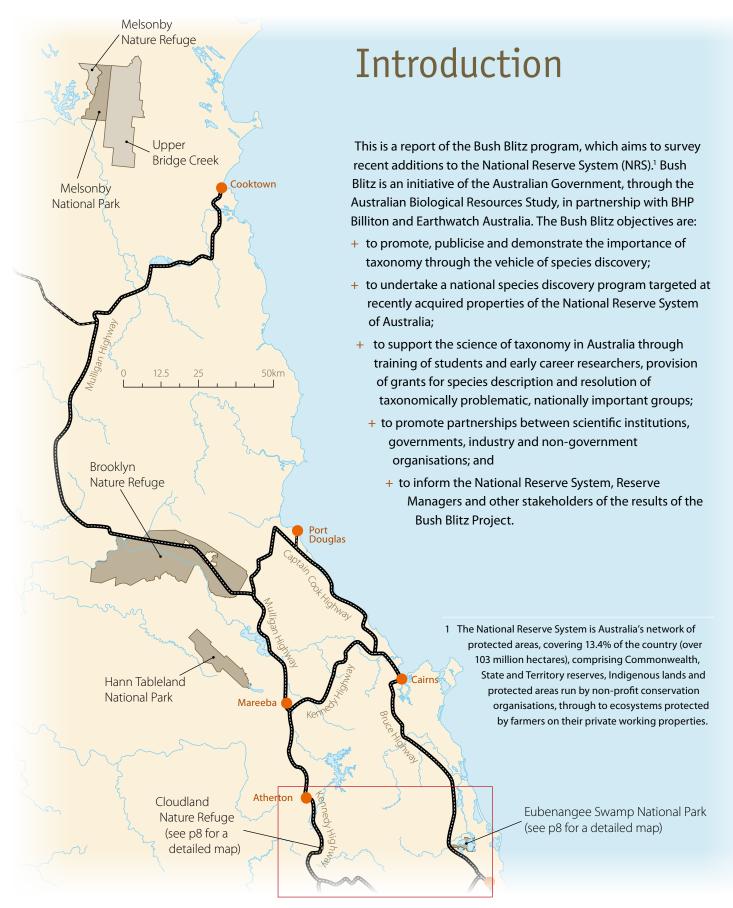
In total, 16 threatened animal species were observed in the reserves, 14 of which were new records. A large number of Lemuroid Ringtail Possums (*Hemibelideus lemuroides*), listed as near threatened under the *Nature Conservation Act 1992* (NCA), were seen in a single spotlighting session in Cloudland Nature Refuge: the reserve currently provides important habitat for this species. A new species of tarantula (*Phlogius crassipes* gp. n. sp.) from the family Theraphosidae was discovered in Upper Bridge Creek, Brooklyn Nature Refuge and Hann Tableland National Park. It is protected as a threatened species under the NCA.

Eighteen plants listed under the Commonwealth *Environment Protection and Biodiversity*Conservation Act 1999 (EPBC Act) or the NCA were found in the reserves and 27 range extensions were documented. A putative new species of triggerplant (Stylidium n. sp.) and an undescribed greenhood orchid (Pterostylis n. sp.) recorded in Hann Tableland National Park will be nominated for listing under the EPBC Act and the NCA once they are formally described. Both species are threatened by the encroachment of weeds, and the orchid is also threatened by unsuitable fire regimes. Both have a restricted distribution.

Exotic vertebrate pests were not a focus of this Bush Blitz, however the Cane Toad (*Rhinella marina*) was recorded in both Cloudland Nature Refuge and Hann Tableland National Park. Only one exotic invertebrate species was recorded, the Spiked Awlsnail (*Allopeas clavulinus*) in Cloudland Nature Refuge.

Seventy-three weeds were identified across the reserves. Upper Bridge Creek, Melsonby National Park and Melsonby Nature Refuge were in good condition with only four weeds detected. Weeds present in the Cloudland Nature Refuge rainforest were relatively few and not a significant threat. Twenty-four weeds were recorded in the Eubenangee Swamp extension to Eubenangee National Park. Many of these pose a serious threat to the park, though most occur in low numbers due to intensive and sustained weed control. Hann Tableland National Park has a considerable weed burden posing a high risk to the reserve. Forty-six environmental weeds were encountered there, including serious infestations of Gamba Grass (Andropogon gayanus) and Lantana (Lantana camara), both Weeds of National Significance. A range extension was also documented for Silverleaf Desmodium (Desmodium uncinatum) with the record for Hann Tableland National Park being its northern most occurence.







This Bush Blitz was undertaken from 29 April to 27 May 2010, and 26 to 27 July 2010. Seven reserves were visited in the Wet Tropics, Einasleigh Uplands and Cape York bioregions of Queensland: Brooklyn Nature Refuge, Cloudland Nature Refuge, Melsonby (Gaarraay) Nature Refuge, Eubenangee Swamp National Park, Hann Tableland National Park, Melsonby (Gaarraay) National Park and Upper Bridge Creek.

Scientists from both local and interstate institutions undertook the field and laboratory work, including the Queensland Museum; Queensland Herbarium; Threatened Species and Biodiversity and



Megan Thomas preparing plant specimens, M. T. Mathieson © Copyright, Department of National Parks, Recreation, Sport and Racing Queensland

Ecosystem Sciences – branches of the former Queensland Department of Environment and Resource Management; Tasmanian Museum and Art Gallery; University of New South Wales and National Herbarium of Victoria.

Table 1 indicates the groups surveyed for each reserve.

Table 1: Taxonomic groups surveyed in each reserve

Group	Common names	Brooklyn Nature Refuge	Cloudland Nature Refuge	Eubenangee Swamp National Park	Hann Tableland National Park	Melsonby (Gaarraay) National Park	Melsonby (Gaarraay) Nature Refuge	Upper Bridge Creek
Mammalia	Mammals				Χ			Χ
Aves	Birds		Х		Χ			Х
Amphibia	Frogs		Х	X	Χ			Χ
Reptilia	Reptiles		Х		Х			Х
Lepidoptera	Butterflies	Х	Х		Х			Х
Heteroptera	True Bugs	Х	Х		Х			Х
Odonata	Dragonflies and Damselflies	Х	Х		Х			Х
Arachnida	Spiders	Х	Х		Х			Х
Gastropoda	Snails and Slugs	Х	Х		Х			Х
Vascular Plants	Vascular Plants		Х	Х	Х	Х	Х	Х
Bryophytes	Hornworts, Liverworts, Mosses ⁺							Х
Lichens	Lichens+							Х
Fungi	Fungi							Х

⁺ Opportunistic collections were made of mosses from Cloudland Nature Refuge and lichens from Hann Tableland National Park.



Reserves Overview²

Brooklyn Nature Refuge³ Australian Wildlife Conservancy

Date of purchase

Area

60,000 ha

Description

Brooklyn Nature Refuge is at the south-western extremity of the Daintree rainforests, and straddles the boundary of the Wet Tropics and Einasleigh Uplands bioregions. The topography of Brooklyn drops from 1,200 m high mountains down to the plains of the Mitchell River. Rainfall across the reserve varies from 4,000 mm to less than 900 mm. At least 71 vegetation classes have been mapped for Brooklyn Nature Refuge. The landforms range from tall wet rainforest-clad mountains with tall wet sclerophyll forest on the slopes, to a vast grassy woodland plain and the freshwater lakes and lagoons of the Mitchell floodplain. Bare granite hills rise above the plain. The Mitchell River runs through the reserve to the Gulf of Carpentaria. Its perennial flow is fed by Rifle Creek, and the McLeod and Mary Rivers.

The Peninsula Development Road traverses the length of Brooklyn Nature Refuge, and the reserve encloses small farms along the Mary River as well as the community of Mount Carbine.

National Reserve System conservation values

The diversity of the topography, rainfall and landform of Brooklyn Nature Refuge provides for exceptionally high biodiversity. Over 500 species of native mammals, birds, reptiles and amphibians are known to occur there or on neighbouring properties, and it is expected to support over 700 plant species. At least 45 threatened animals and around 50 threatened plant species are found on Brooklyn Nature Refuge. The reserve also protects one of only two known northern Queensland occurrences of Bunya Pines (*Araucaria bidwillii*), the main populations being 2,000 km away in southern Queensland. These isolated populations are all that remains of extensive Bunya Pine forests that existed in the Wet Tropics region about 40,000 years ago.

Almost 5,000 ha of Brooklyn lie within the Wet Tropics World Heritage Area, including 2,600 ha of rainforest, of which more than 2,000 ha are virgin rainforest. The rainforest and adjoining wet sclerophyll forest on Brooklyn occupies part of the Mount Carbine Tableland, an area recognised as one of the two most important centres of biodiversity within the Wet Tropics, particularly for upland endemic species.

Brooklyn's rich diversity of ecosystems and wildlife is threatened by a range of factors including unrestricted public access, cattle grazing, altered fire regimes, weeds, and proposals to divert water from the Mitchell River. On-ground management undertaken on the Refuge includes biodiversity surveys and monitoring, cattle removal, fire management, weed control, revegetation and rehabilitation.

- 2 Information about the reserves is derived from the NRS applications and
- 3 Information about Brooklyn Nature Refuge is also derived from the Australian Wildlife Conservancy, accessed 23 July 2013
 http://www.australianwildlife.org/AWC-Sanctuaries/Brooklyn-Sanctuary.aspx





Cloudland Nature Refuge

Privately managed

Date of purchase 2005

Area

80 ha

Description

Cloudland Nature Refuge is located in a high rainfall, high altitude section of the Wet Tropics bioregion. It is one of a series of blocks forming a substantial area of remnant upland rainforest (approximately 850 ha) that have been purchased for nature conservation, several of which have been registered as nature refuges. Most of the surrounding area was rainforest cleared in the early 1900s for farming, though several revegetation projects are underway.

National Reserve System conservation values

Cloudland Nature Refuge supports an endangered regional ecosystem of Complex Notophyll Vine Forest on Cloudy Wet Basalt Uplands and Highlands. It is also known habitat for rare and threatened species including the endangered Southern Cassowary (Casuarius casuarius johnsonii) and the rare Lumholtz's Tree-kangaroo (Dendrolagus lumholtzi), Lemuroid Ringtail Possum (Hemibelideus lemuroides), Green Ringtail Possum (Pseudochirops archeri) and Herbert River Ringtail Possum (Pseudochirulus herbertensis). As it is at relatively high altitude, Cloudland Nature Refuge is vulnerable to the effects of climate change, and therefore all collections and sightings of flora and fauna are considered important.



Cloudland Nature Refuge, remnant upland rainforest © Copyright, G. Wilson



Eubenangee Swamp National Park (Extension)

Queensland Government

Date of purchase

Area

180 ha (1,900 ha total area of park)

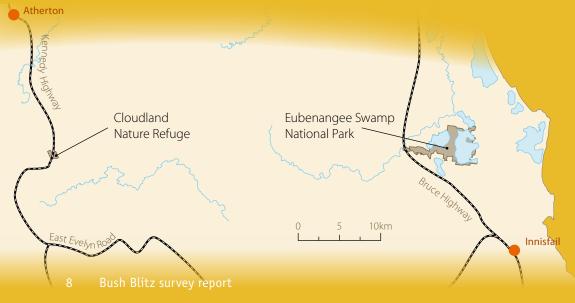
Description

Eubenangee Swamp National Park is located in a very high rainfall area of the Wet Tropics bioregion. In 2002, the Australian Government assisted the Queensland Government to purchase an additional 180 ha along the northern edge of the park.

The extension area encompasses Dinner Creek, the main source of water for the park's wetlands. This area is crossed by major drains that channel the water from Dinner Creek into the nearby Alice River. Some of these are being modified in an attempt to return the area to a more natural state. The grasslands have been heavily grazed and in some places even cultivated, but appear to be slowly returning to native grass cover under active management involving burning and weed control. A large section of the extension area has been cleared of swamp paperbark forest and rainforest. The older section of the park is dominated by Swamp Paperbark (*Melaleuca quinquenervia*) woodlands, grasslands and open swamps.

National Reserve System conservation values

Eubenangee Swamp National Park is considered one of the most important reserves in the Wet Tropics lowlands. It protects freshwater mangroves and plays a crucial role in conserving over 190 bird species and other wildlife. The 180 ha extension to the park supports extremely valuable remnants of grasslands that are endangered under the NCA, as well as other highly threatened communities including lowland rainforests and swampy rainforests.







Hann Tableland National Park (Extension)

Queensland Government

Date of purchase

Area

3,960 ha (10,820 ha total area of park)

Description

The Hann Tableland is an isolated granite massif to the west of Mareeba within the Einasleigh Uplands bioregion of north-eastern Queensland. The massif is surrounded by areas of largely cleared agricultural land. It represents a significant outlier of some plant communities and species that are more widespread in the adjacent Wet Tropics bioregion, in particular rainforest and wetter eucalypt communities. Most of the Tableland is now within the Hann Tableland National Park. In the recent past the park was used for cattle grazing as part of several pastoral holdings. The park has no serviceable roads or tracks, apart from an access road to the central western section of the park.

National Reserve System conservation values

Hann Tableland National Park encompasses high diversity in a range of plant communities and is notable for large expanses of ephemeral flush habitats on pavements and slabs, together with restricted rainforest communities at high altitude. Overall, the flora of Hann Tableland National Park is representative of that found in the general area from Cooktown to Ravenshoe, albeit comprising a disjunct occurrence for many taxa. The geology is granitic (granite, granodiorite). Soils are often shallow or skeletal, and large areas of exfoliating slabs and pavement exist. Some small areas of 'micro' fine grained granite exist in the northern end of the tableland. The vegetation comprises mainly mixed eucalyptdominated communities with a grassy understorey. Many species occur seasonally in ephemeral flush habitats on the rock slabs. Small areas of montane rainforest and gallery vineforest occur on 'micro' granites at the northern end or along granite watercourses in the southern end of the park. The rainforest patches are often dominated by emergent conifers (Agathis, Araucaria spp.) and are floristically depauperate when compared to those found in the adjacent Wet Tropics bioregion, with many of the component species occurring in very small numbers.







Melsonby (Gaarraay) National Park

Queensland Government
Date of purchase
2002
Area

8,990 ha

Melsonby (Gaarraay)

Balnggarrawarra (Gaarraay) Aboriginal Land Trust Date of purchase 2002 Area 3,610 ha

Upper Bridge Creek
Queensland Government
Date of purchase
2004
Area
47,400 ha

Description

Upper Bridge Creek (crown land), Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge are contiguous parcels of land that lie approximately 40 km to the north-west of Cooktown. Together with Jack River, Cape Melville, Lakefield and Starcke National Parks, the properties form a large connected portion of land managed for nature conservation in the Cape York Peninsula bioregion. Ultimately, Upper Bridge Creek will become national park, though the boundaries and official name are yet to be determined.

National Reserve System conservation values

The geology of Upper Bridge Creek, Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge is predominantly sedimentary sandstones or sandstone-derived. The vegetation is dominated by open woodland communities including Eucalyptus tetradonta, E. phoenicea and Corymbia stockeri, often with Xanthorrhoea johnsonii and Grevillea spp. The vegetation is typical of sandstones found in the area stretching from Jowalbinna near Laura through to Cape Melville. Where wet season inundation and runoff occurs, numerous small areas of ephemeral flush vegetation (sedgelands, herblands) occupy rock pavements or skeletal soils. Small escarpments are prevalent, with rock outcrops, slabs and overhangs throughout the area. Gallery rainforest and vine forest communities form small patches along more substantial water courses that are rarely permanent. Even smaller patches of dry rainforest are found on areas of low sandstone escarpment or along permanent watercourses; however these are floristically depauperate when compared to those found in the nearby Jack River and Cape Melville National Parks.



Methods

Collection and observation sites within each reserve were selected based on land classes, supplemented by identification of suitable microhabitats during the field visit. Site selection also depended on access, suitability for trapping and time constraints. Site locations were recorded using global positioning systems.

A number of taxonomic groups were identified as targets for study. Table 2 shows the groups surveyed and the specialists who undertook the work. Some flora collections were also made adjacent to Melsonby Homestead in conjunction with traditional owners and school students from Cooktown.

Table 2: Taxonomic groups surveyed and personnel

Group	Survey Team	Affiliation
Mammals	Keith McDonald	Threatened Species and Biodiversity and Ecosystem Sciences
	Michael Mathieson	Queensland Herbarium
	Heather Janetzki	Queensland Museum
Birds	Keith McDonald	Threatened Species
	Michael Mathieson	Queensland Herbarium
	Heather Janetzki	Queensland Museum
Frogs	Jeanette Kemp, Anthony Backer	Queensland Herbarium
	Patrick Couper, Andrew Amey	Queensland Museum
Reptiles	Keith McDonald	Threatened Species
	Michael Mathieson	Queensland Herbarium
	Patrick Couper, Andrew Amey	Queensland Museum
Butterflies, Damselflies and	Abbey Throssell (collection)	Tasmanian Museum and Art Gallery
Dragonflies	Chris Burwell (identification)	Queensland Museum
True Bugs	Anna Namyatova, Michael Elias, Gerry Cassis	University of New South Wales
Spiders	Robert Raven	Queensland Museum
Snails and Slugs	Kevin Bonham (collection)	Tasmanian Museum & Art Gallery
	John Stanisic (identification)	Biodiversity Assessment and Management Pty Ltd
Vascular Plants	Paul Forster, Megan Thomas, Michael Mathieson, Jeanette Kemp, Rigel Jensen, Andrew Ford, Wendy Cooper, Mark Newton, Dave Hudson, Fannie Venter, Gary Wilson, Darryn Crayn, Rosemary Lovatt, Louise Hucks, Cameron Kilgour, Katharina Schulte, Yumiko Baba	Queensland Herbarium
Bryophytes, Lichens and Fungi	Josephine Milne, Helen Jolley	National Herbarium of Victoria



A standard suite of survey techniques was used:

- Mammals were caught using Elliot and cage traps, identified and released. Records were also obtained from direct observation during day searches and nocturnal spotlighting.
- + Birds were surveyed using direct observation at the same locations and for the same duration each day, between 20–180 minutes depending on the area.
- + Frogs were surveyed using spotlight searches.

 Banks and hill slopes surrounding creeks were traversed while stopping periodically and listening for calls, as well as driving slowly along roads during rain. In some reserves searches for amphibians were also conducted during the day.
- Reptiles were collected by hand only.
 Searches were conducted during the day and spotlighting was used at night.
- Butterflies, damselflies and dragonflies were collected during the day using sweep nets.
 Live animals were photographed whenever possible.
- Survey team at Cloudland Nature Refuge © Copyright, G. Wilson

- True bugs were collected by beat-sampling vegetation and using light traps at night.
 Water surfaces were swept with an aquatic net to capture semi-aquatic (Gerromorpha) and aquatic (Nepomorpha) bugs.
- + Spiders were collected during the day using pitfall traps, hand searching, and locating and excavating burrows where possible. Difficult burrows were marked with reflective tape and the spider later extracted using vibration from a four wheel drive vehicle. Spiders were also collected at night around marked burrows and by hand searching the broader area. Sub-adults were kept alive to force moulting and enable identification. Live spiders were also photographed.
- + Land snails were collected by hand from under woody debris and rocks. The majority of land snails can be identified from the shells alone and their presence usually indicates the presence of living individuals, hence, live snails and dead shells were taken. Leaf litter was also collected and sifted for shells. Freshwater sampling was undertaken where possible. Sampling was restricted to areas considered likely to be snail hotspots and easily accessible: these chiefly comprised rainforest areas. Individual species are generally patchy in their distribution, therefore in each reserve up to six sites were sampled in order to gain a more complete inventory.



- + Vascular plants were collected by hand. Survey effort was focused on filling gaps in areas for which some collections previously existed or collecting in areas for which no records existed. The aim was to traverse the main vegetation communities, aspects (e.g. north slope, south slope) and landforms (e.g. gully, slope, and ridge). Herbarium specimens were collected for all fertile vascular plants encountered.
- + Bryophytes (mosses, liverworts and hornworts), lichens and fungi were collected by searching the forest floor, sandstone ledges, crevices, stream embankments and the trunks and branches of trees. As the colour and appearance of fungi alters dramatically upon drying, photographs were taken of the fungi to show size, features of the underside of the fruit body, and any other diagnostic characteristics that assist with identification. All available fungi fruit bodies were collected. Fungi are seasonal and often only one fruit body was present. This was collected to assist with identification at the herbarium, but not retained as a herbarium voucher.

Incidental observations of vertebrate species were recorded during the surveys. Reptiles, frogs and mammals were also identified from skeletal material and scats. For Cloudland National Park, mammals, birds, amphibians and reptiles were identified from photographs taken during the survey. Voucher specimens were taken of reptiles, invertebrates, plants and fungi.



Collections were identified in the field by experts, and also by using the available literature and the holdings of museums and herbaria. New species were photographed or scanned. Fauna specimens were deposited with the Queensland Museum. Flora specimens were deposited with the Queensland Herbarium.

Final species lists were compiled using data from the results of this Bush Blitz and the Australian Natural Heritage Assessment Tool (ANHAT).



Results

The locational data of collected and observed specimens are available to reserve managers. A total of 1,186 species were added to those known across the reserves. Thirty-six putative species new to science were discovered—these await assessment. Sixteen threatened animal species were observed, of which 14 are new records for the reserves, and 18 threatened plants were recorded, 14 of which are new records for the reserves. Two exotic or pest fauna species and 73 weed species were also recorded.

Species Lists

Appendix A provides updated species lists for each reserve. Names in **brown bold text** are putative new species. Species marked with an asterisk (*) have not been previously recorded. Species without an asterisk were recorded previously and were found again during this survey. Those shown with blue squares were not recorded on this survey, but are known from previous records for the reserve. Table 3 provides a summary of the number of new flora and fauna records and putative



A new species of spider from the *Conothele* genus, R. Raven © Copyright, Queensland Museum



A new species of true bug, Tingini n. gen. n. sp., A. Namyatova © Copyright, University of New South Wal

new species for each reserve. Table 4 provides a summary of the number of new records for each reserve by taxonomic group.

For Brooklyn Nature Refuge, only species listed in ANHAT and recorded during the Bush Blitz are included in the list at Appendix A. The Brooklyn Nature Refuge survey covered invertebrate fauna only. The Australian Wildlife Conservancy maintains a species list for vertebrate fauna and flora documented on the reserve.⁴

Some specimens collected during this Bush Blitz have been identified only to family or genus level. This is because a great deal of time is required to examine and identify to species level the many collections that are generated. In the majority of cases, microscopic examination of the material is necessary. Additional limitations are the lack of experts working on particular groups, and the fact that the taxonomic literature in Australia for some groups is not current. Further work will be conducted on these collections.

Nomenclature and taxonomic concepts used in this report are consistent with the Australian Faunal Directory, Australian Plant Name Index, Australian Plant Census, Checklist of the Lichens of Australia and its Island Territories, AusMoss, and the Catalogue of Australian Liverworts and Hornworts.

4 To view the list of vertebrate fauna and flora for Brooklyn Nature Refuge see http://www.australianwildlife.org/
AWC-Sanctuaries/Brooklyn-Sanctuary/Brooklyn-Wildlife/Brooklyn-Wildlife-Species.aspx>, accessed 23 July 2013.



Table 3: Summary of new records and putative new species

Reserve	Species new to the reserve	Putative species new to science
Brooklyn Nature Refuge	94	10
Cloudland Nature Refuge	535	13
Eubenangee Swamp National Park	123	0
Hann Tableland National Park	479	11
Melsonby (Gaarraay) National Park	49	0
Melsonby (Gaarraay) Nature Refuge	106	0
Upper Bridge Creek	542	11

Table 4: Number of species collected on each reserve by group

Group	Upper Bridge Creek	Brooklyn Nature Refuge	Cloudland Nature Refuge	Eubenangee Swamp National Park	Hann Tableland National Park	Melsonby (Gaarraay) National Park	Melsonby (Gaarraay) Nature Refuge
Mammals	10	-	7	2	18	-	_
Birds	79	-	92	14	62	-	_
Frogs and Toads	5	-	4	5	9	-	_
Reptiles	26	-	5	_	23	-	_
Butterflies	4	24	13	_	24	-	-
True Bugs	27	44	30	_	46	_	_
Dragonflies and Damselflies	8	11	4	-	14	-	-
Spiders	4	3	2	_	5	-	_
Snails and Slugs	1	12	10	_	15	-	-
Vascular Plants	304	-	365	150	472	49	107
Bryophytes	19	-	1	_	_	-	_
Lichens	22	-	-	_	3	-	_
Fungi	34	-	-	-	-	-	_



Removing an endangered Northern Quoll (*Dasyurus hallucatus*) from a trap at Hann Tableland, A. Amey © Copyright, Queensland Museum



Threatened Species

Appendix B itemises the threatened species listed under the NCA and EPBC Act known from the reserves. A summary of threatened species identified during the study is provided in Table 5.

Table 5: Summary of threatened species identified in each reserve

Reserve	Fauna	Flora
Brooklyn Nature Refuge	1	_
Cloudland Nature Refuge	10	5
Eubenangee Swamp National Park	-	1
Hann Tableland National Park	6	6
Melsonby (Gaarraay) National Park	_	1
Melsonby (Gaarraay) Nature Refuge	_	3
Upper Bridge Creek	4	7

Exotic and Pest Species

Appendix C lists the exotic and pest species known from the reserves. A summary of exotic and pest species identified during the study is provided in Table 6.

Table 6: Summary of exotic and pest species identified in each reserve

Reserve	Fauna	Flora
Brooklyn Nature Refuge	-	_
Cloudland Nature Refuge	2	11
Eubenangee Swamp National Park	_	24
Hann Tableland National Park	1	46
Melsonby (Gaarraay) National Park	_	_
Melsonby (Gaarraay) Nature Refuge	_	_
Upper Bridge Creek	_	4



Bridge Creek Holding, Eucalyptus and bloodwood communities, A. Amey © Copyright, Queensland Museum



Discussion

Putative New Species

A putative species new to science is one that has been recognised by an expert as never having been named or described in the scientific literature. It becomes a new species once it is named and its description published. In addition to species that are considered new to science, specimens collected during this Bush Blitz include many undescribed species that are already known from museum and herbarium collections, but have not yet been formally described and named.

A breakdown of the groups in which putative new species have been discovered is provided in Table 7.

Table 7: Putative new species by group

Group	Number of putative new species
True Bugs	24
Spiders	9
Vascular Plants	1
Fungi	2

True Bugs

The vast majority of true bugs in Australia are undescribed. During this Bush Blitz, 24 putative new species were found, including two new genera, which was higher than expected.

A number of the new taxa have global significance, including the first record for Australia of an ant-mimetic Halticine.



Spiders

Nine putative new species of spider were collected. Descriptions of some of the new species have since been prepared for publication.

At Upper Bridge Creek, a new species of curtain web spider (*Cethegus rufipes* n. sp.) was documented. Adult male and female specimens were collected, both being necessary to fully describe a species. Male curtain web spiders usually mature in the dry season (winter) so the specimen collected was fortunately a little early. A brush-footed trapdoor spider (*Mandjelia* n. sp. 4) and a wishbone spider (*Aname* n. sp.) were also found at Bridge Creek, both of which are putative new species. Unfortunately, no males were taken, so the species cannot yet be described.

At Brooklyn Nature Refuge putative new species of saddle-legged trapdoor spider (Conothele n. sp. 3) and brush-footed trapdoor spider (Mandjelia n. sp. 2) were collected. Both species are clearly new to science although the collection of males is needed to complete the descriptions. Conothele is quite a diverse genus in eastern Australia, but only one species (Conothele doleschalli) is currently described and it is highly localised. The brush-footed trapdoor spider (Mandjelia n. sp. 2) was an exciting discovery. Elsewhere in Queensland, spiders in this genus are predominantly rainforest dwellers, however those found in Brooklyn were in open forest.



At Hann Tableland National Park a curtain web spider similar to Namirea johnlyonsi was collected, but no adults were taken. The original type locality of *N. johnlyonsi* is Mount Spec, just west of Townsville, around 500 km away. Spiders so remote from each other are likely to be different species. Female wishbone spiders (Aname n. sp.) were also collected at Hann Tableland National Park, but males are needed to describe the species. A brush-footed trapdoor spider (Mandjelia n. sp.) was another exciting find, being a different species from those found at Brooklyn Nature Refuge and Upper Bridge Creek. The saddle-legged trapdoor spider (Conothele n. sp.) collected at Hann Tableland National Park was also different from the one taken at Brooklyn Nature Refuge.

A putative new tarantula species, identified as belonging to the Phlogius crassipes group, was collected from Upper Bridge Creek, Brooklyn Nature Refuge and Hann Tableland National Park.

Snails and Slugs

Two undescribed species of snail (Helicarionidae WT 31 and Charopidae WT 70) were recorded on Cloudland Nature refuge and one (Camaenidae EU 21) on Brooklyn Nature Refuge. All have been recorded previously from the respective bioregions but not on the reserves. Of these, only Camaenidae EU 21 (from Brooklyn Nature Refuge) can be described at present. Adequate material for description is not available for either Helicarionidae WT 31 or Charopidae WT 70. Camaenidae EU 21 can currently be assigned to the genus *Xanthomelon*, which comprises the melon snails from Queensland.

Vascular Plants

At Hann Tableland National Park, a putative new triggerplant species (*Stylidium* n. sp.) was discovered. Funding from the Bush Blitz program enabled further field work to be undertaken in March 2012 to obtain additional specimens and observations. Formal description is currently in progress. The triggerplant occurs in ephemeral flush wetland habitat, growing in the wet season and drying out during the dry season. The site from where it was collected is its only known location, however it is likely to be found elsewhere in the region where suitable habitat exists.

An undescribed greenhood orchid (*Pterostylis* n. sp.) was also recorded at Hann Tableland National Park. Additional Bush Blitz funding has been allocated to facilitate the describing of this species. The orchid was found at a single site in Hann Tableland National Park. Another specimen is known from the Windsor Tableland approximately 60 km to the north.

Several other undescribed and unidentified plants were found: an endangered myrtle (now described as *Homoranthus clarksonii*); an epiphytic orchid (subsequently reinstated as *Cadetia uniflos*⁵); a *Plectranthus* species now described as *P. bellus* and a potential new species of *Plectranthus* that requires more research before description is possible.

Funai

Fungi were collected only at Upper Bridge Creek. Most of the fungi will require additional taxonomic work to determine them to species level and, in many cases, molecular work will be essential to confirm their identity. Despite this, two putative new species were discovered, a *Laccaria* species and a truffle.

⁵ The species was previously thought to be the same as *C. taylori*, see Mathieson M. T. 2010, *'Cadetia uniflos* (F.M.Bailey) M.T.Mathieson, a new combination in Orchidaceae', *Austrobaileya* **8**(2): 119–124.





Threatened Species

Australia is home to around 570,000 species, most of which are yet to be formally described. About 92% of Australian plants, 87% of mammals, and 93% of reptiles are endemic. Changes to the landscape and native habitat as a result of human activity have put at risk many of these unique species. Over the last 200 years many species of plants and animals have become extinct; survival of others is threatened.⁶

Fauna

Ten animals detected in Cloudland Nature Refuge are listed threatened species. The Southern Cassowary (Casuarius casuarius johnsonii) is listed as endangered under both the EPBC Act and the NCA. Macleay's Fig Parrot (Cyclopsitta diophthalma macleayana) and the Rufous Owl southern subspecies (Ninox rufa queenslandica) are both listed as vulnerable under the NCA. Seven species are listed as near threatened under the NCA: Grey Goshawk (Accipiter novaehollandiae), Australian Swiftlet (Aerodramus terraereginae), Tapping Green-eyed Frog (Litoria serrata), Lumholtz's Tree-kangaroo (Dendrolagus lumholtzi), Lemuroid Ringtail Possum (Hemibelideus lemuroides), Green

Ringtail Possum (*Pseudochirpos archeri*) and Herbert River Ringtail Possum (*Pseudochirulus herbertensis*).

The Southern Cassowary, Lumholtz's Tree-kangaroo and Rufous Owl require extensive areas of contiguous habitat to reduce the risk of stress, and sometimes death, during migration. Cloudland Nature Refuge is a sizeable block of rainforest for the Tablelands area and therefore likely to be very important for these species. Six Lemuroid Ringtail Possums were seen in a single spotlighting session at Cloudland, indicating that the reserve currently provides important habitat for this species. The restricted distribution of the Lemuroid Ringtail Possum means it is very likely to be adversely affected by climate change, so all sightings are important records.

Though not listed under state or Commonwealth legislation, the Golden Bowerbird (*Amblyornis newtonianus*) and Tooth-billed Bowerbird (*Scenopoeetes dentirostris*) recorded in Cloudland Nature Refuge are considered by local experts to be threatened by habitat loss due to predicted climate change.

In Hann Tableland National Park a pair of endangered Buff-breasted Button-quail (*Turnix olivii*) was observed, at approximately 800 m altitude. The pair was spotted on top of the tableland in undulating eucalypt forest with a *Themeda* spp. understorey. In Upper Bridge Creek, the Red Goshawk (*Erythrotriorchis radiatus*) was observed: this species is listed as vulnerable under the EPBC Act and endangered under the NCA. A small colony of approximately 100 Spectacled Flying-foxes (*Pteropus conspicillatus*) was also found at a remote rainforest location within Upper Bridge

⁶ Chapman, A. D. 2009, Numbers of Living Species in Australia and the World, 2nd edn, Australian Biological Resources Study, Canberra.



Creek; this species is listed as vulnerable under the EPBC Act. The NCA does not list the Spectacled Flying-fox but includes general restrictions regarding the removal or disturbance of roosts that are relevant to the genus *Pteropus*.

A tarantula (*Phlogius crassipes* gp. n. sp.) from the family Theraphosidae was discovered in Upper Bridge Creek, Brooklyn Nature Refuge and Hann Tableland National Park. The taking, keeping and use of members of the Theraphosidae family that are indigenous to Australia are restricted under the *Nature Conservation (Wildlife) Regulation 2006*. Up to 10,000 tarantulas are estimated to be taken from the wild each year, mostly from Queensland. This rate of harvest (legal and illegal) is considered unsustainable. Some collectors are using their spiders for captive breeding, a practice which might decrease the pressure on wild populations, at least for the large fast-growing species, such as *Phlogius crassipes*.⁷

Flora

Five plants listed as near threatened under the NCA were recorded in Cloudland Nature Refuge: Pink Leaf Haplostichanthus (Haplostichanthus submontanus subsp. sessiliflorus), Bull Kauri (Agathis microstachya), Giant Mother-in-law Vine (Caesalpinia robusta), Buff Walnut (Endiandra sideroxylon) and a soapberry (Lepiderema largiflorens). One species recorded in Eubenangee Swamp, Water Vine (Rourea brachyandra), is also listed as near threatened under the NCA.

7 Queensland Museum, accessed 23 July 2013 http://www.qm.qld.gov.au/Find+out+about/ Animals+of+Queensland/Spiders/ Primitive+Spiders+Infraorder+Mygalomorphae/ Tarantula+or+Whistling+Spiders>. Goodenia heteroptera, listed as near threatened under the NCA, was found in Upper Bridge Creek, Hann Tableland National Park and Melsonby (Gaarraay) Nature Refuge. The myrtle *Homoranthus tropicus*, also listed as near threatened under the NCA, was found in Upper Bridge Creek, Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge.

Although not listed under the EPBC Act or the NCA, Homoranthus clarksonii satisfies the criteria of the International Union for Conservation of Nature (IUCN) to be considered vulnerable. The newly discovered population at Hann Tableland National Park represents a range extension and marks its eastern limit: it was previously known only from Mount Mulligan, approximately 50 km west of the park. Common Tassel Fern (Huperzia phlegmaria) was also found in Hann Tableland National Park, and is listed as near threatened under the NCA.

The putative new species of triggerplant (Stylidium n. sp.) and undescribed greenhood orchid (Pterostylis n. sp.) will be nominated as endangered under the EPBC Act and NCA once they have been described. The population of Stylidium n. sp. is estimated to be between 200 and 500 plants in an area less than 5 ha. The encroachment of invasive grasses [Giant Ratstail Grass (Sporobolus pyramidalis), Grader Grass (Themeda quadrivalvis) and Gamba Grass (Andropogon gayanus)] and the herbaceous weed Praxelis clematidea into the ephemeral flush wetland habitats in the granite outcrops immediately adjacent, places this population at

8 Commonwealth Scientific and Industrial Research Organisation, accessed 23 July 2013 http://www.publish.csiro.au/view/journals/dsp_journal_fulltext.cfm?nid=150&f=SB11015>.



great risk. The population of greenhood orchid at Hann Tableland National Park is estimated to be less than 50 plants in an area under 1 m². No population data are available for the Windsor Tableland, the only other location from which a specimen has been obtained. Threats to the species include fire and the encroachment of weeds such as Lantana (Lantana camara) and Praxelis clematidea, both of which are assisted by fire. Too frequent and intense fire in the ecotone between the notophyll vine forest and moist eucalypt grassy woodland leaves the habitat unsuitable for the greenhood orchid.9 The orchid most likely experiences very low fire frequency and low to medium fire intensities. It is susceptible to fire during its growing season which occurs variably around October/November to May (late dry and early wet season). A fire that occurs during this period, when the plant is above ground, will most likely kill the plant. While the plant is dormant, it exists as an underground tuber and has a much better chance of surviving a fire.10

Exotic and Pest Species

The NRS is designed to conserve and protect Australia's rare and threatened ecosystems and provide a refuge for species at risk. Invasive species can have a major impact on already vulnerable species and ecosystems, as well as economic, environmental and social impacts. The inclusion of exotic and pest species records as part of this report is designed to provide land managers with baseline information.



Yellow-faced Whip Snake (*Demansia psammophis*) from Hann Tableland
© Copyright, Department of National Parks, Recreation, Sport and Racing Queensland

Fauna

Exotic and pest vertebrate fauna were not a focus of this study, however Cane Toads (Rhinella marina) were observed at Cloudland Nature Refuge and Hann Tableland National Park. Cane Toads are voracious feeders, consuming a wide variety of insects, frogs, small reptiles, mammals and even birds. They are highly toxic to native predators such as goannas, freshwater crocodiles, numerous snakes and quolls. Their eggs can be lethal to tadpoles of native frogs when consumed. Cane Toad tadpoles have also been recorded to reduce the growth rates of native frog tadpoles under certain conditions. When an area is first invaded by Cane Toads, they can rapidly reduce the abundance of invertebrates, probably seriously affecting other insectivorous predators and interrupting ecological processes, at least temporarily.11

A single exotic invertebrate species was recorded: the Spiked Awlsnail (*Allopeas clavulinus*) was found at Cloudland Nature Refuge. This species occurs in disturbed areas throughout the Wet Tropics and is widespread in eastern and northern Australia. Originally a native of east Africa it now has a

⁹ Mathieson, M. T. 2012, 'New Species of *Stylidium* (STYLIDIACEAE) and *Pterostylis* (ORCHIDACEAE) from Tropical Queensland', report submitted to the Australian Biological Resources Study, Canberra.

¹⁰ Pers. comm., Dr Michael Mathieson, Queensland Herbarium.

¹¹ Department of Agriculture, Fisheries and Forestry Queensland, accessed 23 July 2013 http://www.daff.qld.gov.au/plants/weeds-pest-animals-ants/pest-animals/a-z-listing-of-pest-animals/ photo-guide-to-pest-animals/cane-toad>.



circumtropical distribution. The Spiked Awlsnail is not considered a pest, but its presence usually indicates habitat disturbance.

Flora

Upper Bridge Creek, Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge were in good condition with only four weed species found along the only road (the Battlecamp to Cooktown road) that traverses the land parcel. The absence of weeds is thought to result from a combination of a relatively undisturbed landscape (apart from fire) and nutrient-deficient soils derived from sandstone that are particularly lacking in nitrogen and phosphorus.

The number of weed species recorded in Cloudland Nature Refuge (11) was relatively small and considered not to pose a significant threat, although an exhaustive survey for weeds was not carried out. A section of cleared pasture that was not surveyed appeared to have a heavier weed burden.

Twenty-four weeds were recorded in the Eubenangee Swamp extension to Eubenangee National Park, many of which pose a serious threat to the park. At present most occur in low numbers due to intensive and sustained weed control. Currently, the most difficult weed to manage is Creeping Signal Grass (*Urochloa humidicola*), although burning infested areas prior to flooding is having some success. The park is surrounded by a multitude of aggressive weeds that consistently re-invade. Despite this, park managers have been highly successful in managing invasives such as Pond Apple (*Annona glabra*) and Hymenachne (*Hymenachne amplexicaulis*), which have been almost completely eliminated.

Forty-six weeds were encountered in Hann Tableland National Park, including serious infestations of Giant Ratstail Grass (Sporobolus pyramidalis), Grader Grass (Themeda quadrivalvis), Molasses Grass (Melinis minutiflora), Gamba Grass (Andropogon gayanus) and Lantana (Lantana camara). Gamba Grass and Lantana are both Weeds of National Significance. 12 A range extension was also documented for Silver-leaf Desmodium (Desmodium uncinatum), with the Hann Tableland National Park record being the most northern record for this species at the time. The southern portion of Hann Tableland National Park is particularly badly affected by weeds. This is a consequence of the tableland having been disturbed by grazing of cattle for many years, regular wildfires, and a large number of weeds present on or near the agricultural land surrounding the park. In some parts these weeds have already altered the fuel loads and vegetation communities within which they occur.

Other Points of Interest

Vertebrate Fauna

The time of year when the survey took place made it difficult to detect frogs. Even during periods of rain amphibian activity was extremely low. Most species do not call outside the wet season and it was also the end of the breeding season. Despite this, the frog species recorded were as expected for the reserves.

12 Weeds of National Significance have been identified by Australian governments based on their invasiveness, potential for spread and environmental, social and economic impacts, see http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>



As with frogs, bird numbers were slightly lower than expected, primarily due to most migrants having departed for more northern latitudes at the end of the breeding season. However, significant numbers of honeyeaters were present, particularly at Upper Bridge Creek, where nectar-rich Scarlet Gum (*Eucalyptus phoenicea*) was flowering well.

Cloudland Nature Refuge supports a good range of arboreal animals including several upland possum species that are thought to be vulnerable to climate change and possibly declining in number. Lumholtz's Tree-kangaroo (*Dendrolagus lumholtzi*) was also recorded, a species that has had its favoured habitat drastically reduced in area by clearing.

Significant records for Upper Bridge Creek included the following: Nullum Ctenotus (Ctenotus nullum), a range-restricted species locally common in the Cooktown to Laura region; a sight record of Quinkan Ctenotus (Ctenotus quinkan), which is a range extension south from the Laura area; and specimens of Ring-tailed Gecko (Cyrtodactylus tuberculatus). The Ring-tailed Gecko specimens were amongst the material examined for a revision of the Australian 'Cyrtodactylus louisiadensis' group, which resulted in the recognition of four new species.¹³ Other significant finds at Upper Bridge Creek included the Black-backed Butcherbird (Cracticus mentalis), a common Cape York species at the southern limit of its range in Upper Bridge Creek; the Black-winged Monarch (Monarcha frater), a relatively uncommon migrant

to eastern Cape York, reaching the southern limit of its range in the Upper Bridge Creek area; and Godman's Rock-wallaby (*Petrogale godmani*), a localised but common rock-wallaby from Mt Carbine to Bathurst Head. The conditions at Upper Bridge Creek were compromised by a severe fire the previous November and consequently mammal trapping was poor.

The rainforests of the Hann Tableland are western outliers of the Wet Tropics. As such, several bird species limited to the Wet Tropics habitats were detected at their western limit, for example, the Atherton Scrubwren (Sericornis keri), Large-billed Scrubwren (Sericornis magnirostra), Macleay's Honeyeater (Xanthotis macleayanus),



Australian Wood Frog (*Rana daemeli*), Upper Bridge Creek © Copyright, Department of National Parks, Recreation, Sport and Racing Queensland

Pied Monarch (*Arses kaupi*), Eastern Yellow Robin (*Eopsaltria australis*), Pale-yellow Robin (*Tregellasia capito*) and Grey-headed Robin (*Heteromyias cinereifrons*). Conversely, in line with the habitat being an outlier and at its geographical limits, other conspicuous and relatively common birds typical of the Wet Tropics rainforests were not

¹³ Shea, G., Couper, P., Worthington Wilmer, J. & Amey, A. 2011, 'Revision of the genus *Cyrtodactylus* Gray, 1827 (Squamata: Gekkonidae) in Australia', *Zootaxa*, **3146**: 1–63.





Robust Frog (Austrochperina robusta), Cloudland Nature Refuge, R. Raven © Copyright, Queensland Museum

found in Hann Tableland National Park, for example, Spotted Catbird (Ailuroedus melanotis), Bridled Honeyeater (Bolemoreus frenatus), Chowchilla (Orthonyx spaldingii) and Victoria's Riflebird (Ptiloris victoriae). Other species of note recorded at Hann Tableland National Park include the following: Brown Treecreeper (Cape York race) (Climacteris picumnus melanotus), an uncommon subspecies at the southern limit of its range; Black-chinned Honeyeater (Melithreptus gularis), an intergrade between two races at the north-eastern limit of its distribution; and Mareeba Rock-wallaby (Petrogale mareeba), a range-restricted yet common species in the area. A Brush-tailed Phascogale (Phascogale tapoatafa) captured during the mammal survey was a new locality record for this species, providing valuable information on the overall distribution of the species.

Invertebrate Fauna Butterflies and Dragonflies

Many new records for butterflies and dragonflies were added to the reserves. All species recorded were well within their known ranges and as expected for the reserves.

True Bugs

A relatively high diversity of true bugs was collected over eight days with 114 species found. Many of the species collected were in low numbers, which not only reflects the naturally low abundance of true bugs in the tropics, but possibly indicates that conditions were not ideal at the time of the survey. Over the past 50 years Queensland's Wet Tropics have been sampled intensively for true bugs, particularly for many cryptozoic taxa such as the flat bugs (Aradidae). However, much collecting is still required for many plant-inhabiting taxa, such as the plant bugs (Miridae) and lace bugs (Tingidae), whose diversity is undoubtedly higher than recorded to date, while almost nothing is known of their plant host associations. The vast majority of mirids and several other true bugs feed on plants and are usually highly host specific; consequently, they suffer from co-extinction risk when their host plants are endangered.

Spiders

Collecting was focused on mygalomorph spiders, a core taxon for the Bush Blitz program. Mygalomorph spiders include trapdoor spiders (Idiopidae), funnelweb spiders (Hexathelidae), wishbone spiders (Nemesiidae), curtain web spiders (Dipluridae), mouse spiders (Actinopodidae) and tarantulas (Ctenizidae and Theraphosidae). These primitive spiders are the least evolved Australian spiders and are present in the oldest fossil records; they have remained mostly unchanged for tens of thousands of years.14 Identifying Theraphosid tarantulas to species level presents major problems for taxonomists even at the molecular level, so finding fresh specimens with habitat and burrow type was very useful.

¹⁴ Queensland Museum, accessed 23 July 2013 http://www.qm.qld.gov.au/Find+out+about/ Animals+of+Queensland/Spiders/ Primitive+Spiders+Infraorder+Mygalomorphae>.



Upper Bridge Creek, with its dry sandy area of open forest, yielded four species from four mygalomorph families, which is close to optimal for this kind of habitat.

During the two days spent at Brooklyn Nature Refuge in the open forest and swamps of the lowland areas, three species from three mygalomorph families were found. Brooklyn Nature Refuge, being a diverse area ranging from montane rainforest at Mt Carbine to lowland open forest and swamps, has excellent potential for the discovery of many species.

In contrast, the entire area of Cloudland Nature Refuge, even its undisturbed parts, was depauperate of mygalomorph spiders. There was a reduced amount of litter, perhaps because of the high humidity and decomposition rate, few old growth trees except large figs (Ficus spp.), and few decomposing fallen logs. Despite this apparent lack of suitable habitat, a juvenile wishbone spider (Namea n. sp.) and a trapdoor spider (Homogona sp.) were collected. These mygalomorphs are not able to disperse, so their presence at Cloudland Nature Refuge is surprising given the heavy disturbance. However, both were juvenile spiders and therefore unsuitable for taxonomic description; long term surveys are needed to better define the species present in this reserve.

Hann Tableland National Park had a good diversity of mygalomorph spiders. The mygalomorphs were most diverse at the upland site (Radar Tower) and Boyle Creek. The habitat was predominantly open forest with a heavy understorey on the upper slopes. Five species

from five families were found. Spiders from the two other mygalomorph families that might be expected to occur in the area (Idiopidae and Migidae) were not found.

Fire management is a key issue for the conservation of mygalomorph spiders. Burrowing mygalomorphs are most threatened by intense sustained fires. Small, fast and light burns are less damaging. Thousands of brush-footed trapdoor spiders (Barychelidae family) were killed in a fire just before August 2008 on the Mount Amos Road, south of Cooktown. In contrast, the fire inside Brooklyn Holding in 2008 was localised and sufficiently light that spiders were seen on the burnt roadside verge emerging from soil below the cooled ashes.15 Observations at Upper Bridge Creek and Hann Tableland reserves during this Bush Blitz showed that, during a fire, large rocks and boulders act as refuges for some of the largest spiders (at least seven years old). In rainforest areas, embankments along creek edges or protected cuttings are also refugia for a number of mygalomorph spider genera, with diversity in these microhabitats substantially higher than in gently sloping or flat areas. Mygalomorphs often survive in creek embankments that are stabilised by moss and tree roots. During a Bush Blitz survey in Tasmania (2010), scientists found that the few trees left untouched by fire at Seventeen Mile Plain Reserve were refugia for the diversity of spiders that once were common throughout the area. Hence, protection of such trees in rainforests is essential.

15 Pers. comm., Dr Robert Raven, Queensland Museum.



Snails and Slugs

Twenty-nine land and freshwater snail species were recorded during this study. The land snails comprised the bulk of the collections and included many which are bioregionally and locally restricted (see Table 8). The Queensland Museum holds

extensive well-curated collections of land snails from eastern Australia, including many from the Wet Tropics, Einasleigh Uplands and Cape York bioregions. Consequently, any species collected can be placed into geographic and taxonomic context.

Table 8: Bioregionally and locally restricted snails and slugs documented during this Bush Blitz

Species	Reserve	Significance
Boriogenia hedleyi Hedley's Bristle Snail	Brooklyn NR, Hann Tableland NP	Wet Tropics/Einasleigh Uplands/Cape York
Einasleighana antiqua Chillagoe Glass-snail	Brooklyn NR, Hann Tableland NP	Wet Tropics/Einasleigh Uplands
Fastosarion brazieri Chameleon Semi-slug	Cloudland NR, Hann Tableland NP	Wet Tropics endemic
Gnarosophia bellendenkerensis Bellenden Ker Rainforest Snail	Cloudland NR	Wet Tropics endemic
Hadra bipartita Cooktown Bicoloured Snail	Brooklyn NR	Wet Tropics/Einasleigh Uplands/Cape York
Murphitella franklandiensis Cape York Carnivorous Snail	Hann Tableland NP	Wet Tropics/Einasleigh Uplands/Cape York
Obsteugenia inflecta Malanda Bristle Snail	Cloudland NR	Atherton Tableland endemic
Parmacochlea fischeri Wet Tropics Semi-slug	Cloudland NR, Hann Tableland NP	Wet Tropics/Einasleigh Uplands/Cape York
Pravonitor laura Laura Glass-snail	Hann Tableland NP	Einasleigh Uplands endemic
Signepupina ventrosa Bloomfield River Chrysalis-snail	Brooklyn NR	Wet Tropics endemic
Spurlingia monticola Mount Carbine Thicket Snail	Brooklyn NR	Einasleigh Uplands endemic
Spurlingia tinarooensis Tinaroo Thicket Snail	Hann Tableland NP	Wet Tropics/Einasleigh Uplands
Tolgachloritis jacksoni Greenvale Radial-lined Snail	Brooklyn NR, Hann Tableland NP	Einasleigh Uplands endemic
Umbilidelos manierorum Barron Falls Carnivorous Snail	Brooklyn NR	Wet Tropics/Einasleigh Uplands/Cape York
Zyghelix forsteriana Lakeland Downs Thicket Snail	Upper Bridge Creek, Brooklyn NR, Hann Tableland NP	Einasleigh Uplands/Cape York





The Hann Tableland National Park and Brooklyn Nature Refuge lists provide a reasonable guide to the common snails of that part of the Einasleigh Uplands bioregion, with about 80% of the expected species recorded during this survey. On the other hand, the Cloudland Nature Refuge list represents less than 50% of the species expected for that part of the Wet Tropics. The disturbed nature of the sites and relatively short collecting time are probably the main reasons for recording fewer than expected species. The two freshwater snail species recorded, Thiara balonnensis and Stenomelania denisoniensis, were only found on the Hann Tableland National Park. Both species are widespread in eastern Australian drainages and are new records for this reserve.

While this is not a comprehensive inventory for the reserves it does provide important baseline data. The data will be particularly useful for assessing the success of revegetation and biodiversity rehabilitation programs. Land snails are reliant on fungi and other biofilm (algae, lichen) for food and are possible indicators of the establishment of a viable decomposition cycle in the environment. Land snails in eastern Australia prefer rainforest because the closed canopy ensures above average relative humidity and overall stable environmental moisture at the ground level where most species live. In addition, the leaf litter and woody debris produces a variety of microhabitats in which snails can forage and reproduce. The moist rainforest environment also encourages fungi and biofilm growth.

Vascular Flora

The vegetation communities in Upper Bridge Creek, Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge were found to be in good condition with flora typical of the Laura to Cooktown region. Approximately 590 herbarium specimens were made from the area. Based upon earlier collections and the current survey, the combined area contains at least 340 vascular plant species. Twelve range extensions were recorded (see Table 9). Survey effort was concentrated at the northern and southern extremities of Upper Bridge Creek and a number of localities in the adjacent Melsonby (Gaarraay) National Park and Melsonby (Gaarraay) Nature Refuge, as the area along the Battlecamp to Cooktown road had already been relatively well surveyed. Field collection conditions were excellent; however, some of the longer-lived perennials and reseeders were still recovering from the effects of an extensive wildfire in the previous spring. Coverage of most perennials and annuals, especially ephemerals, was excellent. A useful set of specimen records was generated for an area that was largely unknown prior to the survey.

The survey of Cloudland Nature Refuge produced a thorough inventory of vascular plants for the area. There were few vascular plant records made prior to this survey. A total of 653 records were obtained for 365 vascular plant species, and 83 specimens were lodged with the Queensland Herbarium. The following plant species recorded in Cloudland Nature Refuge were locally significant: Creeping Speedwell (*Veronica plebeia*), which is more common in cooler southern latitudes, but north of Gladstone is restricted to high altitudes such as the Eungella Range and parts of the Atherton Tablelands; Pink Tamarind (*Jagera pseudorhus* var. *integerrima*) is endemic to the Wet Tropics and is



restricted to the Atherton and Windsor Tablelands; and Cairns Birdwing Butterfly plant (*Pararistolochia australopithecurus*) is highly restricted, being endemic to the Wet Tropics and occurring mainly on the Atherton Tablelands and Kirrama Range.

Few previous records were available for Eubenangee Swamp National Park extension. Although the older section of Eubenangee Swamp National Park was well-collected for plants, vascular plants had generally not been well-surveyed in the coastal lowlands of the Wet

Table 9: Range extensions for vascular flora documented during this Bush Blitz

Species	Reserve	Significance
Acronychia vestita	Hann Tableland NP	Most western record
Archontophoenix alexandrae	Hann Tableland NP	Most northern record
Cryptocarya clarksoniana	Upper Bridge Creek	Most northern record
Cymbopogon globosus	Hann Tableland NP	Most southern record
Daviesia flava	Upper Bridge Creek, Melsonby (Gaarraay) NR	Most northern record
Dendrobium toressae	Hann Tableland NP	Most western record
Dianella incollata	Upper Bridge Creek, Melsonby (Gaarraay) NR	Previously unrecorded north-eastern population centre
Diplatia grandibractea	Melsonby (Gaarraay) NR	Most northern records in Queensland
Goodenia heteroptera	Upper Bridge Creek, Melsonby (Gaarraay) NR	Most northern record
Gossia retusa	Upper Bridge Creek	Most southern record
Homoranthus clarksonii	Hann Tableland NP	Second population centre and most eastern record
Homoranthus tropicus	Upper Bridge Creek, Melsonby (Gaarraay) NP, Melsonby (Gaarraay) NR	Previously unrecorded north-eastern population centre
Marsdenia connivens	Upper Bridge Creek	Most eastern record
Mitrasacme ambigua	Upper Bridge Creek, Melsonby (Gaarraay) NR	Most northern records in Queensland
Mitrasacme patens	Upper Bridge Creek	Most eastern record
Ophioglossum lusitanicum	Hann Tableland NP	Most northern record for this species in Queensland
Pterostylis procera	Hann Tableland NP	Most northern record
Stylidium oviflorum	Upper Bridge Creek	Most northern record
Stylidium ramosissimum	Upper Bridge Creek	Most northern record
Tasmannia membranea	Hann Tableland NP	Most western record
Tephrosia sp. (Laura M.B. Thomas 283)	Upper Bridge Creek, Melsonby (Gaarraay) NP, Melsonby (Gaarraay) NR	Most northern records in Queensland
Xanthophyllum octandrum	Hann Tableland NP	Most western record for species in Einasleigh Uplands/Wet Tropics bioregions



Tropics. A total of 149 records were made and approximately 150 specimens were lodged with the Queensland Herbarium. Twenty-three plants were new records for the whole park. Survey effort was severely hampered by heavy rain and flooding which prevented access to most areas and increased the risk of crocodile encounters. Rangers led the team along narrow areas of high ground mostly close to the Alice River or adjacent to a sugar cane train line on the eastern side. From these access points the team was able to make small forays into the swamps and rainforest patches. Less than half of the mapped ecosystems were covered as a result, and the team was unable to access the southern parts of the area which contains the highest ecosystem diversity.

Nearly a thousand botanical collections had previously been made from the Hann Tableland, particularly from the rainforest communities at the northern end and from the Boyle Creek catchment at the southern end. In many respects Hann Tableland National Park was considered to be well-collected; however botanical collections from the central sections and areas away from boundaries and access roads were lacking. Interpretation of satellite images indicated that potentially the most interesting areas were in the northern, higher elevation areas of the park, although large areas of outcrops and pavements in the central and southern parts also showed potential for interesting collections. These remote collecting sites were accessed mainly by helicopter and site selection was constrained by suitable landing sites.

Field conditions were good for collecting and coverage of most perennials and annuals, especially ephemerals, was considered to

be excellent. Approximately 460 herbarium specimens were prepared. Overall, the flora appears to be representative of that found in the general area from Cooktown to Ravenshoe, albeit comprising a disjunct occurrence for many taxa. A number of significant collections were made, nearly all range extensions or populations at the limit of their distribution (see Table 9).

Bryophytes, Lichens and Fungi

Upper Bridge Creek was the only reserve surveyed for bryophytes (mosses and liverworts), lichens and fungi; incidental collections were made of mosses from Cloudland Nature Refuge and lichens from Hann Tableland National Park. All collections made during this survey were new records for the reserves. From the identifications to date, it is apparent that there are many significant collections: some are new species, others extend the geographic range of a particular species (see Table 10), and in all instances the collections will provide valuable information to update the records for Queensland.

Mosses and liverworts were not abundant during the survey. It is not known what impact the intense fires in late 2009 in Upper Bridge Creek had on mosses and liverworts and whether their diversity and abundance was affected. Most moss species collected across the survey sites belong to the family Calymperaceae, while the single species of *Sphagnum* moss collected belongs in the section Cuspidata and might be closely related to a European taxon. Further work, most probably molecular analysis, will be required to identify this moss to species level.



Table 10: Range extensions for cryptogams documented during this Bush Blitz

Species	Reserve	Significance
Frullania yorkiana	Upper Bridge Creek	Most western record
Leptogium wilsonii	Hann Tableland NP	Most northern record for this species in Queensland
Lobaria plurimiseptata	Hann Tableland NP	Most northern record
Pseudocyphellarcia desfontainii	Hann Tableland NP	Most northern record, also found in New Guinea
Xerula flavo-olivacea	Upper Bridge Creek	Most north-western record

Very few collections of *Sphagnum* moss from far-north Queensland are lodged in Australian herbaria. ¹⁶ Past collections have been unusual in that they lack fascicles (tightly arranged branch clusters), as is the case with the one species collected during this survey. Molecular studies backed up by morphology have shown that some of these solitary shoots are extreme morphological variants.

Acrolejeunea securifolia and Fossombronia spp. were the main liverworts collected. Collections of the liverwort Frullania yorkiana made during this survey provide valuable additional vouchers. This species was described in 1911, and the holotype collected in Cape York in 1897 is lodged in Geneva. An isotype is lodged in Melbourne and consists of a very small fragment. There was previously only one other collection of this species, in the Oueensland Herbarium.

Many of the lichens collected were epiphytic and associated with sites that had sandy soil. Occasionally the soil had a clay component and at these sites lichens were found growing on the soil. Epiphytic lichens from the following families were collected: Parmeliaceae, Pertusariaceae and Physciaceae.

Fungi are seasonal and the rain prior to and during the survey yielded many interesting and diverse collections. Most of the fungi were found on soil, but a number of bracket fungi were found on fallen branches. Two possible new species of fungi were recorded: a *Laccaria* sp. and a truffle. Specimens of *Xerula flavo-olivacea* collected on this survey extended the range of this recently described species further west and north in Queensland; it was previously recorded from sites between Townsville and Cairns.¹⁷ Most of the fungi will require additional taxonomic work for species determination; for many, molecular work will be needed to confirm identification.

¹⁶ Australia's Virtual Herbarium, accessed 23 July 2013 http://avh.ala.org.au/occurrences/search?taxa=sphagnum#tab_mapView.

¹⁷ Peterson, R. H. 2008, 'The genus *Xerula* (Agaricales; Fungi) in Australia and New Zealand', *Nova Hedwigia*, **87**: 1–67.



Appendix A: Species Lists

Additional supplements containing the appendices for individual reserves are available to download from: www.bushblitz.org.au

Nomenclature and taxonomy used in this appendix are consistent with that from the Australian Faunal Directory (AFD), the Australian Plant Name Index (APNI) and the Australian Plant Census (APC).

Current at March 2013



Fauna

Vertebrates

	М	ammals					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Burramyidae	Cercartetus caudatus	Long-tailed Pygmy Possum		•			
Dasyuridae	Dasyurus hallucatus #	Northern Quoll				X *	
	Phascogale tapoatafa	Brush-tailed Phascogale				X *	
	Sminthopsis sp.	Dunnart					X *
Hypsoprymnodontidae	Hypsiprymnodon moschatus	Musky Rat-kangaroo				•	
Macropodidae	Dendrolagus lumholtzi ~	Lumholtz's Tree-kangaroo		X *			
	Macropus agilis	Agile Wallaby				X *	X *
	Macropus giganteus	Eastern Grey Kangaroo				X *	
	Macropus robustus	Common Wallaroo				Х	X *
	Petrogale assimilis	Allied Rock-wallaby				•	
	Petrogale godmani	Godman's Rock-wallaby				•	X *
	Petrogale mareeba ~	Mareeba Rock-wallaby				Х	
	Petrogale sp.	Rock-wallaby				X *	
	Thylogale stigmatica	Red-legged Pademelon				•	
Megadermatidae	Macroderma gigas ~	Ghost Bat				•	
Miniopteridae	Miniopterus australis	Little Bentwing-bat				X *	
Molossidae	Mormopterus eleryi	Hairy-nosed Freetail-bat				•	
Muridae	Hydromys chrysogaster	Water-rat				•	
	Melomys burtoni	Grassland Melomys			X *	Х	
	Melomys cervinipes	Fawn-footed Melomys				X *	
	Pogonomys sp.	Tree Mouse				•	

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		Mammals					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Muridae	Rattus leucopus	Cape York Rat					
	Rattus sordidus	Canefield Rat				•	
	Uromys hadrourus	Masked White-tailed Rat, Thornton Peak Uromys					
	Zyzomys argurus	Common Rock-rat				X *	X *
Ornithorhynchidae	Ornithorhynchus anatinus	Platypus		X *		•	
Peramelidae	Isoodon macrourus	Northern Brown Bandicoot			Х	X *	
	Perameles nasuta	Long-nosed Bandicoot		X *		•	
Petauridae	Dactylopsila trivirgata	Striped Possum				X *	
	Petaurus cf. norfolcensis	Squirrel Glider				X *	X *
Phalangeridae	Trichosurus vulpecula	Common Brushtail Possum		X *		Х	
Pseudocheiridae	Hemibelideus lemuroides ~	Lemuroid Ringtail Possum		X *			
	Pseudocheirus peregrinus	Common Ringtail Possum				X *	
	Pseudochirops archeri ~	Green Ringtail Possum		X *		•	
	Pseudochirulus herbertensis ~	Herbert River Ringtail Possum		X *			
Pteropodidae	Nyctimene robinsoni	Eastern Tube-nosed Bat, Queensland Tube-nosed Bat				-	
	Pteropus conspicillatus #	Spectacled Flying-fox				Х	X *
	Pteropus scapulatus	Little Red Flying-fox				•	X *
Rhinolophidae	Rhinolophus megaphyllus	Eastern Horseshoe-bat				Х	
Vespertilionidae	Nyctophilus bifax	Eastern Long-eared Bat					X *
	Vespadelus sp.	Cave Bat					Х*







		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Acanthizidae	Acanthiza katherina	Mountain Thornbill		X *		•	
	Acanthiza sp.	Unidentified Thornbill				X *	
	Gerygone levigaster	Mangrove Gerygone			•		
	Gerygone magnirostris	Large-billed Gerygone			Х	•	X *
	Gerygone mouki	Brown Gerygone		X *	•	•	X *
	Gerygone olivacea	White-throated Gerygone			•	•	
	Gerygone palpebrosa	Fairy Gerygone			•	Х	X *
	Oreoscopus gutturalis	Fernwren		X *		•	
	Sericornis citreogularis	Yellow-throated Scrubwren		X *			
	Sericornis frontalis	White-browed Scrubwren		X *		•	
	Sericornis keri	Atherton Scrubwren		X *		Х	
	Sericornis magnirostra	Large-billed Scrubwren			•	Х	
	Smicrornis brevirostris	Weebill				•	
Accipitridae	Accipiter cirrocephalus	Collared Sparrowhawk				Х	X *
	Accipiter fasciatus	Brown Goshawk		X *	•	Х	X *
	Accipiter novaehollandiae ~	Grey Goshawk		X *	•	•	X *
	Aquila audax	Wedge-tailed Eagle		X *		Х	X *
	Aviceda subcristata	Pacific Baza		X *	•	•	
	Circus approximans	Swamp Harrier			•	•	
	Circus assimilis	Spotted Harrier		X *	•	•	
	Elanus axillaris	Black-shouldered Kite		X *	•	•	
	Elanus scriptus	Letter-winged Kite				•	
	Erythrotriorchis radiatus ~ #	Red Goshawk				•	X *
	Haliaeetus leucogaster	White-bellied Sea-eagle		X *	•	•	X *
	Haliastur indus	Brahminy Kite			•	•	
	Haliastur sphenurus	Whistling Kite		X *	•	•	X *
	Hamirostra melanosternon	Black-breasted Buzzard				•	
	Hieraaetus morphnoides	Little Eagle			•	•	
	Lophoictinia isura ~	Square-tailed Kite				•	
	Milvus migrans	Black Kite			Х	•	
	Pandion cristatus	Osprey			•	•	

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		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Unner Bridge Creek
Acrocephalidae	Acrocephalus australis	Australian Reed Warbler			_		
Aegothelidae	Aegotheles cristatus	Australian Owlet-nightjar				Х	χ,
Alaudidae	Mirafra javanica	Horsfield's Bushlark					
Alcedinidae	Ceyx azureus	Azure Kingfisher			-		X ³
	Ceyx pusilla	Little Kingfisher		X *	•		Х*
	Dacelo leachii	Blue-winged Kookaburra				Х	X *
	Dacelo novaeguineae	Laughing Kookaburra		X *	Х	Х	Х*
	Syma torotoro	Yellow-billed Kingfisher			•		
	Tanysiptera sylvia	Buff-breasted Paradise-kingfisher			•	•	
	Todiramphus macleayii	Forest Kingfisher			•	•	X *
	Todiramphus pyrrhopygius	Red-backed Kingfisher					
	Todiramphus sanctus	Sacred Kingfisher		X *	•	•	Х*
Anatidae	Anas gracilis	Grey Teal			•	•	
	Anas superciliosa	Pacific Black Duck			•	•	
	Aythya australis	Hardhead			•	•	
	Chenonetta jubata	Australian Wood Duck, Maned Duck			•	•	
	Cygnus atratus	Black Swan			•	•	
	Dendrocygna arcuata	Wandering Whistling-duck			•	•	
	Dendrocygna eytoni	Eyton's Tree-Duck, Grass Whistler, Plumed Whistling-Duck			•	•	
	Malacorhynchus membranaceus	Pink-eared Duck			•		
	Nettapus coromandelianus ~	Cotton Pygmy-goose			•	•	
	Nettapus pulchellus	Green Pygmy-goose			•	•	
	Tadorna radjah ~	Rajah Shelduck				•	
Anhingidae	Anhinga novaehollandiae	Australasian Darter			Χ	•	
Anseranatidae	Anseranas semipalmata	Magpie Goose			•	•	
Apodidae	Aerodramus terraereginae ~	Australian Swiftlet		X *	•	•	
	Apus pacificus	Fork-tailed Swift		X *		•	
	Hirundapus caudacutus	White-throated Needletail		X *	•	•	
Ardeidae	Ardea alba	Great Egret			•	•	
	Ardea ibis	Cattle Egret			•		
	Ardea intermedia	Intermediate Egret			•	•	
	Ardea modesta	Eastern Great Egret			X *		
	Ardea pacifica	White-necked Heron			•	•	
	Ardea sumatrana	Great-billed Heron			•		
	Bubulcus ibis	Cattle Egret				•	



		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Ardeidae	Egretta garzetta	Little Egret			•	•	
	Egretta novaehollandiae	White-faced Heron			•	•	
	Egretta picata	Pied Heron			•		
	Ixobrychus flavicollis	Black Bittern			•	•	
	Ixobrychus minutus	Australian Little Bittern			•	•	
	Nycticorax caledonicus	Nankeen Night Heron			•	•	
Artamidae	Artamus cinereus	Black-faced Woodswallow				•	
	Artamus leucorynchus	White-breasted Woodswallow			•	•	
	Artamus minor	Little Woodswallow				•	
	Artamus personatus	Masked Woodswallow			•		
	Cracticus mentalis	Black-backed Butcherbird					X *
	Cracticus nigrogularis	Pied Butcherbird				Х	X *
	Cracticus quoyi	Black Butcherbird			Х	•	
	Cracticus quoyi jardini	Black Butcherbird (coastal Cape York Peninsula subspecies)					X *
	Cracticus tibicen	Australian Magpie			•	•	
	Cracticus tibicen dorsalis	Australian Magpie (black-backed form)				X *	
	Cracticus torquatus	Grey Butcherbird			•	Х	
	Strepera graculina	Pied Currawong		X *	•	Х	
	Strepera graculina magnirostris	Pied Currawong (Cape York Peninsula subspecies)					X *
Burhinidae	Burhinus grallarius	Bush Stone-curlew			•	•	



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		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Cacatuidae	Cacatua galerita	Sulphur-crested Cockatoo		X *	•	•	X *
	Calyptorhynchus banksii	Red-tailed Black Cockatoo		X *		•	
	Eolophus roseicapillus	Galah				•	
	Nymphicus hollandicus	Cockatiel				•	
Campephagidae	Coracina lineata	Barred Cuckoo-shrike		X *	•	•	
	Coracina novaehollandiae	Black-faced Cuckoo-shrike		X *	•	Х	X *
	Coracina papuensis	White-bellied Cuckoo-shrike		X *	•	Х	X *
	Coracina tenuirostris	Cicadabird		X *	-	•	X *
	Lalage leucomela	Varied Triller		X *	-	Х	X *
	Lalage tricolor	White-winged Triller			•	•	
Caprimulgidae	Caprimulgus macrurus	Large-tailed Nightjar				•	X *
	Eurostopodus argus	Spotted Nightjar		X *			
	Eurostopodus mystacalis	White-throated Nightjar		X *		•	
Casuariidae	Casuarius casuarius	Southern Cassowary			•	•	
	Casuarius casuarius johnsonii ~ #	Southern Cassowary (southern population)		X *			
Centropodidae	Centropus phasianinus	Pheasant Coucal			Х	•	
Charadriidae	Elseyornis melanops	Black-fronted Dotterel			•	•	
	Erythrogonys cinctus	Red-kneed Dotterel			•		
	Pluvialis fulva	Pacific Golden Plover			•	•	
	Vanellus miles	Masked Lapwing			•	•	
	Vanellus tricolor	Banded Lapwing				•	
Ciconiidae	Ephippiorhynchus asiaticus ~	Black-necked Stork			•	•	
Cisticolidae	Cisticola exilis	Golden-headed Cisticola		X *	Х	•	
Climacteridae	Climacteris picumnus melanotus	Brown Treecreeper (Cape York race)				Х	
	Cormobates leucophaea	White-throated Treecreeper		X *		•	
	Cormobates leucophaea minor	White-throated Treecreeper (northern)				Х	
Columbidae	Chalcophaps indica	Emerald Dove		X *	•	•	
	Columba leucomela	White-headed Pigeon		X *	•	•	
	Ducula bicolor	Pied Imperial-pigeon			-	•	
	Geopelia cuneata	Diamond Dove				•	
	Geopelia humeralis	Bar-shouldered Dove			•	Х	X *
	Geopelia striata	Peaceful Dove		X *	•	Х	X *
	Geophaps scripta	Squatter Pigeon				•	
	Lopholaimus antarcticus	Topknot Pigeon		X *	•	•	
	Macropygia amboinensis	Brown Cuckoo-dove		X *	•	•	



		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Columbidae	Ocyphaps lophotes	Crested Pigeon				•	
	Phaps chalcoptera	Common Bronzewing				•	X *
	Ptilinopus magnificus	Wompoo Fruit-dove		X *	Х	•	
	Ptilinopus regina	Rose-crowned Fruit-dove		X *	•	•	
	Ptilinopus superbus	Superb Fruit-dove		X *	•	•	
Coraciidae	Eurystomus orientalis	Dollarbird		X *	•	•	X *
Corcoracidae	Struthidea cinerea	Apostlebird				•	
Corvidae	Corvus orru	Torresian Crow		X *	•	•	X *
Cuculidae	Cacomantis castaneiventris	Chestnut-breasted Cuckoo				•	
	Cacomantis flabelliformis	Fan-tailed Cuckoo		X *		•	
	Cacomantis pallidus	Pallid Cuckoo			•	•	
	Cacomantis variolosus	Brush Cuckoo			•	Х	
	Centropus phasianinus	Pheasant Coucal					X *
	Chalcites basalis	Horsfield's Bronze-Cuckoo			•	•	
	Chalcites lucidus	Shining Bronze-cuckoo		X *		Х	
	Chalcites minutillus	Little Bronze-Cuckoo			•	•	
	Chalcites minutillus russatus	Gould's Bronze-cuckoo			•	•	
	Cuculus saturatus	Himalayan Cuckoo			•	•	
	Eudynamys scolopaceus	Asian Koel			•	-	
	Scythrops novaehollandiae	Channel-billed Cuckoo		X *	•	•	
Dicruridae	Dicrurus bracteatus	Spangled Drongo		X *	Х	•	
	Dicrurus bracteatus atrabectus	Sangled Drongo (Cape York Peninsula subspecies)					X *
Estrildidae	Erythrura trichroa ~	Blue-faced Parrot-Finch				•	
	Lonchura castaneothorax	Chestnut-breasted Mannikin, Chestnut-breasted Munia		X *	•	•	
	Neochmia phaeton	Crimson Finch			•		
	Neochmia temporalis	Red-browed Finch		X *	•	Χ	
	Poephila cincta	Black-throated Finch				•	
	Poephila cincta atropygialis	Black-throated Finch (Black-rumped subspecies)					X *
	Taeniopygia bichenovii	Double-barred Finch				•	

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		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Falconidae	Falco berigora	Brown Falcon			•	•	
	Falco cenchroides	Nankeen Kestrel			•	•	
	Falco longipennis	Australian Hobby				•	X *
	Falco peregrinus	Peregrine Falcon				Х	
	Falco subniger	Black Falcon				•	
Glareolidae	Stiltia isabella	Australian Pratincole			•	•	
Gruidae	Grus antigone	Sarus Crane				•	
	Grus rubicunda	Brolga			•	•	
Haematopodidae	Haematopus fuliginosus ~	Sooty Oystercatcher				•	
Hirundinidae	Cheramoeca leucosternus	White-backed Swallow				•	
	Hirundo neoxena	Welcome Swallow			•	•	
	Hirundo rustica	Barn Swallow			•		
	Petrochelidon ariel	Fairy Martin			•	•	
	Petrochelidon nigricans	Tree Martin			•	•	
Jacanidae	Irediparra gallinacea	Comb-crested Jacana			•	•	
Laridae	Chlidonias hybrida	Whiskered Tern			•	•	
	Chlidonias leucopterus	White-winged Black Tern			•		
	Sterna caspia	Caspian Tern				•	
Maluridae	Malurus amabilis	Lovely Fairy-wren			•	•	X *
	Malurus melanocephalus	Red-backed Fairy-wren		X *	Х	Х	
Megaluridae	Megalurus gramineus	Little Grassbird			•	•	
	Megalurus timoriensis	Tawny Grassbird			•	•	
Megapodiidae	Alectura lathami	Australian Brush-turkey, Scrub Turkey, Wild Turkey, Yellow-wattled Brush Turkey		X *	•	•	X *
	Megapodius reinwardt	Orange-footed Scrubfowl		X *	•	•	X *
Meliphagidae	Acanthorhynchus tenuirostris	Eastern Spinebill		X *		•	
	Bolemoreus frenatus	Bridled Honeyeater		X *		•	
	Cissomela pectoralis	Banded Honeyeater				Х	X *
	Conopophila rufogularis	Rufous-throated Honeyeater				•	
	Entomyzon cyanotis	Blue-faced Honeyeater				Х	
	Lichenostomus chrysops	Yellow-faced Honeyeater				Х	
	Lichenostomus flavescens	Yellow-tinted Honeyeater					X *
	Lichenostomus flavus	Yellow Honeyeater			•	Х	X *
	Lichenostomus unicolor	White-gaped Honeyeater				•	X *
	Lichmera indistincta	Brown Honeyeater			•	Х	
	Manorina flavigula	Yellow-throated Miner				•	
	Manorina melanocephala	Noisy Miner				Х	



		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Meliphagidae	Meliphaga gracilis	Graceful Honeyeater			•		X *
	Meliphaga lewinii	Lewin's Honeyeater		X *		Х	
	Meliphaga notata	Yellow-spotted Honeyeater			•	•	X *
	Melithreptus albogularis	White-throated Honeyeater			•	Х	X *
	Melithreptus gularis gularis ~	Black-chinned Honeyeater (eastern)				Х	
	Melithreptus lunatus	White-naped Honeyeater				•	
	Myzomela obscura	Dusky Honeyeater			•	•	X *
	Myzomela sanguinolenta	Scarlet Honeyeater				Х	X *
	Philemon argenticeps	Silver-crowned Friarbird				-	
	Philemon buceroides	Helmeted Friarbird			•	-	X *
	Philemon citreogularis	Little Friarbird		X *	•	-	
	Philemon corniculatus	Noisy Friarbird			•	Х	X *
	Phylidonyris niger	White-cheeked Honeyeater				-	
	Ramsayornis modestus	Brown-backed Honeyeater			•	-	
	Trichodere cockerelli	White-streaked Honeyeater					X *
	Xanthotis macleayanus	Macleay's Honeyeater		X *	•	Х	X *
Meropidae	Merops ornatus	Rainbow Bee-eater		X *	•	Х	X *
Monarchidae	Arses kaupi	Pied Monarch		X *	•	Х	
	Carterornis leucotis	White-eared Monarch		X *	•	-	X *
	Grallina cyanoleuca	Magpie-lark			Х	-	
	Machaerirhynchus flaviventer	Yellow-breasted Boatbill		X *	•	-	
	Monarcha frater	Black-winged Monarch					X *
	Monarcha melanopsis	Black-faced Monarch		X *	•	-	
	Myiagra alecto	Shining Flycatcher			•	-	
	Myiagra cyanoleuca	Satin Flycatcher			•		
	Myiagra rubecula	Leaden Flycatcher			•	-	X *
	Myiagra ruficollis	Broad-billed Flycatcher					X *
	Symposiachrus trivirgatus	Spectacled Monarch		X *	•	Х	Х*
Motacillidae	Anthus novaeseelandiae	Australasian Pipit, Australian Pipit			•	•	X *
	Motacilla tschutschensis	Eastern Yellow Wagtail			•		
Nectariniidae	Dicaeum hirundinaceum	Mistletoebird		X *	•	Χ	X *
	Nectarinia jugularis	Olive-backed Sunbird			•	•	X *
Neosittidae	Daphoenositta chrysoptera	Varied Sittella				Χ	

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		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Oriolidae	Oriolus flavocinctus	Yellow Oriole			Х	•	X *
	Oriolus sagittatus	Olive-backed Oriole			•	•	
	Sphecotheres vieilloti	Australasian Figbird		X *	•	•	
Orthonychidae	Orthonyx spaldingii	Chowchilla		X *	•	•	
Otididae	Ardeotis australis	Australian Bustard				Х	
Pachycephalidae	Colluricincla boweri	Bower's Shrike-thrush		X *		•	
	Colluricincla harmonica	Grey Shrike-thrush				Х	X *
	Colluricincla megarhyncha	Little Shrike-thrush		X *	•	Х	X *
	Pachycephala melanura	Mangrove Golden Whistler				•	
	Pachycephala pectoralis	Golden Whistler		X *	•	Х	
	Pachycephala rufiventris	Rufous Whistler			•	Х	
	Pachycephala simplex	Grey Whistler			•	•	
	Pachycephala simplex peninsulae	Grey Whistler (north-eastern Queensland subspecies)					X *
Paradisaeidae	Ptiloris victoriae	Victoria's Riflebird		X *	•	•	



Superb Fruit Dove (Ptilinopus superbus) © Copyright, Wet Tropics Management Authority, Queensland



		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Pardalotidae	Pardalotus punctatus	Spotted Pardalote				Х	
	Pardalotus rubricatus	Red-browed Pardalote				•	X *
	Pardalotus striatus	Striated Pardalote				Х	
Pelecanidae	Pelecanus conspicillatus	Australian Pelican			•	•	
Petroicidae	Eopsaltria australis	Eastern Yellow Robin				X *	
	Heteromyias cinereifrons	Grey-headed Robin		X *		Х	
	Melanodryas cucullata	Hooded Robin				•	
	Microeca fascinans	Jacky Winter				•	
	Microeca flavigaster	Lemon-bellied Flycatcher		X *	•	Х	
	Poecilodryas superciliosa	White-browed Robin			•	•	X *
	Tregellasia capito	Pale-yellow Robin		X *	•	Х	
Phalacrocoracidae	Microcarbo melanoleucos	Little Pied Cormorant			•	•	
	Phalacrocorax carbo	Great Cormorant			•	•	
	Phalacrocorax sulcirostris	Little Black Cormorant			•	•	
	Phalacrocorax varius	Pied Cormorant			•	•	
Phasianidae	Coturnix ypsilophora	Brown Quail		X *			
	Coturnix ypsilophora australis	Swamp Quail				•	
	Excalfactoria chinensis	King Quail			•	•	
Pittidae	Pitta versicolor	Noisy Pitta			•	•	
Podargidae	Podargus papuensis	Papuan Frogmouth				•	
	Podargus strigoides	Tawny Frogmouth				Х	X *
Podicipedidae	Podiceps cristatus	Great Crested Grebe			•		
	Tachybaptus novaehollandiae	Australasian Grebe			•	•	
Pomatostomidae	Pomatostomus temporalis	Grey-crowned Babbler				•	
Psittacidae	Alisterus scapularis	Australian King-parrot		X *	•	•	
	Aprosmictus erythropterus	Red-winged Parrot			•	•	X *
	Cyclopsitta diophthalma	Double-eyed Fig-parrot			•	•	
	Cyclopsitta diophthalma macleayana ~	Macleay's Fig-parrot		X *	•		
	Cyclopsitta diophthalma marshalli ~	Marshall's Fig-parrot				•	
	Glossopsitta pusilla	Little Lorikeet				•	

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		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Psittacidae	Platycercus adscitus adscitus	Pale-headed Rosella (northern form)				Х	X *
	Platycercus elegans	Crimson Rosella		X *			
	Psitteuteles versicolor	Varied Lorikeet				•	
	Trichoglossus chlorolepidotus	Scaly-breasted Lorikeet		X *	•	Х	X *
	Trichoglossus haematodus	Rainbow Lorikeet			•	Х	X *
	Trichoglossus haematodus moluccanus	Rainbow Lorikeet		X *			
Psophodidae	Psophodes olivaceus	Eastern Whipbird		X *	•		
Ptilonorhynchidae	Ailuroedus crassirostris	Green Catbird				•	
	Ailuroedus crassirostris maculosus	Green Catbird			•	•	
	Amblyornis newtonianus	Golden Bowerbird		X *		•	
	Ptilonorhynchus nuchalis	Great Bowerbird				•	X *
	Ptilonorhynchus violaceus	Satin Bowerbird		X *		•	
	Scenopoeetes dentirostris	Tooth-billed Bowerbird		X *		•	
Rallidae	Amaurornis cinerea	White-browed Crake			•	•	
	Amaurornis moluccana	Pale-vented Bush-hen			•	•	
	Eulabeornis castaneoventris	Chestnut Rail				•	
	Fulica atra	Eurasian Coot			•	•	
	Gallinula tenebrosa	Dusky Moorhen			•	•	
	Gallirallus philippensis	Buff-banded Rail		X *	•	•	
	Lewinia pectoralis ~	Lewin's Rail				•	
	Porphyrio porphyrio	Purple Swamphen			•	-	
	Porzana pusilla	Baillon's Crake			•		
	Porzana tabuensis	Spotless Crake			•	•	
	Rallina tricolor	Red-necked Crake			•	•	
	Tribonyx ventralis	Black-tailed Native-hen				•	
Recurvirostridae	Himantopus himantopus	Black-winged Stilt			•		
Rhipiduridae	Rhipidura albiscapa	Grey Fantail		X *	•	Х	
	Rhipidura leucophrys	Willie Wagtail		X *	Х	•	
	Rhipidura rufifrons	Rufous Fantail		X *	•	Х	X *
	Rhipidura rufiventris	Northern Fantail			•	•	X *
Rostratulidae	Rostratula australis ~ #	Australian Painted Snipe				•	



		Birds					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Scolopacidae	Actitis hypoleucos	Common Sandpiper			•		
	Calidris acuminata	Sharp-tailed Sandpiper			•	•	
	Calidris ferruginea	Curlew Sandpiper			•		
	Calidris ruficollis	Red-necked Stint			•	•	
	Gallinago hardwickii	Latham's Snipe			•	•	
	Limosa limosa	Black-tailed Godwit			•		
	Numenius minutus	Little Curlew			•		
	Tringa glareola	Wood Sandpiper			•		
	Tringa nebularia	Common Greenshank			•	•	
	Tringa stagnatilis	Marsh Sandpiper			•		
Strigidae	Ninox connivens	Barking Owl			•	•	X *
	Ninox novaeseelandiae	Southern Boobook		X *		•	X *
	Ninox rufa	Rufous Owl				•	
	Ninox rufa queenslandica ~	Rufous Owl (southern subspecies)		X *		•	
Sturnidae	Aplornis metallica	Metallic Starling			•	•	
Threskiornithidae	Platalea flavipes	Yellow-billed Spoonbill			•	•	
	Platalea regia	Royal Spoonbill			•	•	
	Plegadis falcinellus	Glossy Ibis			•	•	
	Threskiornis molucca	Australian White Ibis			•	•	
	Threskiornis spinicollis	Straw-necked Ibis			•	•	
Timaliidae	Zosterops lateralis	Silvereye		X *	•	X *	X *
Turdidae	Zoothera heinei	Russet-tailed Thrush				•	
	Zoothera lunulata	Bassian Thrush		X *		•	
Turnicidae	Turnix maculosus	Red-backed Button-quail			•	•	
	Turnix olivii ~ #	Buff-breasted Button-quail			•	X *	
Tytonidae	Tyto javanica	Eastern Barn Owl				•	X *
	Tyto longimembris	Eastern Grass Owl			•		
	Tyto novaehollandiae kimberli ~ #	Kimberley Masked Owl				•	
	Tyto tenebricosa multipunctata	Lesser Sooty Owl		X *	•	•	

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		Frogs and Toads					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Bufonidae	Rhinella marina ^	Cane Toad		X *		X *	
Hylidae	Cyclorana alboguttata	Striped Burrowing Frog				•	
	Cyclorana australis	Giant Frog				•	
	Cyclorana brevipes	Short-footed Frog				•	
	Cyclorana novaehollandiae	New Holland Frog				•	
	Litoria bicolor	Northern Dwarf Tree Frog			•	•	
	Litoria caerulea	Green Tree Frog				•	
	Litoria fallax	Eastern Dwarf Tree Frog			X *		
	Litoria gracilenta	Dainty Green Tree Frog				X *	
	Litoria inermis	Peters' Frog			X *	•	
	Litoria infrafrenata	Giant Tree Frog, Growling Tree Frog, White-lipped Tree Frog			X *	•	
	Litoria jungguy	Jungguy Tree Frog		X *		•	
	Litoria jungguy/wilcoxii	Jungguy Tree Frog/Wilcox's Frog				X *	
	Litoria latopalmata	Broad-palmed Frog, Gunther's Frog				Х	
	Litoria nannotis ~ #	Torrent Tree Frog				•	
	Litoria nasuta	Rocket Frog			X *	Х	
	Litoria nigrofrenata	Bridle Frog				Х	X *
	Litoria nyakalensis ~ #	Nyakala Frog				•	
	Litoria pallida	Pale Frog				•	
	Litoria rheocola ~ #	Common Mist Frog, Creek Frog				•	
	Litoria rothii	Roth's Tree Frog				•	





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		Frogs and Toads					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Hylidae	Litoria rubella	Desert Tree Frog, Red Tree Frog				Х	
	Litoria serrata ~	Green-eyed Tree Frog		X *		•	
	Litoria xanthomera	Orange-thighed Frog				•	
	Nyctimystes dayi ~ #	Australian Lacelid, Day's Frog				•	
Microhylidae	Austrochaperina fryi	Fry's Frog				•	
	Austrochaperina robusta	Robust Frog		X *			
	Cophixalus aenigma ~	Tapping Nursery Frog				•	
	Cophixalus concinnus ~	Elegant Frog				•	
	Cophixalus hosmeri ~	Hosmer's Frog				•	
	Cophixalus ornatus	Northern Ornate Nursery-frog, Ornate Frog				•	
Myobatrachidae	Crinia deserticola	Desert Froglet				•	
	Limnodynastes convexiusculus	Marbled Frog				•	
	Limnodynastes peronii	Brown-striped Frog, Striped Marsh Frog			Х	Х	
	Limnodynastes terraereginae	Northern Banjo Frog				X *	
	Mixophyes schevilli	Northern Barred Frog				•	
	Platyplectrum ornatum	Ornate Burrowing Frog				•	
	Taudactylus acutirostris #	Sharp-nosed Torrent Frog, Sharp-snouted Torrent Frog				•	
	Taudactylus rheophilus ~ #	Tinkling Frog				•	
	Uperoleia lithomoda	Stonemason Toadlet				•	X *
	Uperoleia mimula	Mimic Toadlet, Mimicking Toadlet					X *
	Uperoleia sp.	Toadlet					X *
Ranidae	Rana daemeli	Water Frog, Wood Frog					X *



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		Reptiles					
Family	Spacias	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Family	Species Chlamuda a umu kin aii	Frilled Lizard	ш	O	ш		ر ا
Agamidae	Chlamydosaurus kingii					•	
	Diporiphora australis	Tommy Roundhead					V ¥
	Diporiphora bilineata	Two-lined Dragon				•	X *
D : I	Intellagama lesueurii	Eastern Water Dragon, Water Dragon			•	v	v
Boidae	Antaresia maculosa	Spotted Python				X *	X *
	Morelia kinghorni	Australian Scrub Python		X *	•	•	
	Morelia spilota	Carpet Python, Diamond Python		X *			
Carphodactylidae	Carphodactylus laevis	Chameleon Gecko				•	
	Saltuarius cornutus	Northern Leaf-tailed Gecko		X *		•	
Chelidae	Emydura tanybaraga	Northern Yellow-faced Turtle				X *	
	Emydura victoriae	North-west Red-faced Turtle, Victoria River Red-faced Turtle				•	
Colubridae	Boiga irregularis	Brown Tree Snake, Night Tiger					X *
	Dendrelaphis punctulatus	Common Tree Snake, Green Tree Snake					X *
	Pseudoferania polylepis	Macleay's Water Snake				•	
	Stegonotus cucullatus	Slaty-grey Snake					X *
Crocodylidae	Crocodylus porosus ~	Saltwater Crocodile			•		
Diplodactylidae	Diplodactylus conspicillatus	Fat-tailed Diplodactylus, Fat-tailed Gecko				•	
	Oedura castelnaui	Northern Velvet Gecko				•	X *
	Oedura coggeri	Northern Spotted Velvet Gecko				•	X *
	Oedura rhombifer	Zigzag Velvet Gecko				Х	X *
Elapidae	Acanthophis praelongus	Northern Death Adder					X *
	Cacophis churchilli	Northern Dwarf Crowned Snake				X *	
	Cryptophis boschmai	Carpentaria Snake				•	
	Cryptophis nigrescens	Eastern Small-eyed Snake					
	Demansia psammophis	Yellow-faced Whip Snake				X *	X *
	Demansia vestigiata	Black Whipsnake, Lesser Black Whipsnake					X *
	Hemiaspis signata	Black-bellied Swamp Snake, Marsh Snake					
	Pseudechis porphyriacus	Red-bellied Black Snake				•	
	Pseudonaja textilis	Common Brown Snake, Eastern Brown Snake				X *	
Gekkonidae	Cyrtodactylus tuberculatus	Ring-tailed Gecko					X *
	Gehyra dubia	Dubious Dtella				Х	X *
	Gehyra variegata	Tree Dtella				•	
	Heteronotia binoei	Bynoe's Gecko				Х	
	Lucasium steindachneri	Box-patterned Gecko					
	Nactus cheverti	Chevert's Gecko				X *	X *







		Reptiles					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Scincidae	Bellatorias frerei	Major Skink				•	
	Carlia jarnoldae	Lined Rainbow-skink				Х	X *
	Carlia longipes	Closed-litter Rainbow-skink					X *
	Carlia rostralis	Black-throated Rainbow-skink			•	Х	X *
	Carlia rubrigularis	Red-throated Rainbow-skink			•	•	
	Carlia schmeltzii	Robust Rainbow-skink				X *	X *
	Carlia sp.	unidentified Rainbow Skink					X *
	Carlia storri	Brown Bicarinate Rainbow-skink				Х	
	Carlia vivax	Lively Rainbow Skink, Tussock Rainbow-skink				Х	
	Cryptoblepharus adamsi	Adams' Snake-eyed Skink				X *	
	Cryptoblepharus pulcher	Elegant Snake-eyed Skink				X *	
	Cryptoblepharus virgatus	Cream-striped Shinning-skink, Striped Snake-eyed Skink				•	X *
	Ctenotus nullum	Nullum Ctenotus					X *
	Ctenotus quinkan	Quinkan Ctenotus					X *
	Ctenotus taeniolatus	Copper-tailed Skink				Х	
	Eremiascincus pardalis	Lowlands Bar-lipped Skink				•	
	Eulamprus brachysoma	Northern Barsided Skink				Х	X *
	Glaphyromorphus cracens	Slender Mulch-skink				X *	
	Glaphyromorphus fuscicaudis	Brown-tailed Bar-lipped Skink				•	

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		Reptiles					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Scincidae	Glaphyromorphus mjobergi ~	Atherton Tableland Mulch-skink				•	
	Gnypetoscincus queenslandiae	Prickly Forest Skink		X *		•	
	Lampropholis coggeri	Rainforest Sunskink		X *			
	Liburnascincus mundivensis	Outcrop Rainbow-skink				Х	
	Lygisaurus malleolus	Red-tailed Litter-skink				X *	
	Lygisaurus sp.	Litter-skink					X *
	Menetia koshlandae	Fine-browed Dwarf Skink				X *	
	Proablepharus tenuis	Northern Soil-crevice Skink, Slender Snake-eyed Skink					X *
Varanidae	Varanus storri	Storr's Monitor					X *
	Varanus tristis	Black-headed Monitor				X *	

		Fish					
Family	Species	Common name	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Terapontidae	Scortum ogilbyi	Gulf Grunter				•	
Toxotidae	Toxotes chatareus	Sevenspot Archerfish				•	





Invertebrates

		Butterflies				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Hesperiidae	Arrhenes dschilus iris	X *			X *	
	Ocybadistes walkeri sothis		X *			
	Pelopidas lyelli lyelli	X *				
	Suniana lascivia neocles				X *	
	Suniana sunias rectivitta	X *	X *			
Lycaenidae	Candalides erinus erinus	X *				
	Catochrysops panormus platissa	X *	X *		X *	
	Euchrysops cnejus cnidus	X *	X *		X *	
	Everes lacturnus australis				•	
	Famegana alsulus alsulus	X *	X *		Х	X *
	Freyeria putli putli				X *	
	Jamides phaseli	X *	X *			X *
	Nacaduba kurava parma				X *	
	Philiris nitens nitens	X *				
	Psychonotis caelius taygetus		X *		X *	
	Zizina otis labdalon				•	
	Zizina otis labradus		X *		X *	
	Zizula hylax attenuata		X *		X *	
Nymphalidae	Acraea andromacha					
	Danaus affinis affinis	X *				
	Danaus chrysippus				•	
	Danaus petilia				X *	
	Danaus plexippus				Х	
	Euploea corinna	X *			Х	
	Hypocysta adiante adiante	X *			Х	X *
	Hypocysta metirius		X *		X *	
	Hypolimnas bolina nerina	X *			Х	
	Junonia hedonia					

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		Butterflies				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Nymphalidae	Junonia hedonia zelima	X *				
	Junonia orithya albicincta	X *			Х	
	Junonia villida calybe				Х	
	Melanitis leda bankia	X *	X *		Х	
	Mycalesis perseus perseus	X *			Х	X *
	Mycalesis terminus terminus	X *			Х	
	Neptis praslini				•	
	Tirumala hamata					
	Ypthima arctous arctous	X *			Х	
Papilionidae	Cressida cressida				•	
	Cressida cressida	X *				
	Graphium agamemnon					
	Graphium eurypylus				•	
	Graphium macleayanum macleayanum		X *		•	
	Graphium sarpedon			•	•	
	Papilio aegeus aegeus				•	
	Papilio ulysses				•	
Pieridae	Belenois java					
	Catopsilia pomona	X *				
	Cepora perimale scyllara	X *				
	Delias nigrina				•	
	Eurema brigitta					
	Eurema hecabe	X *			Х	
	Eurema herla				X *	
	Eurema laeta sana	X *	X *			

		Beetles				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Carabidae	Anomotarus nq1				•	
	Castelnaudia obscuripennis					
	Illaphanus nq1					
	Lachnoderma foveolatum					
	Lacordairia nq1				•	
	Leiradira opacistriatis					
	Loxogenius opacipennis					
	Mecyclothorax lewisensis					
	Mystropomus regularis				•	
	Notonomus dimorphicus				•	



		Beetles				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Carabidae	Notonomus flos					
	Notonomus spurgeoni					
	Pamborus opacus					
	Sitaphe rotundata					
	Trechodes lustrans					
	Trichosternus frater				•	
Dytiscidae	Clypeodytes migrator				•	
	Copelatus clarki			•		
	Copelatus divisus			•		
	Eretes australis					
	Hydaticus bihamatus			•		
	Hydaticus consanguineus			•	•	
	Hydaticus vittatus			•		
	Hydaticus wattsi			•		
	Hydroglyphus basalis					
	Hydroglyphus daemeli			•	•	
	Hydroglyphus godeffroyi				•	
	Hydroglyphus grammopterus				•	
	Hydroglyphus mastersii				•	
	Hydrovatus ovalis				•	
	Hyphydrus decemmaculatus			•		
	Hyphydrus lyratus			•	•	
	Laccophilus clarki			•		
	Laccophilus seminiger			•		
	Laccophilus sharpi			•		
	Laccophilus univittatus			•		
	Megaporus fischeri			•		
	Megaporus ruficeps			•	•	
	Neobidessodes denticulatus				•	
	Neobidessodes mjobergi				•	
	Platynectes australicus				•	
	Sandracottus bakewelli				•	
	Tiporus denticulatus				•	
	Tiporus josepheni			•		
Hydrophilidae	Pilocnema maculiapex					
	Sphaeridium discolor					

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		True Bugs				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Acanthosomatidae	Elasmucha sp. 31				X *	
Alydidae	Leptocorisa acuta	X *	X *			X *
	Mutusca brevicornis	X *			X *	X *
	Noliphus sp. 15 (nr annulipes)				X *	
	Riptortus sp. 14	X *				
	Riptortus sp. 29				X *	
Anthocoridae	Lyctocoris sp. 60	X *				
	Montandoniola sp. 59		X *			
	Orius sp. 58	X *	X *			
Belostomatidae	Diplonychus rusticus					X *
Berytidae	Metacanthus sp. 47				X *	
	Metacanthus sp. 48	X *			X *	
Colobathristidae	Phaenacantha australiae	X *			X *	
Coreidae	Acroelytrum muricatum	X *				
	Amblypelta sp. 22				X *	
	Amorbus sp. 16				X *	
	Clavigralloides acantharis	X *				X *
	Cletus sp. 26				X *	
	Cletus sp. 27				X *	
	Coreinae sp. 19				X *	
	Gralliclava australiensis	X *			X *	
Cydnidae	Cydnidae sp. 30					X *
Cymidae	Cymus sp. 76 (nr novaezelandiae)					X *
Geocoridae	Geocoris provisus		X *			
Gerridae	Limnogonus luctuosus	X *			X *	X *
Hydrometridae	Hydrometra jourama	X *				



Putative new species of true bug, from left to right: Miridae nr. *Morobea* n. sp., *Pseudoloxops* n. sp., Orthotylini n. sp., *Aitkenia* n. sp., A. Namyatova © Copyright, University of New South Wales



		True Bugs				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creel
Lygaeidae	Crompus sp. 64				X *	
	Graptostethus servus				X *	
	Graptostethus sp. 61	X *				
	Nysius caledoniae	X *				
	Oncopeltus sp. 62		X *			
Miridae	Acrorrhinium sp. 87	X *				
	Aitkenia n. sp. 88				0	
	nr <i>Angerianus</i> n. sp. 81	0	0			0
	Arafuramiris queenslandensis				X *	
	nr Austromiris n. sp. 95		0			
	Democoris sp. 83					X *
	Democoris sp. 84	X *				
	Deraeocoris n. sp. 105				0	
	Dimifacoris n. sp. 92		0			
	Halticini n. gen. n. sp. 110	0				
	Helopeltis clavifer				X *	
	nr <i>Morobea</i> n. sp. 94		0			
	Nesidiocoris tenuis	X *	X *		X *	X *
	Ommatodema sp. 85	X *				
	Orthotylini n. sp. 98		0			
	Orthotylini n. sp. 99		0			
	Orthotylini n. sp. 103		0			
	Pilophorini sp. 90					X *
	Pseudoloxops n. sp. 96					0
	nr Zanchius n. sp. 89		0			0
	nr Zanchius n. sp. 91					0
	nr Zanchius n. sp. 93	0	0			
	nr Zanchius n. sp. 97	0				
	nr Zanchius n. sp. 101		0			
	nr Zanchius n. sp. 102		0			
Nabidae	Arbela telomi		X *			
	Nabis kinbergii	X *			X *	
Ninidae	Ninus insignis					X *
	Ninus sp. 74	X *				X *
	Ninus sp. 74a					X *

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Previously recorded on the reserve but not found on this survey

Key



		True Bugs				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Pachygronthidae	Pachygrontha sp. 77	X *	X *		X *	X *
	Pachygrontha sp. 79	X *				
	Stenophyella macreta					X *
Pentatomidae	Bromocoris souefi				X *	
	Cephaloplatus n. sp. 33					0
	Monteithiella humeralis				X *	
	Oncocoris sp. 41					X *
	Pentatomidae sp. 36				X *	
	Plautia affinis	X *			X *	
	Poecilometis darwini plenicolor	X *				
	Poecilometis n. sp. 32				0	
	Poecilometis sp. 34		X *			
	Poecilometis sp. 35	X *			X *	
	Spermatodes sp. 25				X *	
Plataspidae	Brachyplatys sp. 28	X *				
·	Coptosoma sp. 24	X *			X *	
Pyrrhocoridae	Dindymus sp. 21		X *			
Reduviidae	Australcmena sp. 11	X *				
	Emesinae sp. 2				X *	
	Emesinae sp. 3		X *			
	nr Gminatus sp. 4	X *			X *	
	Harpactorinae sp. 9				X *	
	Helonotus sp. 1	X *			X *	
	Helonotus sp. 5		X *			
	Oncocephalus sp. 7				X *	
	Opistoplatys sp. 20				X *	
	Peirates sp. 8				X *	
	Reduviidae sp. 10				X *	
	Reduviidae sp. 6				X *	X *
Rhyparochromidae	Antillocorini sp. 72		X *			
	Bedunia sp. 69a		X *			
	Lethaeaster sp. 67		X *			
	Myodochini sp. 65				X *	X *
	Narbo sp. 69		X *			
	Paramyocara punctatum	X *				
	Paromius australis	X *				X *
	Paromius gracilis	X *				
	Poeantius australopictus					X *
	Pseudopachybrachius guttus	X *				X *



		True Bugs				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Tessaratomidae	Agapophyta bipunctata				X *	
	Cumare pallida					X *
Tingidae	Agramma vulturnum	X *				
	Cromerus n. sp. 53				0	
	Engynoma sp. 51		X *			
	Epimixia nigripes dysmica	X *				
	Epimixia tropica n. sp. 108 (publication in prep.)	0			0	
	Epimixia vittata				X *	
	nr Eritingis n. sp. 55		0		0	
	nr <i>Malandiola</i> n. sp. 50	0				
	Stephanitis queenslandensis		X *			
	Teleonemia scrupulosa	X *				
	Tingini n. gen. n sp. 55a	0				



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		Termites				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Rhinotermitidae	Schedorhinotermes actuosus				•	
Termitidae	Amitermes laurensis				•	
	Ephelotermes cheeli				•	
	Macrognathotermes errator				•	
	Microcerotermes serratus				•	
	Nasutitermes longipennis				•	
	Tumulitermes comatus				•	
	Tumulitermes mareebensis				•	

	Dragonf	lies and Dam	selflies			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Austrocorduliidae	Austrocordulia refracta					
	Austrophya mystica				•	
Coenagrionidae	Agriocnemis argentea				X *	
	Agriocnemis rubricauda				•	
	Archibasis mimetes			•		
	Austroagrion watsoni				•	
	Ceriagrion aeruginosum			•	Х	
	Ischnura aurora	X *				X *
	Ischnura heterosticta			•		X *
	Pseudagrion ignifer	X *			Х	
	Pseudagrion jedda					
	Pseudagrion microcephalum					
Corduliidae	Hemicordulia australiae		X *			
	Hemicordulia intermedia					X *
	Hemicordulia tau					
	Pentathemis membranulata					
Gomphidae	Austrogomphus cornutus				•	
	Austrogomphus divaricatus				•	
	Austrogomphus mjobergi				•	
	Austrogomphus prasinus			•	•	
	Austrogomphus turneri				•	
	Hemigomphus comitatus				•	
Gomphomacromiidae	Archaeophya magnifica					
Hypolestidae	Lestoidea conjuncta				•	
	Lestoidea lewisiana				•	
Isostictidae	Oristicta filicicola				•	



	Dragor	ıflies and Dam	selflies			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Lestidae	Austrolestes insularis				Χ	
	Lestes concinnus	X *				X *
Lestoideidae	Diphlebia euphoeoides				Χ	
	Diphlebia hybridoides				•	
Libellulidae	Aethriamanta circumsignata					
	Brachydiplax denticauda			•		
	Diplacodes bipunctata	X *			•	
	Diplacodes haematodes	X *	X *		Х	X *
	Diplacodes trivialis	X *			X *	X *
	Hydrobasileus brevistylus			•	•	
	Lathrecista asiatica festa				•	
	Nannodiplax rubra	X *		•	Х	X *
	Nannophlebia eludens	X *			•	
	Nannophlebia risi				•	
	Neurothemis stigmatizans	X *	X *	•	Х	
	Orthetrum caledonicum	X *			Х	X *
	Orthetrum migratum				•	
	Orthetrum sabina			•	Х	
	Orthetrum villosovittatum	X *	X *	•	Х	
	Potamarcha congener				•	
	Rhodothemis lieftincki				Х	
	Rhyothemis braganza				•	
	Rhyothemis princeps			•	•	
	Rhyothemis resplendens			•		
	Tholymis tillarga					
	Tramea loewii				Х	
	Tramea propinqua			•		
Lindeniidae	Ictinogomphus australis			•	•	
Macromiidae	Macromia tillyardi				•	
Megapodagrionidae	Austroargiolestes aureus				•	
	Griseargiolestes metallicus				•	
Petaluridae	Petalura ingentissima				•	
Platycnemididae	Nososticta coelestina					
	Nososticta solitaria					
Pseudocorduliidae	Pseudocordulia elliptica				•	
Synlestidae	Synlestes tropicus					

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	Dragor	nflies and Dam	selflies			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Synthemistidae	Choristhemis flavoterminata				•	
	Eusynthemis netta				•	
	Eusynthemis nigra				•	
	Tonyosynthemis claviculata				•	
Telephlebiidae	Dromaeschna forcipata				•	
	Dromaeschna weiskei				•	
	Spinaeschna watsoni				•	

		Spiders				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Barychelidae	Mandjelia n. sp.				0	
	Mandjelia n. sp. 2	0				
	Mandjelia n. sp. 4					0
Ctenizidae	Conothele n. sp.				0	
	Conothele n. sp. 3	0				
Dipluridae	Cethegus rufipes n. sp.					0
	Namirea sp. (johnlyonsi?)				X *	
Idiopidae	Homogona sp. (pulleinei?)		X *			
Nemesiidae	Aname (n. sp. ?)				0	0
	Namea (n. sp. ?)		0			
Theraphosidae	Phlogius crassipes gp. n. sp. ~	0			0	0

		Bivalves				
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Hyriidae	Velesunio wilsonii				•	

	Sn	ails and Slug	S			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Camaenidae	Boriogenia hedleyi	X *			Х	
	Camaenidae CY 9				•	
	Camaenidae WT 12				•	
	Camaenidae WT 3				•	
	Camaenidae WT 6				•	



	Si	nails and Slug	ıs			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Camaenidae	Camaenidae Xanthomelon EU 3				•	
	Camaenidae Xanthomelon EU 21	X *			•	
	Eurytrachia mucosa					
	Gnarosophia bellendenkerensis		X *			
	Hadra bipartita	X *				
	Jacksonena delicata				•	
	Obsteugenia inflecta		X *			
	Spurlingia monticola	X *				
	Spurlingia tinarooensis				X *	
	Tolgachloritis jacksoni	X *			Х	
	Zyghelix forsteriana	X *			•	X *
Charopidae	Charopidae WT 42				•	
	Charopidae WT 45				•	
	Charopidae WT 48				•	
	Charopidae WT 51					
	Charopidae WT 52				•	
	Charopidae WT 53				•	
	Charopidae WT 55					
	Charopidae WT 70		X *			
	Charopidae WT 75				•	
	Oreokera cumulus					
	Setomedea monteithi				•	
Euconulidae	Queridomus grenvillei				Х	
	Turrisitala normalis	X *	X *		•	
Helicarionidae	Einasleighana antiqua	X *			X *	
	Fastosarion brazieri		X *			
	Helicarionidae WT 31		X *			
	Helicarionidae WT X 10					
Helicarionidae	Helicarionidae WT X 11					
	Helicarionidae WT X 13					
	Parmacochlea fischeri		X *		Х	
	Pravonitor laura				X *	
	Tropicystis fulva				•	
Helicinidae	Pleuropoma gouldiana				•	
	Pleuropoma macleayi				•	

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		Snails and Slug	S			
Family	Species	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creel
Microcystidae	Liardetia scandens				X *	
	Wilhelminaia mathildae	X *	X *		X *	
Pupillidae	Gastrocopta pediculus		X *			
	Pumilicopta bifurcata				X *	
	Pupisoma microturbinata				X *	
Pupinidae	Pupinidae WT 3				•	
	Signepupina ventrosa	X *				
Rathouisiidae	Atopos australis				•	
Rhytididae	Limesta sheridani				•	
	Murphitella franklandiensis				X *	
	Rhytididae WT 1				•	
	Torresiropa spaldingi				•	
	Umbilidelos manierorum	X *				
Subulinidae	Allopeas clavulinus ^		X *			
	Eremopeas tuckeri	X *			X *	
Thiaridae	Stenomelania denisoniensis			•	X *	
	Thiara balonnensis				X *	







Flora



	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Acanthaceae	Nelsonia campestris						X *
	Pseuderanthemum variabile						X *
	Rostellularia adscendens			X *	X *	X *	
Actinidiaceae	Saurauia andreana	X *					
Adoxaceae	Sambucus australasica	X *					
Amaranthaceae	Alternanthera denticulata			X *			
	Alternanthera denticulata var. micrantha			•			
	Alternanthera nana			•			
	Amaranthus interruptus			•			
	Deeringia arborescens	X *					
	Ptilotus macrocephalus			•			
Anacardiaceae	Blepharocarya involucrigera			•	X *		X *
	Euroschinus falcatus var. angustifolius			X *			
Annonaceae	Annona glabra ^		Х				
	Desmos goezeanus	X *					
	Haplostichanthus submontanus subsp. sessiliflorus ~	X *					
	Melodorum leichhardtii	X *		X *			
	Polyalthia nitidissima			X *			X *
Apiaceae	Centella asiatica	X *	X *	X *			

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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Apocynaceae	Alstonia actinophylla						X *
	Alstonia scholaris	X *					
	Alyxia grandis	X *					
	Alyxia spicata	X *					
	Gomphocarpus physocarpus ^			X *			
	Gymnanthera oblonga		X *				
	Hoya australis subsp. australis			X *			X *
	Hoya australis subsp. tenuipes		X *				
	Hoya pottsii			X *			
	Ichnocarpus frutescens			X *			
	Marsdenia connivens						X *
	Marsdenia rostrata	X *					
	Melodinus australis	X *	X *	X *			
	Melodinus baccellianus	X *					
	Neisosperma poweri	X *					
	Parsonsia langiana	X *					
	Parsonsia latifolia	X *		X *			
	Parsonsia straminea	X *					
	Parsonsia velutina			X *			X *
	Sarcostemma viminale subsp. brunonianum						X *
	Secamone elliptica			X *			
	Tabernaemontana orientalis						X *
Aponogetonaceae	Aponogeton queenslandicus			•			
Aquifoliaceae	Ilex arnhemensis subsp. ferdinandi						X *
Araceae	Alocasia brisbanensis	X *					
	Epipremnum pinnatum			X *			
	Pothos longipes	X *	X *				
	Rhaphidophora australasica	X *					





	Flower	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Araliaceae	Astrotricha pterocarpa						X *
	Cephalaralia cephalobotrys	X *					
	Hydrocotyle acutiloba	X *					
	Hydrocotyle grammatocarpa			X *			
	Hydrocotyle miranda	X *					
	Hydrocotyle oraria		X *				
	Hydrocotyle pedicellosa	X *					
	Mackinlaya confusa	X *					
	Mackinlaya macrosciadea			X *			
	Polyscias australiana	X *	X *	X *			X *
	Polyscias elegans	X *					
	Polyscias murrayi	X *					
	Schefflera actinophylla		X *				
	Trachymene bivestita var. bivestita			X *			
	Trachymene montana			X *			
Arecaceae	Archontophoenix alexandrae			X *			
	Archontophoenix purpurea			•			
	Calamus australis	X *	X *				
	Calamus caryotoides	X *					
	Calamus moti		X *	•			
	Calamus radicalis			•			
	Laccospadix australasicus			•			
	Linospadix apetiolatus			•			
	Linospadix microcaryus ~			•			
	Linospadix minor			•			
	Linospadix palmerianus ~			•			
	Livistona muelleri						X *
	Oraniopsis appendiculata			•			
Aristolochiaceae	Aristolochia pubera var. pubera						X *
	Pararistolochia australopithecurus	X *					
	Pararistolochia deltantha	X *					
Asparagaceae	Cordyline cannifolia	X *	X *	X *			
	Lomandra banksii					X *	X *
	Lomandra filiformis subsp. filiformis			X *			
	Lomandra hystrix		X *				
	Lomandra longifolia			X *			
	Thysanotus tuberosus subsp. tuberosus					X *	X *

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	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
	1	Cioudianu	Luberiarigee	1	INF	INIX	CIECK
Asteraceae	Acmella grandiflora var. brachyglossa	V *	V	X *			
	Ageratum conyzoides subsp. conyzoides ^	X *	X	X *			
	Bidens pilosa ^			X *			
	Blumea lacera			X *			
	Blumea saxatilis			X *			X *
	Camptacra gracilis			X *			
	Centipeda minima		•				
	Coronidium rupicola			X *			
	Crassocephalum crepidioides ^			X *			
	Cyanthillium cinereum		X *	X *	X *	X *	X *
	Emilia sonchifolia ^	X *		Х			
	Emilia sonchifolia var. sonchifolia ^						X *
	Erechtites valerianifolius f. valerianifolius ^		Х				
	Gamochaeta pensylvanica ^		Х				
	Lagenophora gracilis			X *			
	Olearia xerophila			•			
	Peripleura diffusa						X *
	Phacellothrix cladochaeta			X *			
	Pleurocarpaea denticulata						X *
	Praxelis clematidea ^		Х	Х			X *
	Pseudognaphalium luteoalbum			X *			
	Pterocaulon sphacelatum			X *			
	Senecio bipinnatisectus	X *					
	Sigesbeckia orientalis	X *		X *			
	Sonchus oleraceus ^			X *			
	Streptoglossa odora			•			
	Synedrella nodiflora ^			Х			
	Wedelia asperrima			X *			
	Wedelia longipes			X *			
	Wedelia spilanthoides			X *			
	Xanthium occidentale ^			Х			
Atherospermataceae	Daphnandra repandula	X *		•			
,	Doryphora aromatica	X *		•			
Austrobaileyaceae	Austrobaileya scandens			-			
Balanopaceae	Balanops australiana			Х			
Bignoniaceae	Neosepicaea jucunda	X *					
- J	Pandorea pandorana	X *		X *			
	Spathodea campanulata subsp. nilotica ^			X			



	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creel
Boraginaceae	Heliotropium peninsulare			X *			
-	Trichodesma zeylanicum var. zeylanicum			X *			
Boryaceae	Borya septentrionalis			X *			
Burseraceae	Canarium australasicum	X *					
	Canarium australianum			•			
	Canarium muelleri	X *					
Byblidaceae	Byblis liniflora			X *			
Campanulaceae	Lobelia trigonocaulis			X *			
	Wahlenbergia caryophylloides			X *			X *
	Wahlenbergia graniticola			X *			
	Wahlenbergia tumidifructa			X *			
Cannabaceae	Trema tomentosa var. aspera	X *		X *			X *
Capparaceae	Capparis canescens						X *
Caryophyllaceae	Drymaria cordata subsp. diandra ^		X *				
	Polycarpaea corymbosa var. corymbosa			X *		X *	
	Polycarpaea spirostylis subsp. spirostylis			Х			
Casuarinaceae	Allocasuarina littoralis			X *			X *
	Allocasuarina torulosa			Х			
	Casuarina cunninghamiana			X *			
Celastraceae	Denhamia oleaster			X *		X*	
	Elaeodendron melanocarpum						X *
	Euonymus australiana			X *			
	Hippocratea barbata			X *			X *
	Maytenus disperma			X *			
	Maytenus fasciculiflora						X *
	Perrottetia arborescens	X *					
	Pleurostylia opposita						X *
	Siphonodon membranaceus	X *					
	Stackhousia intermedia			X *			X *
Centrolepidaceae	Centrolepis exserta			X *			
Chrysobalanaceae	Parinari nonda					X *	X *
Cleomaceae	Cleome aculeata ^		Х				
Clusiaceae	Calophyllum costatum	X *					
	Garcinia warrenii		X *				

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	Flow	ering Plants					
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Colchicaceae	Iphigenia indica			X *		X *	
	Schelhammera multiflora			X *			X *
Combretaceae	Terminalia aridicola subsp. chillagoensis			•			
	Terminalia muelleri			•			X *
	Terminalia platyphylla			•			
	Terminalia platyptera			•			
	Terminalia subacroptera			•			
Commelinaceae	Aneilema siliculosum			X *			X *
	Cartonema brachyantherum			X *		X *	
	Cartonema spicatum var. spicatum					X *	X *
	Commelina diffusa			X *			
	Commelina ensifolia		X *	X *			X *
	Murdannia graminea			X *			
	Pollia crispata	X *					
	Pollia macrophylla	X *		X *			
Connaraceae	Connarus conchocarpus subsp. conchocarpus			•			
	Rourea brachyandra ~		Х				
Convolvulaceae	Erycibe coccinea		X *				
	Evolvulus alsinoides			Х			X *
	Evolvulus alsinoides var. decumbens			•			
	Evolvulus alsinoides var. villosicalyx			•			
	Ipomoea eriocarpa			Х			
	Ipomoea gracilis						X *
	Ipomoea plebeia			X *			
	Merremia hederacea		X *				
	Xenostegia tridentata			X *			X *
Cornaceae	Alangium villosum subsp. polyosmoides	X *					
Cucurbitaceae	Neoachmandra cunninghamii	X *		X *			
	Trichosanthes ovigera	X *					
	Trichosanthes sp. (Mt Lewis B.Gray 167)	X *					
Cunoniaceae	Acsmithia davidsonii		•				
	Caldcluvia australiensis	X *		•			
	Ceratopetalum hylandii			•			
	Ceratopetalum succirubrum	X *		•			
	Davidsonia pruriens	X *					
	Geissois biagiana	X *		•			
	Gillbeea adenopetala	X *		•			
	Pullea stutzeri	X *		•			



	Flov	vering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Cyperaceae	Actinoscirpus grossus						
	Arthrostylis aphylla				X *	X *	X *
	Bulbostylis barbata					X *	X *
	Carex indica		•				
	Cyperus aquatilis			X *	X *	X *	X *
	Cyperus aromaticus ^		Х				
	Cyperus brevifolius ^		Х				
	Cyperus carinatus			•			
	Cyperus castaneus			X *			X *
	Cyperus cristulatus					X *	X *
	Cyperus decompositus			•		X *	X *
	Cyperus difformis			X *			
	Cyperus eboracensis						X *
	Cyperus flavidus			X *			
	Cyperus haspan subsp. haspan		Х	X *			
	Cyperus haspan subsp. juncoides						X *
	Cyperus laevis	X *					
	Cyperus lucidus		X *	X *			
	Cyperus multispiceus			X *			
	Cyperus paniceus			•			
	Cyperus pedunculosus			•			
	Cyperus pilosus		X *	X *			
	Cyperus polystachyos var. polystachyos		X *				
	Cyperus procerus			•			
	Cyperus pulchellus			X *			
	Cyperus scaber			Х			X *
	Cyperus sphacelatus ^		Х				
	Cyperus squarrosus			Х			
	Cyperus tenuispica		X *				
	Cyperus trinervis			•			
	Eleocharis dulcis			•			
	Eleocharis retroflexa ~ #		•				
	Fimbristylis acicularis			X *			X *
	Fimbristylis aestivalis		•				
	Fimbristylis bisumbellata			•			
	Fimbristylis cinnamometorum					X *	

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	F	lowering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Cyperaceae	Fimbristylis depauperata		•	X *			
	Fimbristylis dichotoma		X *	•			
	Fimbristylis furva			X *			X *
	Fimbristylis littoralis		X *				
	Fimbristylis microcarya			•			
	Fimbristylis nutans						X *
	Fimbristylis pauciflora		Х				
	Fimbristylis polytrichoides		•				
	Fimbristylis recta			X *		X *	X *
	Fimbristylis squarrulosa				X *		
	Fuirena arenosa			X *			
	Fuirena ciliaris			Х	X *	X *	X *
	Fuirena umbellata			X *			X *
	Gahnia aspera	X *					X *
	Gahnia sieberiana	X *					X *
	Hypolytrum nemorum		Х				
	Isolepis inundata		•				
	Lepironia articulata		Х				
	Rhynchospora corymbosa		X *				X *
	Rhynchospora heterochaeta		•				
	Rhynchospora pterochaeta			X *		X *	X *
	Schoenoplectus articulatus			•			



Far North Queensland 2010



	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creek
Cyperaceae	Schoenoplectus laevis						
	Schoenoplectus mucronatus		•				
	Schoenus apogon var. apogon			X *			
	Schoenus sparteus					X *	X *
	Scleria brownii			X *			X *
	Scleria ciliaris						X *
	Scleria laxa		•				
	Scleria levis		Х				
	Scleria mackaviensis						
	Scleria polycarpa		X *	•			
	Scleria rugosa						X *
	Scleria sp. (Laura N.Byrnes 3285)				X *		X *
	Scleria sphacelata						X *
	Scleria sumatrensis		•				
	Scleria terrestris		•				
	Scleria tricuspidata			X *		X *	
	Thoracostachyum sumatranum		Х				
	Trachystylis stradbrokensis				X *		X *
	Tricostularia undulata						X *
Dichapetalaceae	Dichapetalum papuanum	X *					
Dilleniaceae	Dillenia alata		X *				X *
	Hibbertia araneolifera				X *		X *
	Hibbertia banksii f. banksii					X *	X *
	Hibbertia echiifolia subsp. echiifolia				X *		
	Hibbertia laurana						X *
	Hibbertia lepidota					X *	
	Hibbertia scandens	X *	X *				
	Tetracera nordtiana	X *	X *				
Droseraceae	Drosera auriculata			X *			
	Drosera banksii			X *			
	Drosera burmanni			X *			X *
	Drosera indica			X *		X *	
	Drosera lanata					X *	
	Drosera peltata			X *			
	Drosera petiolaris			X *			

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	Flowe	ring Plants					Uppei
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Bridge Creek
Ebenaceae	Diospyros compacta						X *
	Diospyros geminata			X *			
	Diospyros pentamera			X *			
Elaeagnaceae	Elaeagnus triflora	X *					
Elaeocarpaceae	Elaeocarpus eumundi			X *			
	Elaeocarpus foveolatus	X *					
	Elaeocarpus grandis	X *	X *	X *			
	Elaeocarpus largiflorens subsp. largiflorens	X *					
	Elaeocarpus ruminatus	X *					
	Elaeocarpus sericopetalus	X *					
	Elaeocarpus sp. (Mt Bellenden Ker L.J.Brass 18336)	X *		X *			
	Sloanea australis subsp. parviflora	X *					
	Sloanea langii	X *					
Ericaceae	Acrothamnus spathaceus	X *		•			
	Leucopogon lavarackii					X *	X *
	Leucopogon ruscifolius						X *
	Melichrus adpressus			X *			
	Melichrus urceolatus			Х			
	Paphia meiniana			Х			
Eriocaulaceae	Eriocaulon fistulosum					X *	X *
	Eriocaulon nanum			X *			
	Eriocaulon pusillum			X *			
	Eriocaulon pygmaeum			X *	X *		
	Eriocaulon truncatum			X *			
Erythroxylaceae	Erythroxylum sp. (Brewer LA B.Hyland 13373)	X *					
Escalloniaceae	Polyosma alangiacea	X *					
	Polyosma hirsuta	X *					
	Polyosma rhytophloia	X *					
Euphorbiaceae	Actephila petiolaris subsp. petiolaris			•			
	Antidesma erostre	X *					
	Antidesma ghaesembilla						X *
	Antidesma parvifolium			•			
	Baloghia inophylla			X *			
	Baloghia parviflora			•			
	Bertya polystigma			X *			
	Breynia cernua	X *		X *			
	Breynia oblongifolia			X *			
	Choriceras tricorne						X *



	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Euphorbiaceae	Claoxylon tenerifolium subsp. boreale	X *					
	Euphorbia carissoides ~ #						X *
	Euphorbia mitchelliana			X *			
	Fontainea picrosperma	X *					
	Glochidion benthamianum			•			
	Glochidion harveyanum		X *	•			
	Glochidion harveyanum var. harveyanum			X *			
	Glochidion hylandii	X *					
	Glochidion pungens ~			•			
	Glochidion sessiliflorum var. pedicellatum	X *					
	Glochidion sumatranum		X *				
	Homalanthus novoguineensis	X *	X *	Х			
	Hylandia dockrillii			•			
	Macaranga inamoena	X *	X *				
	Macaranga involucrata		X *	Х			
	Macaranga polyadenia		X *				
	Macaranga subdentata			Х			
	Macaranga tanarius		X *				
	Mallotus paniculatus	X *					
	Mallotus polyadenos		X *	•			



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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creel
Euphorbiaceae	Microstachys chamaelea				X *		X *
	Neoroepera banksii				X *	X *	X *
	Petalostigma banksii					X *	X *
	Petalostigma pubescens			•			X *
	Phyllanthus amarus ^		Х				
	Phyllanthus carpentariae			X *			
	Phyllanthus dallachyanus						X *
	Phyllanthus debilis		•				
	Phyllanthus lamprophyllus			Х			
	Phyllanthus sulcatus		X *				
	Phyllanthus virgatus			X *		X *	
	Poranthera microphylla			Х			X *
	Ricinocarpos ledifolius			•			
	Ricinocarpos verrucosus			•			
	Rockinghamia angustifolia			•			
	Sauropus albiflorus			X *			
	Sauropus elachophyllus var. glaber				X *	X *	X *
	Sauropus podenzanae					X *	X *
Eupomatiaceae	Eupomatia barbata	X *					
	Eupomatia laurina	X *		Х			
Fabaceae	Acacia aulacocarpa			Х			
	Acacia auriculiformis			•			
	Acacia calyculata			Х	X *		X *
	Acacia celsa	X *					
	Acacia crassicarpa						X *
	Acacia disparrima subsp. calidestris			Х			
	Acacia flavescens			Х			X *
	Acacia guymeri ~ #			•			
	Acacia humifusa			X *		X *	X *
	Acacia hyaloneura					X *	X *
	Acacia leptocarpa			•			
	Acacia leptoloba				X *	X *	X *
	Acacia leptostachya			X *			
	Acacia melanoxylon	X *					
	Acacia multisiliqua					X *	X *
	Acacia platycarpa					^	X *
	Acacia rothii						X *
	Acacia simsii			•			X *
	Acacia umbellata			-			X *
	Acacia victoriae			-			
	Acacia whitei	-		-			



	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Fabaceae	Aeschynomene villosa ^			Х			
	Albizia procera						X *
	Archidendron grandiflorum			•			
	Archidendron ramiflorum	X *					
	Archidendron vaillantii			•			
	Austrosteenisia stipularis	X *					
	Caesalpinia robusta ~	X *					
	Cajanus acutifolius			X *			
	Cajanus marmoratus						X *
	Callerya pilipes ~			•			
	Castanospermum australe		X *				
	Chamaecrista absus			X *			
	Chamaecrista mimosoides			X *			
	Chamaecrista nomame var. nomame			X *			X *
	Chamaecrista rotundifolia var. rotundifolia ^			Х			
	Crotalaria aridicola			•			
	Crotalaria brevis			X *			X *
	Crotalaria calycina			Х			
	Crotalaria humifusa			X *			
	Crotalaria lanceolata subsp. lanceolata ^			Х			
	Crotalaria medicaginea var. neglecta			Х			X *
	Crotalaria sessiliflora var. anthylloides			X *			
	Crotalaria verrucosa			X *			
	Daviesia flava					X *	X *
	Desmodium filiforme						X *
	Desmodium pullenii						X *
	Desmodium rhytidophyllum			X *			X *
	Desmodium trichostachyum			X *		X *	X *
	Desmodium uncinatum ^			Х			
	Eriosema chinense					X *	
	Erythrina vespertilio			Х			
	Erythrophleum chlorostachys			•			
	Flemingia lineata			•			
	Flemingia parviflora			X *			X *
	Galactia sp. (Laura J.C.Tothill JT53A)						X *

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	Flower	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Fabaceae	Galactia tenuiflora						
	Glycine curvata			Х			X *
	Glycine cyrtoloba			Х			X *
	Gompholobium sp. (Point Archer J.Wrigley+NQ1301)					X *	X *
	Hovea longipes			•			
	Hovea nitida			•			
	Hovea parvicalyx				X *	X *	X *
	Indigofera linnaei			•			
	Indigofera pratensis						X *
	Jacksonia thesioides					X *	X *
	Lamprolobium fruticosum			X *		Х	X *
	Macroptilium atropurpureum ^			Х			
	Macroptilium lathyroides ^		X *				
	Millettia pinnata ^		•				
	Mucuna gigantea		X *				
	Pararchidendron pruinosum			X *			
	Phyllodium hackeri						
	Pycnospora lutescens			X *			
	Senna obtusifolia ^		Х				
	Senna septemtrionalis ^	X *					
	Smithia sensitiva			X *			
	Stylosanthes guianensis ^			Х			
	Stylosanthes hamata ^			Х			
	Stylosanthes humilis ^			Х			
	Tephrosia astragaloides						X *
	Tephrosia filipes var. filipes			Х			
	Tephrosia filipes var. latifolia					X *	X *
	Tephrosia gaudium-solis						
	Tephrosia juncea			X *	X *	X *	X *
	Tephrosia leptoclada					X *	
	Tephrosia macrostachya			•			
	<i>Tephrosia</i> sp. (Battle Camp K.R.McDonald KRM7106)						X *
	<i>Tephrosia</i> sp. (Copperfield River P.I.Forster PIF14768)						X *
	Tephrosia sp. (Iron Range L.J.Brass 19242)						X *
	Tephrosia sp. (Laura M.B.Thomas 283)				X *	X *	X *
	Uraria picta					X *	
	Vachellia bidwillii			•			
	Vachellia sutherlandii			•			



	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Fabaceae	Vandasina retusa						X *
	Vigna lanceolata var. filiformis						X *
	Vigna radiata var. sublobata			X *			
	Vigna sp. (Greta Creek R.J.Lawn+AQ532201)			X *			
	Vigna vexillata var. angustifolia			•			
	Zornia muriculata subsp. angustata					X *	X *
	Zornia muriculata subsp. muriculata			X *			
Flagellariaceae	Flagellaria indica	X *	X *				
Gentianaceae	Canscora diffusa			X *			
	Fagraea fagraeacea	X *		X *			
Gesneriaceae	Boea hygroscopica			X *			
	Cyrtandra baileyi	X *					
Goodeniaceae	Goodenia heteroptera ~			X *		X *	X *
	Goodenia janamba					X *	X *
	Goodenia pumilio			X *			
	Scaevola enantophylla	X *					
Haemodoraceae	Haemodorum coccineum				X *	X *	X *
Haloragaceae	Gonocarpus acanthocarpus			X *			
J	Gonocarpus chinensis subsp. verrucosus			X *			
Hemerocallidaceae	Dianella caerulea var. vannata		X *	•			
	Dianella incollata ~					X *	X *
	Dianella nervosa			Х			
	Tricoryne anceps subsp. anceps			Х			
	Tricoryne anceps subsp. pterocaulon						X *
Hernandiaceae	Gyrocarpus americanus subsp. sphenopterus			•			
Himantandraceae	Galbulimima baccata	X *		•			
Hydrocharitaceae	Najas tenuifolia			•			
Hypericaceae	Hypericum gramineum			X *			
Hypoxidaceae	Curculigo ensifolia var. ensifolia			X *			
, r · · · · · · · · · · · · · · · · · ·	Hypoxis marginata			•			
	Hypoxis pratensis var. pratensis			X *			
Icacinaceae	Apodytes brachystylis	X *		,,			
. Carinaccac	Citronella smythii	X *					
	Irvingbaileya australis	X *					
Juncaceae	Juncus usitatus	X *		X *			

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	FI	owering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creel
Lamiaceae	Anisomeles malabarica			X *			X *
	Callicarpa longifolia	X *					
	Callicarpa pedunculata	X *		X *			
	Chloanthes parviflora					X *	X *
	Clerodendrum floribundum			X *			
	Clerodendrum grayi	X *					
	Clerodendrum tomentosum			X *			
	Gmelina fasciculiflora	X *	X *	X *			
	Hyptis capitata ^		X *				
	Hyptis suaveolens ^			X *			
	Leucas decemdentata			X *			
	Plectranthus apreptus			X *			
	Plectranthus apricus						X *
	Plectranthus bellus			X *			
	Plectranthus congestus			X *			X *
	Plectranthus mirus			X *			
	Plectranthus scutellarioides	X *					
	Plectranthus sp.	X *					
	Plectranthus spectabilis ~			X *			
	Salvia misella ^			Х			
Lauraceae	Beilschmiedia bancroftii	X *		•			
	Beilschmiedia brunnea	X *					
	Beilschmiedia collina	X *					
	Beilschmiedia obtusifolia		X *	X *			
	Beilschmiedia recurva	X *		•			
	Beilschmiedia tooram	X *		•			
	Cassytha capillaris						X *
	Cassytha filiformis			X *		X *	
	Cinnamomum camphora ^	X *					
	Cinnamomum laubatii			•			
	Cinnamomum oliveri			X *			
	Cryptocarya angulata	X *					
	Cryptocarya clarksoniana						X *
	Cryptocarya corrugata	X *		•			
	Cryptocarya densiflora			•			
	Cryptocarya grandis	X *		•			
	Cryptocarya hypospodia			X *			
	Cryptocarya leucophylla	X *		•			
	Cryptocarya lividula			•			
	Cryptocarya mackinnoniana	X *					
	Cryptocarya melanocarpa	X *		•			



	Flow	vering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Lauraceae	Cryptocarya murrayi	X *	X *				
	Cryptocarya oblata	X *		•			
	Cryptocarya saccharata			Х			
	Cryptocarya triplinervis var. riparia		X *				
	Cryptocarya vulgaris			X *			
	Endiandra acuminata						
	Endiandra bessaphila	X *	X *				
	Endiandra cowleyana	X *	X *				
	Endiandra dielsiana			•			
	Endiandra glauca						X *
	Endiandra hypotephra			•			
	Endiandra jonesii ~			•			
	Endiandra leptodendron	X *					
	Endiandra monothyra			•			
	Endiandra monothyra subsp. monothyra	X *					
	Endiandra montana			•			
	Endlandia palmerstenii	X*				1 4	
1	Endiandra sankeyana	X *		To a find			
	Endiandra sideroxylon ~	X.*	-	7		A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	200
	Endiandra wolfei	X*			1.0		196
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	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Lauraceae	Litsea bennettii			•			
	Litsea breviumbellata						X *
	Litsea connorsii	X *		Х			
	Litsea fawcettiana			X *			
	Litsea glutinosa						
	Litsea leefeana	X *	X *	•			
	Neolitsea brassii			X *			
	Neolitsea dealbata	X *		X *			
Lecythidaceae	Barringtonia racemosa		X *				
Leeaceae	Leea indica		X *				
Lentibulariaceae	Utricularia bifida			X *			
	Utricularia caerulea			X *			X *
	Utricularia chrysantha			X *		X *	X *
	Utricularia dichotoma			X *			
	Utricularia limosa			,,		X *	
	Utricularia minutissima			•			
	Utricularia sp.		X *				
	Utricularia uliginosa		,	X *		X *	
Linderniaceae	Artanema fimbriatum					,,	
	Lindernia crustacea			X *			X *
	Lindernia scapigera			X *			X *
	Lindernia tenuifolia		X *	,,			
Loganiaceae	Mitrasacme ambigua		Λ			X *	X *
	Mitrasacme brachystemonea			X *			X *
	Mitrasacme connata			X *			X *
	Mitrasacme nudicaulis var. nudicaulis			,,			X *
	Mitrasacme nummularia			X *		X *	
	Mitrasacme oasena			X *			
	Mitrasacme patens			,,			X *
	Mitrasacme pygmaea			X *			X *
Loranthaceae	Amyema biniflora						X *
Loranthaceae	Amyema mackayensis		X *				
	Amyema queenslandica	X *	X				
	Amyema whitei	X *					
	Amylotheca dictyophleba	X *		X *			
	Decaisnina brittenii subsp. brittenii					X *	
	Dendrophthoe glabrescens		X *				X *
	Diplatia grandibractea		^			X *	
Lythraceae	Lagerstroemia archeriana subsp. archeriana			•		^	
	Rotala mexicana			X *			
	Rotala occultiflora			X *			



	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Malvaceae	Abelmoschus moschatus subsp. tuberosus			X *			
	Argyrodendron peralatum			•			
	Argyrodendron trifoliolatum	X *					
	Brachychiton albidus			•			
	Brachychiton diversifolius subsp. orientalis			Х			
	Commersonia bartramia	X *	i				
	Franciscodendron laurifolium	X *					
	Grewia mesomischa						X *
	Grewia retusifolia			Х			
	Grewia sp.		X *				
	Hibiscus meraukensis			X *			X *
	Melhania oblongifolia			Х			
	Melochia corchorifolia		Х	•			
	Sida acuta ^			Х			
	Sida cordifolia ^			X *			
	Sida rhombifolia ^		Х	Х			
	Triumfetta rhomboidea ^			Х			
	Urena lobata ^	X *		Х			
Melastomataceae	Melastoma malabathricum subsp. malabathricum		Х	X *			X *
	Memecylon pauciflorum						X *
Meliaceae	Aglaia brassii ~			•			
	Aglaia meridionalis	X *		•			
	Aglaia sapindina			•			
	Aglaia tomentosa	X *					
	Anthocarapa nitidula			X *			
	Dysoxylum acutangulum subsp. foveolatum						X *
	Dysoxylum klanderi	X *	X *				
	Dysoxylum oppositifolium	X *					
	Dysoxylum pettigrewianum			•			
	Dysoxylum rufum	X *					
	Owenia acidula			•			
	Synoum glandulosum			•			
	Synoum glandulosum subsp. paniculosum	X *					

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	Flowe	ering Plants					Uppe
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Bridge Creek
Menispermaceae	Carronia protensa		X *				
	Hypserpa decumbens	X *		X *		X *	
	Hypserpa laurina		•	•			
	Legnephora moorei	X *					
	Stephania japonica var. discolor			•			
	Tinospora smilacina			•	X *		X *
Menyanthaceae	Nymphoides minima			•			
Molluginaceae	Glinus oppositifolius			•			
Monimiaceae	Austromatthaea elegans	X *					
	Dryadodaphne trachyphloia			•			
	Endressia wardellii ~			Х			
	Hedycarya loxocarya	X *					
	Levieria acuminata			•			
	Palmeria hypotephra	X *					
	Palmeria scandens	X *		•			
	Steganthera cooperorum						
	Steganthera laxiflora			•			
	Steganthera laxiflora subsp. laxiflora	X *					
	Steganthera laxiflora subsp. lewisensis			•			
	Steganthera macooraia			•			
	Wilkiea angustifolia	X *		•			
	Wilkiea cordata			•			
	Wilkiea hylandii			•			
	Wilkiea pubescens			X *			
	Wilkiea rigidifolia						X *
	Wilkiea smithii			•			
Moraceae	Ficus aculeata var. aculeata			X *			
	Ficus benjamina		X *	,,			
	Ficus congesta var. congesta	X *	X *	X *			
	Ficus crassipes	X *					
	Ficus destruens	X *					
	Ficus leptoclada	X *		X *			
	Ficus microcarpa		X *	X *			X *
	Ficus obliqua	X *	,	X *			,
	Ficus pleurocarpa	X *		, ,			
	Ficus septica	X *					
	Ficus watkinsiana	,		X *			
	Maclura cochinchinensis	X *		,,			
	Streblus pendulinus	X *					
	Trophis scandens subsp. scandens	^	X *				



	Flov	vering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Myodocarpaceae	Delarbrea michieana	X *					
Myristicaceae	Myristica globosa subsp. muelleri	X *	X *				
Myrtaceae	Archirhodomyrtus beckleri			•			
	Asteromyrtus lysicephala					X *	X *
	Corymbia clarksoniana			•			X *
	Corymbia confertiflora						
	Corymbia erythrophloia			•			
	Corymbia hylandii						X *
	Corymbia intermedia			Х			
	Corymbia leichhardtii			X *			
	Corymbia nesophila						X *
	Corymbia stockeri						
	Corymbia stockeri subsp. stockeri				X *	X *	X *
	Corymbia tessellaris			Х			
	Corymbia x chillagoensis			•			
	Eucalyptus acmenoides			X *			X *
	Eucalyptus atrata			Х			
	Eucalyptus brassiana						X *
	Eucalyptus camaldulensis			•			
	Eucalyptus chlorophylla						
	Eucalyptus crebra			•			X *
	Eucalyptus cullenii						
	Eucalyptus exserta						
	Eucalyptus grandis						
	Eucalyptus granitica			Х			
	Eucalyptus leptophleba			•			
	Eucalyptus lockyeri subsp. exuta			X *			
	Eucalyptus normantonensis			•			
	Eucalyptus persistens						
	Eucalyptus phoenicea				X *	X *	Х
	Eucalyptus platyphylla			•			
	Eucalyptus resinifera						
	Eucalyptus staigeriana						
	Eucalyptus tardecidens			•			
	Eucalyptus tereticornis subsp. tereticornis			Х			
	Eucalyptus tetrodonta						X *

X = Previously recorded on the reserve and found on this survey

= EPBC listed X * = New record for this reserve ~ = NCA listed

^ = Exotic/Pest

O = Putative new species



	Flo	owering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Myrtaceae	Eugenia reinwardtiana						
•	Gossia dallachiana	X *					
	Gossia grayi	X *		•			
	Gossia lewisensis			•			
	Gossia myrsinocarpa	X *	X *				
	Gossia retusa						X *
	Gossia shepherdii	X *					
	Homoranthus clarksonii			X *			
	Homoranthus tropicus ~				X *	X *	X *
	Lenwebbia lasioclada			•			
	Leptospermum neglectum			•			
	Lindsayomyrtus racemoides			•			
	Lithomyrtus obtusa					X *	X *
	Lophostemon grandiflorus			X *			
	Lophostemon suaveolens			X *			
	Melaleuca acacioides			•			
	Melaleuca argentea			•			
	Melaleuca fluviatilis			•			
	Melaleuca leucadendra			Х			
	Melaleuca linariifolia			•			
	Melaleuca monantha			•			
	Melaleuca nervosa			Х			Χ*
	Melaleuca quinquenervia		•				
	Melaleuca recurva			Х			
	Melaleuca stenostachya			•			
	Melaleuca trichostachya			X *			
	Melaleuca viminalis			Х			
	Melaleuca viridiflora			Х	X *		X *
	Neofabricia myrtifolia						X *
	Neofabricia sericisepala					X *	
	Pilidiostigma tetramerum	X *		•			
	Pilidiostigma tropicum	X *	X *				
	Psidium cattleyanum var. cattleyanum ^	X *					
	Psidium guajava ^		Х				
	Rhodamnia blairiana	X *		•			
	Rhodamnia costata			X *			
	Rhodamnia sessiliflora	X *	X *	X *			
	Rhodamnia sharpeana			•			
	Rhodamnia spongiosa			X *			
	Rhodomyrtus canescens			•			



	Flo	wering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
	•	X*	Laberiarigee	•	1		CICCK
Myrtaceae	Rhodomyrtus pervagata	^		-			
	Rhodomyrtus sericea Syzygium canicortex	X *		-			
	Syzygium claviflorum	^		-			
	Syzygium cormiflorum	X *		-			
	Syzygium cryptophlebium	X *		-			
		X *					
	Syzygium endophloium	^ "					
	Syzygium erythrodoxum			-			
	Syzygium gustavioides Syzygium hemilamprum subsp. hemilamprum			•			
	Syzygium hemilamprum subsp. orophilum			•			
	Syzygium johnsonii	X *					
	Syzygium kuranda	X *		•			
	Syzygium luehmannii	X *		X *			
	Syzygium mulgraveanum ~			•			
	Syzygium oleosum			X *			
	Syzygium papyraceum	X *		•			
	Syzygium pringlei ~						X *
	Syzygium resa			Х			
	Syzygium trachyphloium	X *		•			
	Syzygium unipunctatum	X *					
	Syzygium wesa			•			
	Thryptomene oligandra						X *
	Tristaniopsis exiliflora						X *
	Xanthostemon umbrosus						X *
Ochnaceae	Brackenridgea australiana	X *		X *			
Olacaceae	Olax aphylla				X *		X *
Oleaceae	Chionanthus axillaris	X *					
	Chionanthus ramiflorus			X *			
	Jasminum elongatum						X *
	Ligustrum australianum			X *			
	Olea paniculata			X *			
Onagraceae	Ludwigia hyssopifolia ^		X				X *
	Ludwigia octovalvis		X *	•			

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	Flowe	ring Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Orchidaceae	Bulbophyllum evasum			•			
	Bulbophyllum gadgarrense			•			
	Bulbophyllum lilianiae			•			
	Bulbophyllum longiflorum ~ #			•			
	Bulbophyllum macphersonii			Х			
	Bulbophyllum newportii			X *			
	Bulbophyllum sladeanum			•			
	Bulbophyllum sp.	X *					
	Bulbophyllum wadsworthii			•			
	Cadetia sp.			X *			
	Cadetia uniflos			Х			
	Caladenia carnea			X *			
	Calanthe triplicata			•			
	Corybas abellianus ~			Х			
	Cymbidium madidum	X *	X *	X *			
	Dendrobium agrostophyllum			•			
	Dendrobium cacatua			•			
	Dendrobium jonesii			•			
	Dendrobium monophyllum			•			
	Dendrobium prenticei			X *			
	Dendrobium sp.	X *					
	Dendrobium speciosum			•			
	Dendrobium toressae			X *			
	Dienia montana	X *					
	Dipodium elegantulum			X *			
	Dockrillia calamiformis			Х			



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	Flo	owering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridge Creek
Orchidaceae	Dockrillia sp.	X *					
	Dockrillia teretifolia		X *				
	Empusa habenarina			X *			
	Eria queenslandica			•			
	Eria sp.	X *					
	Geodorum densiflorum			X *			
	Liparis fleckeri			•			
	Micropera fasciculata		•				
	Nervilia holochila						X *
	Nervilia plicata			X *			
	Octarrhena pusilla			•			
	Plexaure crassiuscula			Х			
	Pterostylis n. sp.			X *			
	Pterostylis procera			X *			
	Sarcochilus sp.	X *					
	Taeniophyllum muelleri #		•				
	Vappodes bigibba ~ #			•			
	Vappodes phalaenopsis ~ #			•			
Orobanchaceae	Buchnera gracilis			X *		X *	X *
	Buchnera linearis			X *			X *
	Buchnera urticifolia			•			
	Centranthera cochinchinensis				X *		X *
	Rhamphicarpa australiensis ~			Х			
	Striga curviflora			X *			
Oxalidaceae	Oxalis radicosa			X *			
Pandanaceae	Freycinetia excelsa	X *					
	Freycinetia scandens	X *	X *				
	Pandanus solmslaubachii		X *				
Passifloraceae	Passiflora herbertiana subsp. herbertiana	X *					
Pentaphylacaceae	Ternstroemia cherryi	X *					
Philesiaceae	Eustrephus latifolius		Х	•			X *
Philydraceae	Helmholtzia acorifolia	X *					
•	Philydrum lanuginosum						X *
Picrodendraceae	Austrobuxus megacarpus			•			

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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridge Creek
Piperaceae	Peperomia blanda var. floribunda			X *			
	Peperomia enervis	X *					
	Piper hederaceum	X *					
	Piper hederaceum var. hederaceum			X *			
	Piper macropiper	X *					
Pittosporaceae	Bursaria tenuifolia			X *			
	Pittosporum rubiginosum	X *					
	Pittosporum trilobum	X *					
	Pittosporum venulosum			X *			
Plantaginaceae	Limnophila fragrans			X *			X *
	Mecardonia procumbens ^			Х			
	Scoparia dulcis ^		X *				
	Veronica plebeia	X *					
Poaceae	Alloteropsis cimicina			Х			
	Alloteropsis semialata			•		X *	X *
	Andropogon gayanus ^			Х			
	Aristida calycina			•			
	Aristida holathera			•			
	Aristida ingrata			•			
	Aristida macroclada subsp. queenslandica					X *	X *
	Aristida perniciosa						X *
	Aristida queenslandica			•			
	Aristida queenslandica var. queenslandica			•			
	Aristida sciuroides			•			
	Aristida superpendens			•			
	Aristida utilis var. utilis						X *
	Arundinella nepalensis			X *		X *	X *
	Arundinella setosa			Х	X *		
	Brachyachne tenella		X *				
	Capillipedium parviflorum			X *			
	Capillipedium spicigerum			X *			
	Cenchrus pedicellatus subsp. unispiculus ^			X *			
	Centotheca lappacea		X *				
	Chionachne cyathopoda			X *			
	Chloris lobata						
	Chrysopogon setifolius						X *
	Cleistochloa subjuncea			X *			,
	Coelachne pulchella			,			X *
	Cymbopogon ambiguus			X *	X *	X *	



Family		Flower	ering Plants					
Dichanthium fecundum Dichanthium sericeum Digitaria diminuta Digitaria setigera Dimeria acinaciformis X* X* X* X* Dimeria acinaciformis Ectrosia agrostoides Ectrosia one X* Ectrosia plliveri Ectrosia leporina Ectrosia perorina Ectrosia perorina Elytrophorus spicatus Enneapogon virens Eragrostis brownii X* X* X* X* Eragrostis schultzii Eragrostis spartinoides Eragrostis spartinoides X* Eriachne armittii Eriachne pulchella var. pulchella Eriachne spu. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne autorinata Heteropogon triticeus K* X*	Family	Species	Cloudland	Eubenangee	Hann			Bridge
Dichanthium sericeum Digitaria diminuta Digitaria seligera Dimeria acinaciformis Dimeria acinaciformis Dimeria ornithopoda Ectrosia agrostoides Ectrosia agrostoides Ectrosia eleprina Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis schultzii Eragrostis soronia Eragrostis spornia Eragrostis partinoides X * X * X * X * X * X * X * X * X * X	Poaceae	Cymbopogon globosus			X *			
Digitaria diminuta Digitaria setigera Dimeria acinaciformis Ectrosia agrostoides Ectrosia agrostoides Ectrosia leporina Ectrosia leporina Ellytrophorus spicatus Enneapogon virens Eragrostis shownii Eragrostis sororia Eragrostis spartinoides Eragrostis spartinoides Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne pulchella var. pulchella Eriachne spucarosa Eriachne squarrosa Eriachne squarrosa Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon triticeus Hymenachne aculipluma X* X* X* X* X* X* X* X* X* X		Dichanthium fecundum			•			
Digitaria setigera Dimeria acinaciformis Dimeria acinaciformis Dimeria acinatifopoda Ectrosia agrostoides Ectrosia agrostoides Ectrosia gulliveri Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis sp. Eragrostis sp. Eriachne amiktii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K. Simon+ 3007) Eriachne stipacea Eriachne triseta Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon contortus Hymenachne acutigluma Ix* X* X* X* X* X* X* X* X* X*		Dichanthium sericeum			•			
Dimeria acinaciformis Dimeria ornithopoda Ectrosia ognostoides Ectrosia confusa Ectrosia gulliveri Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis sporia Eragrostis spartinoides Eriagrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W. Purdie 1370) Eriachne obtusa Eriachne pulchella var. pulchella Eriachne squarosa Eriachne squarosa Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon cultidurae Imperata cylindrica X* X* X* X* X* X* X* X* X* X		Digitaria diminuta				X *		X *
Dimeria ornithopoda Ectrosia agrostoides Ectrosia confusa Ectrosia quiliveri Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne pallescens Eriachne pulchella var, pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon contortus Hymenachne acutigluma I X*		Digitaria setigera			X *			
Ectrosia agrostoides Ectrosia confusa Ectrosia leporina Ectrosia leporina Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis spartinoides Eriachne armittii Eriachne pulchella var, pulchella Eriachne squarrosa Eriachne stipacea Eriachne stipacea Eriachne imitieus Eriachne squarrosa Eriachne		Dimeria acinaciformis			X *		X *	X *
Ectrosia confusa Ectrosia gulliveri Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis soronia Eragrostis sororia Eragrostis spartinoides Eragrostis spartinoides Eriachne amittii Eriachne amittii Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne stipacea Eriachne pandiflora Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon contortus Heteropogon contortus Hymenachne acutigluma Imperata cylindrica X * X * X * X * X * X * X * X		Dimeria ornithopoda			X *			
Ectrosia gulliveri Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis sororia Eragrostis sororia Eragrostis spantinoides Eragrostis spantinoides Eriachne amittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pulchella var. pulchella Eriachne squarrosa Eriachne squarrosa Eriachne stipacea Eria		Ectrosia agrostoides			X *			
Ectrosia leporina Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis spa. Eragrostis spantinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pallescens Eriachne spuchella var. pulchella Eriachne squarrosa Eriachne squarrosa Eriachne squarrosa Eriachne squarrosa Eriachne sipacea Eriachne sipacea Eriachne sipacea Eriachne iriseta Germainia grandiflora Heteropogon contortus Heteropogon contortus Hymenachne acutigluma Imperata cylindrica V * V * V * V * V * V * V * V		Ectrosia confusa					X *	
Ectrosia nervilemma Elytrophorus spicatus Enneapogon virens Eragrostis brownii X* X* X* X* Eragrostis schultzii X X X* X* Eragrostis sororia Eragrostis spartinoides Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne tritseta Germainia grandiflora Heteropogon contortus Heteropogon contortus Heteropogon contortus I X* I		Ectrosia gulliveri			•			
Elytrophorus spicatus Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis sp. Eragrostis sp. Eragrostis sp. Eragrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne stipacea Eriachne istipacea Eriachne istipacea Eriachne istipacea Eriachne istipacea Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata Heteropogon contortus Heteropogon triticeus X* X* X* Imperata cylindrica X* X* X* X* X* X* X* X* X* X		Ectrosia leporina						X *
Enneapogon virens Eragrostis brownii Eragrostis schultzii Eragrostis sororia Eragrostis sp. Eragrostis sp. Eragrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon triticeus X* X* X* X* X* X* X* X* X* X		Ectrosia nervilemma			•			
Eragrostis brownii X* X* X* X* Eragrostis schultzii X X X* X* X* X* Eragrostis sororia		Elytrophorus spicatus			•			
Eragrostis schultzii X X X* X* X* X* Eragrostis sororia		Enneapogon virens			•			
Eragrostis schultzii Eragrostis sororia Eragrostis sp. Eragrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne titjacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon triticeus IX X X X X X X X X X X X X X X X X X X		Eragrostis brownii			X *		X *	X *
Eragrostis sp. X * X					Х	X *	X *	X *
Eragrostis spartinoides Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata Heteropogon contortus Hymenachne acutigluma Ix* X* X* X* X* X* X* X* X* X*		Eragrostis sororia			•			
Eriachne armittii Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon triticeus I X*		Eragrostis sp.	X *					
Eriachne mucronata f. Burnham (R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Heteropogon contortus Heteropogon triticeus Hymenachne acutigluma I X*		Eragrostis spartinoides		X *	Х			
(R.W.Purdie 1370) Eriachne obtusa Eriachne pallescens Eriachne pulchella var. pulchella X* Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata X* Heteropogon contortus Heteropogon triticeus X* Imperata cylindrica X* X* X* X* X* X* X* X* X* X		Eriachne armittii			•			
Eriachne pallescens X* X* X* Eriachne pulchella var. pulchella X* X* X* Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa X* Eriachne stipacea X* Eriachne triseta X* Germainia grandiflora X* Hemarthria uncinata X Heteropogon contortus X* Heteropogon triticeus X* X* Hymenachne acutigluma X* Imperata cylindrica X*						X *		
Eriachne pulchella var. pulchella Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata Heteropogon contortus Heteropogon triticeus X* X* X* X* X* X* X* X* X* X		Eriachne obtusa						X *
Eriachne sp. (Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata Heteropogon contortus Heteropogon triticeus Hymenachne acutigluma Imperata cylindrica X* X* X* X* X* X* X* X* X* X		Eriachne pallescens				X *	X *	X *
(Dugald River B.K.Simon+ 3007) Eriachne squarrosa Eriachne stipacea Eriachne triseta Germainia grandiflora Hemarthria uncinata X Heteropogon contortus Heteropogon triticeus X* Hymenachne acutigluma Imperata cylindrica X* X* X* X* X* X* X* X* X* X		Eriachne pulchella var. pulchella			X *		X *	X *
Eriachne stipacea X* Eriachne triseta X* Germainia grandiflora X* Hemarthria uncinata X Heteropogon contortus X* Heteropogon triticeus X* X* Hymenachne acutigluma X* Imperata cylindrica X*					X *		X *	
Eriachne triseta X* Germainia grandiflora X* Hemarthria uncinata X Heteropogon contortus X* Heteropogon triticeus X* Hymenachne acutigluma X* Imperata cylindrica X*		Eriachne squarrosa					X *	
Germainia grandiflora X Hemarthria uncinata X Heteropogon contortus X Heteropogon triticeus X X X X X X X X X X X X X X X X X X X		Eriachne stipacea						X *
Hemarthria uncinata X X Heteropogon contortus X* Heteropogon triticeus X* X* X* X* X* X* X* Imperata cylindrica X*		Eriachne triseta						X *
Heteropogon contortus Heteropogon triticeus X* X* X* X* Imperata cylindrica X*		Germainia grandiflora						X *
Heteropogon triticeus X* X* X* Hymenachne acutigluma X* Imperata cylindrica X*		Hemarthria uncinata		Х				
Hymenachne acutigluma X * Imperata cylindrica X *		Heteropogon contortus			X *			
Imperata cylindrica X *		Heteropogon triticeus			X *	X *	X *	X *
		Hymenachne acutigluma		X *				
Isachne globosa X*		Imperata cylindrica	X *					
		Isachne globosa		X *				

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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Poaceae	Ischaemum australe var. arundinaceum		X				
	Ischaemum australe var. australe			X *			
	Ischaemum australe var. villosum			X *			X *
	Ischaemum fragile						X *
	Ischaemum rugosum var. segetum			Х			
	Leersia hexandra		X *	X *			
	Megathyrsus maximus var. maximus ^			Х			
	Melinis minutiflora ^			Х			
	Melinis repens ^			Х			
	Mnesithea formosa						X *
	Mnesithea rottboellioides		•	X *			X *
	Ophiuros exaltatus			X *			
	Oplismenus hirtellus	X *		X *			
	Oplismenus imbecillis			X *			
	Oplismenus mollis	X *					
	Ottochloa gracillima	X *					
	Ottochloa nodosa			•			
	Panicum effusum						X *
	Panicum mitchellii			X *			
	Panicum pygmaeum	X *					
	Panicum seminudum var. cairnsianum			Х		X *	X *
	Panicum simile			X *			X *
	Panicum trichoides			Х			X *
	Paspalidium albovillosum	X *					
	Paspalidium constrictum						X *
	Paspalidium distans		Х	Х			X *
	Paspalidium gausum						X *
	Paspalidium gracile			•			
	Paspalidium spartellum				X *	X *	X *
	Paspalum mandiocanum ^	X *					
	Paspalum paniculatum ^	X *					
	Paspalum scrobiculatum		X *	X *			
	Pheidochloa gracilis						X *
	Pseudopogonatherum contortum			X *	X *		X *
	Pseudoraphis spinescens			•			
	Sacciolepis indica		Х	X *		X *	X *
	Sacciolepis myosuroides			X *			X *
	Schizachyrium crinizonatum						X *
	Schizachyrium fragile			Х		X *	X *



	Flower	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Poaceae	Schizachyrium pachyarthron			X *	X *		
	Schizachyrium pseudeulalia			X *			X *
	Setaria pumila subsp. pallidefusca ^			X *			
	Setaria sphacelata ^		Х				
	Setaria surgens			Х			X *
	Sorghum angustum						X *
	Sorghum plumosum			X *			X *
	Sporobolus fertilis ^			Х			
	Sporobolus jacquemontii ^			Х			
	Sporobolus natalensis ^			Х			
	Sporobolus pyramidalis ^			Х			
	Steinchisma laxa ^		Х				
	Thaumastochloa major			X *			
	Thaumastochloa monilifera						X *
	Thaumastochloa pubescens						X *
	Thaumastochloa rariflora			X *		X *	X *
	Thaumastochloa x heteromorpha					X *	
	Themeda arguens			•			
	Themeda quadrivalvis ^			Х			
	Themeda triandra			X *		X *	X *
	Triodia microstachya						X *
	Tripogon loliiformis			X *			
	Urochloa decumbens ^			Х			
	Urochloa holosericea						X *
	Urochloa humidicola ^		Х				
	Urochloa mutica ^		Х				
	Urochloa polyphylla						X *
	Urochloa subquadripara ^			Х			X *
Polygalaceae	Comesperma secundum					X *	X *
	Polygala exsquarrosa			X *			X *
	Polygala linariifolia				X *		X *
	Polygala paniculata ^		Х	Х			
	Salomonia ciliata						X *
Polygonaceae	Persicaria decipiens		X *	X *			
	Persicaria strigosa		X *				

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	Flo	wering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Portulacaceae	Calandrinia arenicola						X *
	Calandrinia tumida			X *			
	Calandrinia uniflora			•			
	Portulaca australis			X *			
	Portulaca bicolor			Х			X *
	Portulaca filifolia			•			
	Portulaca pilosa ^			X *			
Potamogetonaceae	Potamogeton octandrus		•				
Primulaceae	Ardisia brevipedata	X *					
	Ardisia crenata ^	X *					
	Embelia grayi	X *					
	Lysimachia ovalis			X *			
	Maesa dependens	X *					
	Myrsine achradifolia	X *					
	Myrsine porosa			X *			
	Myrsine subsessilis subsp. cryptostemon	X *		X *			
	Myrsine urceolata						X *
	Myrsine variabilis			X *			
Proteaceae	Athertonia diversifolia	X *		•			
	Banksia aquilonia			•			
	Banksia dentata						X *
	Banksia integrifolia			•			
	Banksia spinulosa var. spinulosa			•			
	Bleasdalea bleasdalei	X *					
	Cardwellia sublimis	X *	X *	•			
	Carnarvonia araliifolia			•			



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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Proteaceae	Carnarvonia araliifolia var. montana						
	Catalepidia heyana						
	Darlingia darlingiana						
	Darlingia ferruginea	X *					
	Grevillea baileyana			•			
	Grevillea coriacea						
	Grevillea dryandri subsp. dryandri				X *		
	Grevillea glauca			Х			
	Grevillea mimosoides			•			
	Grevillea parallela			•			
	Grevillea pteridifolia					X *	X *
	Helicia australasica		X *	X *			
	Helicia grayi ~			•			
	Helicia lewisensis ~						
	Helicia nortoniana	X *	X *				
	Lomatia fraxinifolia	X *		•			
	Musgravea stenostachya						
	Opisthiolepis heterophylla	X *		•			
	Persoonia falcata						
	Placospermum coriaceum						
	Sphalmium racemosum						
	Stenocarpus davallioides ~						
	Stenocarpus reticulatus	X *					
	Triunia montana						
Putranjivaceae	Drypetes acuminata	X *					
Restionaceae	Dapsilanthus ramosus						X *
Rhamnaceae	Alphitonia excelsa						X *
	Alphitonia oblata		X *				
	Alphitonia petriei	X *					
	Alphitonia whitei	X *					
Rhizophoraceae	Carallia brachiata		Х	•			X *
Ripogonaceae	Ripogonum album	X *	X *	•			
Rosaceae	Prunus turneriana	X *					
	Rubus moluccanus var. moluccanus	X *					
	Rubus queenslandicus	X *					
Rousseaceae	Abrophyllum ornans	X *					

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	Flower	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Rubiaceae	Amaracarpus nematopodus	X *					
	Antirhea tenuiflora	X *					
	Atractocarpus fitzalanii subsp. tenuipes		X *				
	Atractocarpus hirtus	X *	X *				
	Atractocarpus merikin	X *					
	Atractocarpus sessilis			X *			X *
	Bobea myrtoides	X *					
	Coelospermum paniculatum			X *			
	Coelospermum paniculatum var. paniculatum						X *
	Coelospermum reticulatum						X *
	Cyclophyllum costatum ~ #						X *
	Gardenia ovularis	X *					
	Gynochthodes oresbia	X *					
	Hedyotis auricularia var. melanesica		X *				
	lxora oreogena	X *					
	Larsenaikia ochreata			X *			
	Mitracarpus hirtus ^		Х	Х			
	Morinda ammitia				X *	X *	X *
	Morinda jasminoides	X *		X *			
	Morinda reticulata					X *	X *
	Morinda retropila	X *					
	Nauclea orientalis		X *				
	Oldenlandia laceyi				X *		X *
	Oldenlandia mitrasacmoides subsp. nigricans						X *
	Oldenlandia subulata		X *				
	Pavetta australiensis	X *					
	Psychotria coelosperma		X *				
	Psychotria dallachiana	X *		X *			
	Psychotria daphnoides			X *			
	Psychotria fitzalanii			X *			
	Psychotria interstans			X *			
	Psychotria poliostemma						X *
	<i>Psychotria</i> sp. (Danbulla S.T.Blake 15262)	X *					
	Psychotria sp. (Mt Finnigan L.J.Brass 20044)			X *			
	Psydrax banksii						X *
	Psydrax lamprophylla			X *			
	Psydrax lepida						X *
	Randia tuberculosa	X *					



	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creek
Rubiaceae	Spermacoce brachystema			X *			
	Spermacoce marginata				X *		X *
	Spermacoce sp. (Lorim Point A.Morton AM1237)			X *			
	Tarenna dallachiana subsp. dallachiana	X *					
Rutaceae	Acronychia aberrans			•			
	Acronychia acidula	X *		•			
	Acronychia chooreechillum			•			
	Acronychia crassipetala	X *					
	Acronychia laevis			Х			
	Acronychia parviflora	X *		•			
	Acronychia vestita	X *		X *			
	Boronia bowmanii				X *		
	Dinosperma stipitatum			•			
	Flindersia acuminata	X *		•			
	Flindersia bourjotiana	X *		•			
	Flindersia brayleyana	X *		X *			
	Flindersia ifflana			X *			
	Flindersia pimenteliana	X *		•			
	Halfordia kendack	X *		Х			X *
	Medicosma glandulosa ~			•			
	Medicosma sessiliflora			•			
	Melicope affinis			•			
	Melicope broadbentiana	X *					
	Melicope elleryana		X *	X *			
	Melicope jonesii	X *		•			
	Melicope vitiflora	X *					
	Melicope xanthoxyloides	X *					
	Pitaviaster haplophyllus			•			
	Sarcomelicope simplicifolia subsp. simplicifolia			X *			
	Zanthoxylum veneficum	X *					
Salicaceae	Casearia costulata	X *					
	Casearia dallachii		X *				
	Scolopia braunii			X *			
Santalaceae	Anthobolus filifolius				X *		X *
	Dendrotrophe varians	X *					
	Exocarpos latifolius			X *	X *		X *
	Notothixos subaureus	X *					

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	Flow	ering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Sapindaceae	Alectryon tomentosus			X *			
	Alectryon tropicus			•			
	Arytera divaricata			•			
	Arytera pauciflora			•			
	Atalaya sericopetala			•			
	Castanospora alphandii	X *					
	Cnesmocarpon dasyantha	X *					
	Cupaniopsis anacardioides			X *			
	Cupaniopsis dallachyi	X *					
	Cupaniopsis flagelliformis			•			
	Cupaniopsis flagelliformis var. flagelliformis	X *					
	Dodonaea dodecandra			X *			
	Dodonaea hispidula var. hispidula			X *			
	Dodonaea lanceolata var. subsessilifolia			Х	X *	X *	X *
	Dodonaea malvacea			•		X *	X *
	Dodonaea physocarpa			•			
	Dodonaea viscosa subsp. burmanniana			•			
	Guioa acutifolia	X *		X *			X *
	Guioa lasioneura	X *					
	Guioa montana			•			
	Harpullia frutescens	X *					
	Harpullia rhyticarpa	X *		•			
	Jagera pseudorhus var. integerrima	X *					
	Lepiderema largiflorens ~	X *					
	Lepiderema sericolignis			•			
	Mischarytera lautereriana	X *		X *			
	Mischocarpus exangulatus	X *		•			
	Mischocarpus grandissimus	X *					
	Mischocarpus lachnocarpus	X *	X *	Х			
	Mischocarpus macrocarpus	X *					
	Mischocarpus pyriformis subsp. pyriformis			X *			
	Rhysotoechia florulenta			•			
	Rhysotoechia mortoniana			•			
	Sarcopteryx martyana	X *		•			
	Sarcopteryx montana ~			•			
	Sarcopteryx stipata			•			
	Sarcotoechia lanceolata	X *		•			
	Sarcotoechia protracta	X *					





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	Flov	vering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Sapindaceae	Sarcotoechia villosa			•			
	Synima cordierorum	X *		•			
	Synima macrophylla	X *					
	Synima reynoldsiae	X *					
	Toechima erythrocarpum	X *					
	Toechima monticola	X *		•			
	Toechima pterocarpum ~ #			•			
Sapotaceae	Chrysophyllum roxburghii ~						X *
	Planchonella asterocarpon	X *					
	Planchonella chartacea		X *				
	Planchonella myrsinifolia						X *
	Planchonella pohlmaniana var. (Gilbert River C.T.White 1409)						X *
	Pouteria brownlessiana	X *					
	Pouteria papyracea	X *					
	Sersalisia sericea			X *	X *		Х*
	Vanroyena castanosperma	X *					
Smilacaceae	Smilax aculeatissima	X *					
	Smilax australis			•			
	Smilax blumei						X *
	Smilax calophylla			X *			
	Smilax glyciphylla	X *		•			

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	Flor	wering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Solanaceae	Solanum dimorphispinum			•			
	Solanum esuriale			•			
	Solanum intonsum			•			
	Solanum macoorai	X *	•				
	Solanum magnifolium	X *					
	Solanum mauritianum ^	X *		X *			
	Solanum multiglochidiatum			•			
	Solanum nigrum			X *			
	Solanum nodiflorum		•				
	Solanum seaforthianum ^			Х			
	Solanum torvum ^	X *					
	Solanum viridifolium	X *					
Stemonaceae	Stemona lucida			•			
Stylidiaceae	Stylidium alsinoides						X *
,	Stylidium cordifolium						X *
	Stylidium leiophyllum					X *	X *
	Stylidium n. sp.			0			
	Stylidium oviflorum			X *			X *
	Stylidium pedunculatum						X *
	Stylidium ramosissimum						X *
	Stylidium rotundifolium			Х			X *
	Stylidium tenerum			Х			X *
Symplocaceae	Symplocos cochinchinensis var.	X *		,			,
	Symplocos cochinchinensis var. glaberrima	X *					
	Symplocos cochinchinensis var. pilosiuscula		X *				
	Symplocos hayesii	X *					
	Symplocos stawellii var. stawellii	X *		X *		X *	
Taccaceae	Tacca leontopetaloides					X *	
Thymelaeaceae	Lethedon setosa	X *					
	Pimelea sericostachya subsp. amabilis			Х			
	Thecanthes cornucopiae					X *	X *
	Wikstroemia indica	X *		Х			
Urticaceae	Boehmeria nivea	X *					
	Dendrocnide cordata	X *					
	Dendrocnide moroides			X *			
	Dendrocnide photinophylla	X *					
	Elatostema reticulatum	X *					
	Pipturus argenteus	X *		X *			



	Flo	owering Plants					
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Verbenaceae	Lantana camara ^			Х			
Violaceae	Hybanthus enneaspermus				X *	X *	X *
Vitaceae	Ampelocissus acetosa						X *
	Cayratia japonica	X *					
	Cayratia saponaria	X *					
	Cayratia trifolia			X *			
	Cissus antarctica			X *			
	Cissus hypoglauca	X *					
	Cissus sterculiifolia	X *					
	Cissus vinosa	X *					
	Clematicissus opaca			X *			
	Tetrastigma nitens	X *					
Winteraceae	Bubbia queenslandiana			•			
	Bubbia semecarpoides	X *					
	Tasmannia insipida			•			
	Tasmannia membranea	X *		Х			
Xanthophyllaceae	Xanthophyllum octandrum	X *		X *			
Xanthorrhoeaceae	Xanthorrhoea johnsonii			X *		X *	X *
Xyridaceae	Xyris complanata			•		X *	X *
	Xyris pauciflora			X *			X *
Zingiberaceae	Alpinia arctiflora	X *					
	Alpinia caerulea			X *			
	Alpinia modesta	X *					
	Pleuranthodium racemigerum	X *					

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		Conife	ers				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Araucariaceae	Agathis microstachya ~	X *					
	Agathis robusta			X *			
	Araucaria cunninghamii var. cunninghamii			X *			
Cupressaceae	Callitris intratropica			Χ			
Podocarpaceae	Podocarpus grayae			•			X *
	Podocarpus smithii			•			
	Prumnopitys ladei ~			•			
	Sundacarpus amarus	X *					

	Cycads								
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek		
Cycadaceae	Cycas media subsp. banksii			X *			X *		
Zamiaceae	Lepidozamia hopei			•					

		Fern	S				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Aspleniaceae	Asplenium australasicum	X *	X *	X *			
	Asplenium paleaceum			X *			
	Asplenium polyodon			X *			
Blechnaceae	Blechnum cartilagineum	X *		X *			
	Blechnum indicum		X *				
	Blechnum orientale						X *
	Blechnum patersonii	X *					
	Blechnum patersonii subsp. queenslandicum	X *					
	Doodia aspera			X *			
	Doodia caudata			X *			
	Doodia media			X *			
	Stenochlaena palustris		X *				
Cyatheaceae	Cyathea cooperi	X *		X *			
	Cyathea woollsiana	X *					
Davalliaceae	Davallia denticulata			X *			X *
	Humata repens			X *			



Ferns									
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Uppe Bridg Creel		
Dennstaedtiaceae	Hypolepis glandulifera	X *							
	Pteridium esculentum			X *			X *		
Dryopteridaceae	Arachniodes aristata			X *					
	Lastreopsis rufescens	X *							
	Lastreopsis tenera			X *					
	Lastreopsis wurunuran	X *							
	Teratophyllum brightiae	X *							
Gleicheniaceae	Dicranopteris linearis var. linearis					X *	X *		
Hymenophyllaceae	Crepidomanes johnstonense	X *							
•	Crepidomanes saxifragoides	X *							
	Crepidomanes sp.	X *							
	Hymenophyllum walleri			X *					
Lindsaeaceae	Lindsaea ensifolia subsp. agatii						X *		
	Lindsaea fraseri					X *			
	Lindsaea media						X *		
Lygodiaceae	Lygodium flexuosum		X *						
	Lygodium microphyllum		X *						
	Lygodium reticulatum		X *	X *					
Marattiaceae	Angiopteris evecta	X *							
	Marattia oreades	X *							
Ophioglossaceae	Helminthostachys zeylanica		X *						
	Ophioglossum lusitanicum			X *					
	Ophioglossum pendulum		X *						
Polypodiaceae	Belvisia mucronata var. mucronata	X *		X *					
	Colysis ampla	X *							
	Colysis sayeri	X *							
	Dictymia brownii	X *							
	Drynaria rigidula	X *	X *	X *					
	Drynaria sparsisora						X *		
	Goniophlebium subauriculatum	X *		X *					
	Microsorum punctatum			X *					
	Platycerium bifurcatum	X *		X *					
	Platycerium hillii	X *	X *						
	Prosaptia fuscopilosa			X *					

X = Previously recorded on the reserve and found on this survey

X * = New record for this reserve

 \wedge = Exotic/Pest # = EPBC listed

~ = NCA listed

O = Putative new species







		Fern	s				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Polypodiaceae	Pyrrosia confluens var. dielsii	X *					
	Pyrrosia longifolia	X *	X *	X *			Χ*
	Pyrrosia rupestris	X *		X *			
Psilotaceae	Psilotum nudum		X *	X *		X *	
Pteridaceae	Adiantum atroviride			X *			
	Adiantum hispidulum var. hispidulum	X *		X *			
	Adiantum hispidulum var. hypoglaucum			X *			
	Adiantum philippense			X *			
	Adiantum silvaticum	X *					
	Cheilanthes brownii			X *			
	Cheilanthes caudata			X *			X *
	Cheilanthes contigua						X *
	Cheilanthes nitida			X *			X *
	Cheilanthes nudiuscula						X *
	Cheilanthes prenticei					X *	
	Cheilanthes sieberi subsp. sieberi			X *			
	Cheilanthes tenuifolia			X *			
	Paraceterach muelleri			X *			
	Vittaria elongata			X *			
	Vittaria ensiformis			X *			



		Fern	S				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Schizaeaceae	Schizaea dichotoma					X *	X *
Tectariaceae	Arthropteris palisotii	X *					
	Arthropteris submarginalis	X *					
	Arthropteris tenella	X *					
	Tectaria confluens	X *					
Thelypteridaceae	Christella dentata	X *		X *			
	Cyclosorus interruptus		X *				
	Pneumatopteris sogerensis	X *					
	Pronephrium triphyllum		X *				
Woodsiaceae	Diplazium dilatatum		X *				
	Diplazium queenslandicum	X *					

	Fern Allies								
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek		
Lycopodiaceae	Huperzia phlegmaria ~			X *					
Selaginellaceae	Selaginella ciliaris			X *					

	Liverworts									
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek			
Fossombroniaceae	Fossombronia sp. 1						X *			
	Fossombronia sp. 2						X *			
Frullaniaceae	Frullania yorkiana						X *			
Jungermanniaceae	?Jungermannia sp.						X *			
	Andrewsianthus ?puniceus						X *			
Lejeuneaceae	Acrolejeunea securifolia						X *			
	Cheilolejeunea ?mimosa						X *			

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O = Putative new species





		Mosse	es				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Bartramiaceae	Philonotis sp.						X *
Bryaceae	Plagiobryum sp.						X *
Calymperaceae	Calymperes crassinerve						X *
	Calymperes erosum						X *
	Calymperes graeffeanum						X *
	Syrrhopodon armatus						X *
Fissidentaceae	Fissidens sp. 1						X *
	Fissidens sp. 2						X *
Leucobryaceae	Campylopus ?introflexus						X *
	Leucobryum cf. chlorophyllosum						X *
Polytrichaceae	Dawsonia polytrichoides	X *					
Sematophyllaceae	Sematophyllum subhumile var. subhumile						X *
Sphagnaceae	Sphagnum cf. cuspidatum						X *



Dawsonia polytrichoides, a moss found at Cloudland Nature Refuge © Copyright, G. W. & R. F. Wilson







		Liche	ns				
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Arthoniaceae	?Cryptothecia sp.						X *
Cladoniaceae	Cladonia sp.						X *
	Ochrolechia sp.						X *
Coccocarpiaceae	Coccocarpia adnata						X *
Collemataceae	Leptogium wilsonii			X *			
Graphidaceae	Myriotrema sp.						X *
Lecideaceae	Lecidea sp.						X *
Lobariaceae	Lobaria plurimiseptata			X *			
	Pseudocyphellarcia desfontainii			X *			
Mycoblastaceae	Tephromela sp.						X *
Pannariaceae	Physma byrsaeum						X *
Parmeliaceae	Flavoparmelia sp.						X *
	Parmotrema cf. robustum						X *
	Parmotrema gardneri						X *
	Relicinopsis ?malaccensis						X *
Pertusariaceae	?Pertusaria or Ochrolechia sp.						X *
	?Pertusaria sp.						X *
	Pertusaria ?xanthoplaca						X *
Physciaceae	Buellia sp.						X *
	Dirinaria cf. batavica						X *
	Pyxine coccifera						X *
Porinaceae	Porina sp.						X *
Teloschistaceae	Caloplaca sp. 1						X *
	Caloplaca sp. 2						X *
	Caloplaca sp. 3						X *

O = Putative new species

X = Previously recorded on the reserve and found on this survey # = EPBC listed X * = New record for this reserve

~ = NCA listed



Fungi								
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek	
Amanitaceae	Amanita sp.						X *	
Cantharellaceae	Cantharellus sp. 1						X *	
	Cantharellus sp. 2						X *	
Coprinaceae	Coprinus sp. 1						X *	
	Coprinus sp. 2						X *	
Coriolaceae	Fomitopsis sp.						X *	
	Pycnoporus sp.						X *	
Craterellaceae	Craterellus sp.						X *	
Crepidotaceae	Tubaria sp.						X *	
Geastraceae	Geastrum sp.						X *	
Hygrophoraceae	Hygrocybe sp. 1						X *	
	Hygrocybe sp. 2						X *	
Not agreed	Irpex sp. 1						X *	
	Irpex sp. 2						X *	
Not known	Dacrymycetales sp.						X *	
	Polyporales sp. 1						X *	
	Polyporales sp. 2						X *	
	Polyporales sp. 3						X *	
	Polyporales sp. 4						X *	
	Polyporales sp. 5						X *	
	Polyporales sp. 6						X *	
	Truffle n. sp.						0	



Far North Queensland 2010



Fungi								
Family	Species	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek	
Peniophoraceae	Peniophora sp.						X *	
Physalacriaceae	Xerula flavo-olivacea						X *	
Polyporaceae	Microporus xanthopus						X *	
Russulaceae	Russula aff. persanguinea						X *	
Schizophyllaceae	Schizophyllum commune						X *	
Strobilomycetaceae	Austroboletus sp.						X *	
Thelephoraceae	Thelephora sp.						X *	
Tricholomataceae	?Marasmiellus sp.						X *	
	Gymnopus sp.						X *	
	Laccaria n. sp.						0	
	Marasmius crinis-equi group						X *	
	Tricholoma sp.						X *	





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X * = New record for this reserve

^ = Exotic/Pest

~ = NCA listed

O = Putative new species



Appendix B: Threatened Species

Additional supplements containing the appendices for individual reserves are available to download from:

www.bushblitz.org.au

Nomenclature and taxonomy used in this appendix are consistent with that from the Australian Faunal Directory (AFD), the Australian Plant Name Index (APNI) and the Australian Plant Census (APC).

Current at March 2013



Fauna

Vertebrates

Mammals								
Species	Status	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek		
Dasyurus hallucatus	EPBC — Endangered				X *			
Dendrolagus lumholtzi	NCA — Near Threatened		X *					
Hemibelideus lemuroides	NCA — Near Threatened		X *					
Macroderma gigas	NCA — Vulnerable				•			
Petrogale mareeba	NCA — Near Threatened				Х			
Pseudochirops archeri	NCA — Near Threatened		X *		•			
Pseudochirulus herbertensis	NCA — Near Threatened		X *					
Pteropus conspicillatus	EPBC — Vulnerable				Х	X *		



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NCA = Refers to the *Nature Conservation Act 1992* (Queensland) X = Previously recorded on the reserve and found on this survey

= New record for this reserve



	Bird	s				
Species	Status	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Accipiter novaehollandiae	NCA — Near Threatened		X *	•	•	X *
Aerodramus terraereginae	NCA — Near Threatened		X *	•	•	
Casuarius casuarius johnsonii	EPBC — Endangered, NCA — Endangered		X *			
Cyclopsitta diophthalma macleayana	NCA — Vulnerable		X *	•		
Cyclopsitta diophthalma marshalli	NCA — Near Threatened				•	
Ephippiorhynchus asiaticus	NCA — Near Threatened			•	•	
Erythrotriorchis radiatus	EPBC — Vulnerable, NCA — Endangered				•	X *
Erythrura trichroa	NCA — Near Threatened				•	
Haematopus fuliginosus	NCA — Near Threatened				•	
Lewinia pectoralis	NCA — Near Threatened				•	
Lophoictinia isura	NCA — Near Threatened					
Melithreptus gularis gularis	NCA — Near Threatened				Χ	
Nettapus coromandelianus	NCA — Near Threatened			•	•	
Ninox rufa queenslandica	NCA — Vulnerable		X *		•	
Rostratula australis	EPBC — Vulnerable, NCA — Vulnerable				•	
Tadorna radjah	NCA — Near Threatened				•	
Turnix olivii	EPBC — Endangered, NCA — Vulnerable			•	X *	
Tyto novaehollandiae kimberli	EPBC — Vulnerable, NCA — Vulnerable				•	



Far North Queensland 2010



	Frog	s and Toads				
Species	Status	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Cophixalus aenigma	NCA — Near Threatened				•	
Cophixalus concinnus	NCA — Vulnerable				•	
Cophixalus hosmeri	NCA — Near Threatened				•	
Litoria nannotis	EPBC — Endangered, NCA — Endangered				•	
Litoria nyakalensis	EPBC — Critically Endangered, NCA — Endangered				•	
Litoria rheocola	EPBC — Endangered, NCA — Endangered				•	
Litoria serrata	NCA — Near Threatened		X *		•	
Nyctimystes dayi	EPBC — Endangered, NCA — Endangered				•	
Taudactylus acutirostris	EPBC — Extinct, NCA — Endangered				•	
Taudactylus rheophilus	EPBC — Endangered, NCA — Endangered				•	

Reptiles						
Species	Status	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Crocodylus porosus	NCA — Vulnerable			•		
Glaphyromorphus mjobergi	NCA — Near Threatened				•	

Invertebrates

Spiders							
Species	Status	Brooklyn	Cloudland	Eubenangee	Hann	Upper Bridge Creek	
Phlogius crassipes gp. n. sp.	NCA — Least Concern	0			0	0	

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Previously recorded on the reserve but not found on this survey



Flora

	Flowering Plants						
Species	Status	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Acacia guymeri	EPBC — Vulnerable, NCA — Vulnerable			•			
Aglaia brassii	NCA — Near Threatened			•			
Bulbophyllum longiflorum	EPBC — Vulnerable, NCA — Vulnerable			•			
Caesalpinia robusta	NCA — Near Threatened	X *					
Callerya pilipes	NCA — Near Threatened			•			
Chrysophyllum roxburghii	NCA — Near Threatened						X *
Corybas abellianus	NCA — Near Threatened			Χ			
Cyclophyllum costatum	EPBC — Vulnerable, NCA — Vulnerable						X *
Dianella incollata	NCA — Near Threatened					X *	X *
Eleocharis retroflexa	EPBC — Vulnerable, NCA — Vulnerable		•				
Endiandra jonesii	NCA — Vulnerable			•			
Endiandra sideroxylon	NCA — Near Threatened	X *					
Endressia wardellii	NCA — Near Threatened			Χ			
Euphorbia carissoides	EPBC — Vulnerable, NCA — Vulnerable						X *
Glochidion pungens	NCA — Near Threatened			•			
Goodenia heteroptera	NCA — Near Threatened			X *		X *	X *
Haplostichanthus submontanus subsp. sessiliflorus	NCA — Near Threatened	X *					
Helicia grayi	NCA — Near Threatened			•			
Helicia lewisensis	NCA — Vulnerable			•			
Homoranthus tropicus	NCA — Near Threatened				X *	X *	X *
Lepiderema largiflorens	NCA — Near Threatened	X *					
Linospadix microcaryus	NCA — Near Threatened			•			
Linospadix palmerianus	NCA — Near Threatened			•			
Medicosma glandulosa	NCA — Near Threatened			•			
Plectranthus spectabilis	NCA — Near Threatened			X *			
Rhamphicarpa australiensis	NCA — Near Threatened			Х			
Rourea brachyandra	NCA — Near Threatened		Х				
Sarcopteryx montana	NCA — Near Threatened			•			



	Flowering Plants						
Species	Status	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Stenocarpus davallioides	NCA — Vulnerable			•			
Syzygium mulgraveanum	NCA — Near Threatened			•			
Syzygium pringlei	NCA — Near Threatened						X *
Taeniophyllum muelleri	EPBC — Vulnerable		•				
Toechima pterocarpum	EPBC — Endangered, NCA — Endangered			•			
Vappodes bigibba	EPBC — Vulnerable, NCA — Vulnerable			•			
Vappodes phalaenopsis	EPBC — Vulnerable, NCA — Vulnerable			•			

Conifers							
Species	Status	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Agathis microstachya	NCA — Near Threatened	X *					
Prumnopitys ladei	NCA — Near Threatened			•			

Fern Allies							
Species	Status	Cloudland	Eubenangee	Hann	Melsonby NP	Melsonby NR	Upper Bridge Creek
Huperzia phlegmaria	NCA — Near Threatened			X *			

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Appendix C: Exotic and Pest Species

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Nomenclature and taxonomy used in this appendix are consistent with that from the Australian Faunal Directory (AFD), the Australian Plant Name Index (APNI) and the Australian Plant Census (APC).

Current at March 2013



Fauna

Vertebrates

	Toads		
Species	Common name	Cloudland	Hann
Rhinella marina	Cane Toad	X *	X *

Invertebrates

	Snails		
Species	Common name	Cloudland	Hann
Allopeas clavulinus	Spiked Awlsnail	X *	



Key

X = Previously recorded on the reserve and found on this survey

X * = New record for this reserve



Flora

	Flowering Plants				
Species	Status	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Aeschynomene villosa	Villose Jointvetch, Hairy Jointvetch, Sensitive Jointvetch			Х	
Ageratum conyzoides subsp. conyzoides	Goatweed	X *	Х	Х	
Andropogon gayanus	Gamba Grass			Х	
Annona glabra	Alligator Apple, Pond Apple		Х		
Ardisia crenata	Spiceberry, Coralberry	X *			
Bidens pilosa	Broomstick, Teasers, Grab-a-Leg, Cobbler's Pegs			Х	
Cenchrus pedicellatus subsp. unispiculus	Annual Mission Grass			X *	
Chamaecrista rotundifolia var. rotundifolia	Round-leaf Cassia, Roundleaf Sensitive Pea, Wynn Cassia			Х	
Cinnamomum camphora	Camphor Laurel	X *			
Cleome aculeata	Prickly Spiderflower		Х		
Crassocephalum crepidioides	Thickhead			Х	
Crotalaria lanceolata subsp. lanceolata	Rattlepod			X *	
Cyperus aromaticus	Navua Sedge		Х		
Cyperus brevifolius	Mullumbimby Couch		Х		
Cyperus sphacelatus	Roadside Flatsedge		Х		
Desmodium uncinatum	Silver-leaf Desmodium, Silver-leaved Desmodium			Х	
Drymaria cordata subsp. diandra	Tropical Chickweed		X *		
Emilia sonchifolia	Emilia	X *		Х	
Emilia sonchifolia var. sonchifolia	Emilia				X *
Erechtites valerianifolius f. valerianifolius	Brazilian Fireweed		Х		
Gamochaeta pensylvanica	Cudweed		Х		
Gomphocarpus physocarpus	Swan Plant, Balloon Cottonbush			Х	
Hyptis capitata	Knobweed		X *		
Hyptis suaveolens	Hyptis			X *	
Lantana camara	Lantana, Common Lantana			Х	
Ludwigia hyssopifolia	Yellow Willow Herb		Х		X *
Macroptilium atropurpureum	Siratro			Х	
Macroptilium lathyroides	Phasey Bean		X *		



	Flowering Plants				
Consider	Charter	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Species	Status		ш		
Mecardonia procumbens	Bacopa, Mecardonia			X	
Megathyrsus maximus var. maximus Melinis minutiflora	Guinea Grass			X	
	Molasses Grass			X	
Melinis repens	Red Natal Grass		_	X	
Millettia pinnata	Pongamia, Native Wisteria, Indian Beech			• V	
Mitracarpus hirtus	White Eye	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Х	Х	
Paspalum mandiocanum	Broadleaf Paspalum, Warrel Grass	X *			
Paspalum paniculatum	Russell River Grass	X *	.,		
Phyllanthus amarus	Dukong Anak		X		
Polygala paniculata	Polygala		Х	X	
Portulaca pilosa	Djanggara, Akulikuli, Hairy Pigweed			X *	
Praxelis clematidea	Praxelis		Х	Х	X *
Psidium cattleyanum var. cattleyanum	Cherry Guava	X *			
Psidium guajava	Yellow Guava, Guava		Х		
Salvia misella	Salvia			Х	
Scoparia dulcis	Scoparia		X *		
Senna obtusifolia	Sicklepod, Chinese Senna, Arsenic Weed		Х		
Senna septemtrionalis	Arsenic Bush	X *			
Setaria pumila subsp. pallidefusca	Pale Pigeon Grass			X *	
Setaria sphacelata	South African Pigeon Grass		Х		
Sida acuta	Spinyhead Sida			Х	
Sida cordifolia	Flannel Weed			X *	
Sida rhombifolia	Big Jack		Х	Х	
Solanum mauritianum	Wild Tobacco	X *		X *	
Solanum nigrum subsp. nigrum	Black Berry Nightshade			X *	
Solanum seaforthianum	Brazilian Nightshade			Х	
Solanum torvum	Devil's Fig	X *			
Sonchus oleraceus	Common Sowthistle			X *	
Spathodea campanulata subsp. nilotica	African Tulip Tree			Х	
Sporobolus fertilis	Bloomsbury Grass, Giant Parramatta Grass			Х	
Sporobolus jacquemontii	American Ratstail Grass			Х	
Sporobolus natalensis	Giant Ratstail Grass			Х	
Sporobolus pyramidalis	Giant Ratstail Grass			Х	

Key

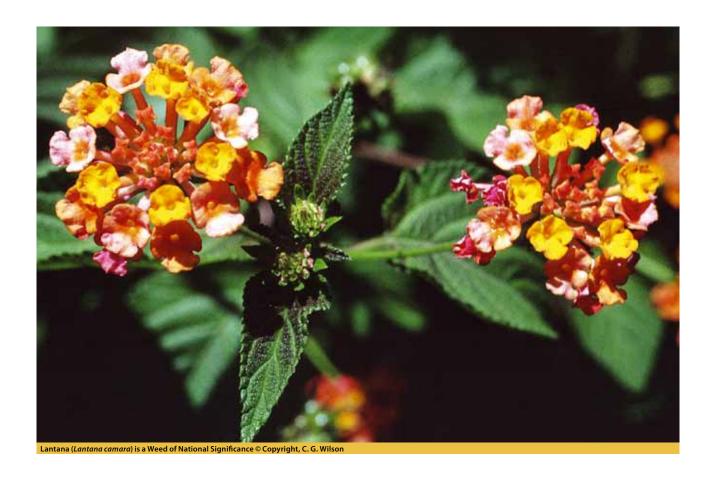
X = Previously recorded on the reserve and found on this survey

X * = New record for this reserve

• Previously recorded on the reserve but not found on this survey



Flowering Plants					
Species	Status	Cloudland	Eubenangee	Hann	Upper Bridge Creek
Steinchisma laxa	-		Х		
Stylosanthes guianensis	Stylo			Х	
Stylosanthes hamata	Caribbean Stylo, Verano			Х	
Stylosanthes humilis	Townsville Stylo			Х	
Synedrella nodiflora	Cinderella Weed			Х	
Themeda quadrivalvis	Grader Grass			Х	
Triumfetta rhomboidea	Chinese Burr			Х	
Urena lobata	Urena Weed, Urena Burr	X *		Х	
Urochloa decumbens	Signal Grass			Х	
Urochloa humidicola	Koronivia Grass, Humidicola, Creeping Signal Grass		Х		
Urochloa mutica	Para Grass		Х		
Urochloa subquadripara	Green Summer Grass			Х	X *
Xanthium occidentale	Cockleburr, Noogoora Burr			Χ	







Prickly Forest Skink (Gnypetoscincus queenslandiae), R. Raven © Copyright, Queensland Museum







Glossary



C

Cryptic species (Cryptospecies)

Species that are physically similar but reproductively isolated from each other.

Cryptozoic taxon

A taxon that is well camouflaged or lives in dark places, caves or holes.

Ε

Epiphyte

A plant that depends on another plant for physical support but not food. It gets nutrients and moisture from the air, rain, water and debris that pools on the host plant or around the epiphyte.

Н

Holotype

The specimen or illustration that was used when a species was formally described.

Ι

Isotype

A duplicate specimen of the holotype.

M

Macrofungi

Fungi that produce large fruiting bodies, i.e. those visible to the naked eye and generally one centimetre or more in width or height.

P

Putative new species

A species that has been recognised by an expert as never having been named or described in the scientific literature. Note specimens may already be in museum or herbarium collections.

Т

Taxon (plural taxa)

A member of any particular taxonomic group, e.g. a particular species, genus, family.

Taxonomy

The categorisation and naming of species. The science of identifying and naming species, as well as grouping them based on their relatedness.

Type locality

The location where the holotype (type specimen) was originally found.

U

Undescribed taxon

A taxon (e.g. a species) that has not yet been formally described or named.





 $Southern \ Cassowary \ (\textit{Casuarius casuarius johnsonii}), listed \ as \ endangered \ under the \ EPBC \ Act \ © \ Copyright, \ Wet \ Tropics \ Management \ Authority \ Queensland$



Notes

















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Contributors

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Research agencies involved in this Bush Blitz were the Queensland Museum, Queensland Herbarium, Threatened Species and Biodiversity and Ecosystem Sciences (former Queensland Department of Environment and Resource Management), Tasmanian Museum and Art Gallery, University of New South Wales and the National Herbarium of Victoria.

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