



Groote Eylandt, Northern Territory 2021: Bush Blitz expedition report



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Contributors

Bush Blitz is coordinated by Parks Australia, which is part of the Australian Government Department of Climate Change, Energy, the Environment and Water. The program is a partnership between the Australian Government, BHP and Earthwatch Australia.

Research agencies involved in this Bush Blitz were the Museum and Art Gallery of the Northern Territory, the Northern Territory Herbarium, the Australian Museum and the University of New South Wales.

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Bush Blitz acknowledges the Traditional Owners of Country throughout Australia and their continuing connection to land, sea and community. We pay our respects to them and their cultures and to their Elders both past and present.

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Summary

From 14 to 25 June 2021, Bush Blitz led an expedition to Groote Eylandt within the Anindilyakwa Indigenous Protected Area in the Northern Territory.

Surveys and collections filled knowledge gaps, provided important material for future genetic and taxonomic studies, and extended the known ranges of species.

At least 751 species were recorded during the Bush Blitz and 12 of those may be completely new to western science (1 reptile, 1 frog, 8 true bugs, 1 snail and 1 worm). Many unnamed or informal invertebrate taxa were collected. These may assist scientists to revise, compare and describe species in the future.

Five threatened vertebrates were recorded – Northern Quoll (*Dasyurus hallucatus*), Ghost Bat (*Macroderma gigas*), Northern Hopping-mouse (*Notomys aquilo*), Northern Masked Owl (*Tyto novaehollandiae kimberli*) and Merten's Water Monitor (*Varanus mertensi*). A threatened bladderwort, *Utricularia singeriana*, and 15 other plants of conservation significance were recorded.

Introduced animals and plants were at low levels in the areas surveyed. Only one introduced reptile, one pest insect and 9 weed species were recorded, mostly around towns and at the airport.

Highlights of the expedition include:

- collecting tissue samples from bats that will be used to identify which species of *Vespadelus* is present on the island
- adding to knowledge of the Groote fish fauna, including observing some unique behaviours in gobies living in the mangrove ecosystems
- collecting tissue samples from reptiles and amphibians which later revealed up to 5 scientifically undescribed species
- collecting 12 butterfly and 24 dragonfly and damselfly species from Groote Eylandt for the first time
- collecting 50 species of true bugs, only 4 of which had been previously recorded from Groote Eylandt
- discovering a large species of land snail, *Xanthomelon* sp. 'North East Isles', that is potentially a new species
- recording a segmented worm (*Palola* sp.) that is rare in the NT because its preferred habitat is limited
- recording 50 vascular plant species on Groote Eylandt for the first time, including a threatened bladderwort and range extensions of up to 600 km.

Introduction

About Bush Blitz

The Bush Blitz program documents plants and animals in selected properties across Australia to support the discovery of species new to western science, complement and complete existing collections, and provide information to support land management and conservation.

Bush Blitz is an initiative of the Australian Government, through Parks Australia, in partnership with BHP and Earthwatch Australia. 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.

An estimated 580,000 to 680,000 species are found in Australia (Chapman 2009), but three-quarters of this biodiversity is yet to be formally identified. Around 45% of continental Australia and over 90% of our marine area have never been comprehensively surveyed by scientists. Increasing our understanding of Australia's biodiversity is critical for conservation, biosecurity, agriculture, human and animal health and many other activities.

Since the Bush Blitz program began in 2010, more than 1,800 species have been discovered during Bush Blitz expeditions across Australia.

In addition to species discovery, Bush Blitz objectives include raising public awareness of biodiversity, Indigenous engagement, including two-way learning on Country, and improving environmental, social and educational outcomes for local communities. While some of these objectives are met during expeditions – through Bush Blitz TeachLive, teacher workshops and community days – they are out of scope for this report.

About this report

This report summarises the initial scientific findings of an expedition to Groote Eylandt. Information in this report has been extracted from the [scientific reports](#) provided by expedition members. Locational data for all flora and fauna records are provided to reserve managers and are publicly available through the [Atlas of Living Australia](#) (ALA).

Groote Eylandt Bush Blitz

Bush Blitz led an expedition to Groote Eylandt in the Northern Territory from 14 to 25 June 2021.

Groote Eylandt is the fourth largest island in Australia and the largest island in the Groote Archipelago. It measures about 50 km (east to west) by 60 km (north to south) and has an area of around 2,400 km². The Groote Archipelago is located on the western side of the Gulf of Carpentaria, approximately 630 km east of Darwin and 50 km east of the mainland.

The Traditional Owners of the Groote Archipelago are an amalgamation of 2 cultures, the Warnindilyakwa and the Nunggubuyu. Both cultures speak Anindilyakwa as their first language, and the land, people and culture are referred to by this term. The Anindilyakwa Land Council (ALC) represents the Traditional Owners of the Groote Archipelago.

Groote Eylandt Mining Company Pty Ltd (GEMCO) runs a large manganese mine and associated port and settlement on the west coast of Groote Eylandt. The mine has been in operation since 1965.

In 2006, the Anindilyakwa Indigenous Protected Area (IPA) was declared over Groote Eylandt, Bickerton Island and more than 40 smaller, low-lying islands in the archipelago. In 2016, the IPA was extended to include the surrounding sea country and the Anindilyakwa IPA now covers an area of approximately 10,000 km². The Anindilyakwa Land and Sea Rangers, who operate under the ALC, are responsible for overseeing the delivery of the IPA Plan of Management (ALC 2016).

The Anindilyakwa IPA has significant conservation value. Prior to this expedition, more than 900 plant species, 150 marine fish species, and 330 terrestrial vertebrate species had been recorded within the IPA, including numerous threatened species (DENR & ALC 2019). The region supports the only known population of the Northern Hopping-mouse (*Notomys aquilo*) and is a key refuge for the Northern Quoll (*Dasyurus hallucatus*) and the Brush-tailed Rabbit-rat (*Conilurus penicillatus*). It also contains important breeding areas for 4 threatened marine turtle species, foraging habitat for migratory shorebirds, and several internationally significant seabird rookeries. Many of the threatening processes operating across northern Australia are absent from, or at low levels across, the IPA. The environment remains largely undisturbed, with no established agriculture, no Cane Toads (*Rhinella marina*), no large introduced herbivore or pig populations, and a relatively benign fire regime.

The Groote Archipelago is located in the wet-dry tropics region of Australia. It is generally hot and wet from October to April and cool to warm and dry from May to September. A low, highly dissected sandstone escarpment occupies much of the island's eastern side, and various habitats such as tropical open woodlands, coastal flood plains, swamps and mangrove forests are found across the island.

Groote Eylandt supports a high diversity of bat species for an offshore island and is considered of regional importance as a refuge for species such as the nationally vulnerable Ghost Bat (*Macroderma gigas*). Despite previous surveys, significant areas of Groote Eylandt and its archipelago are poorly sampled for bats. Aims of this expedition included conducting bat surveys in areas that are difficult to access, and capturing specimens for species that have only previously been detected by acoustic sampling.

The reptiles and amphibians of Groote Eylandt are also poorly known scientifically. Recent studies have revealed that many well-known 'species' in northern Australia are composites of morphologically cryptic taxa. That means, rather than being a single species, they are 2 or more species that look the same. A greater understanding of the amphibian and reptile biodiversity of northern Australia is urgently needed for conservation planning. This expedition targeted groups known to harbour cryptic species in other parts of northern Australia. The general habitat diversity and remoteness of the region meant that unexpected discoveries were also a possibility, especially for smaller species with potentially narrow ranges.

Little is known of the freshwater and estuarine fishes of Groote Eylandt. Previous survey efforts primarily targeted marine habitats or have been part of impact assessments relating to mining activity in the north-west. In Northern Australia, new varieties of fish continue to be recorded from remote regions, and genetic techniques suggest there are likely to be 2 to 3 times the number of species present than is currently recognised. Estuarine habitats also appear to be

prime areas for species discovery, especially for small species like gobies that are hidden near the seafloor (cryptobenthic). The focus of this expedition was therefore a baseline assessment of remote habitats and cryptobenthic estuarine gobies.

No dedicated surveys of diurnal Lepidoptera (butterflies) or Odonata (dragonflies and damselflies) had been carried out on Groote Eylandt before this expedition. However, some specimens had been collected from the island since the 1920s and observations have been recorded over the past 20 years. Observational records are useful to a point, but voucher specimens (identified specimens kept in a public institution, like a museum) are important for making sure records can be verified. The timing of the expedition, at the end of the wet season, meant that sampling occurred when butterflies, dragonflies and damselflies were the most active and abundant. Site selection targeted remote and upland areas, which could not be reached by vehicles.

Prior to this expedition, studies of true bug records held in collections revealed 37 species of true bugs (Heteroptera) known from Groote Eylandt. This expedition aimed to add to the known heteropteran fauna for the IPA.

The molluscs of Groote Eylandt include gastropods, bivalves, chitons, tusk snails and cephalopods. This expedition targeted 3 groups of significant but previously neglected molluscs – land snails, micromolluscs (species smaller than 5 mm when fully adult) and mangrove-associated molluscs. The larger molluscs have long been harvested on Groote Eylandt as part of the annual cycle of traditional food gathering but little is known of the micromolluscs.

Marine segmented worms (Annelida, including bristle worms and Sipuncula), ribbon worms (Nemertea) and flatworms (Platyhelminthes) are poorly known taxonomically and poorly documented, particularly in northern Australia. This makes it difficult to assess if a species is common, its range and its status (for example, whether it is threatened, endemic or exotic). Prior to the expedition there were only 4 bristle worm specimens recorded from the area. Nemertea, Platyhelminthes and sipunculids had not been recorded at all. This expedition therefore held considerable potential to discover new species, and provide new records of annelids and other worm phyla.

Groote Eylandt and offshore islands have been relatively well surveyed for vascular plants. Non-vascular plants are less well known from the region, generally with records restricted to incidental collections and a small number of targeted surveys by specialists. During this expedition, the botanists focused primarily on vascular plants in the sandstone habitats, drainage systems and wetlands, which have previously been poorly collected as a result of restricted access. Other areas sampled were selected across a variety of habitat and geological types. Particular emphasis was placed on species of conservation significance and taxa not previously recorded on Groote Eylandt. The overall approach was to fill knowledge gaps and produce a more complete checklist for the vascular flora of Groote Eylandt in order to inform management decisions. In addition to this, seed was collected for the Australian Seed Bank Partnership projects.

Study area

The study area for this expedition was the Anindilyakwa IPA. Map 1 shows the location of the IPA off the north coast of Australia. Most of the scientific teams' time was spent on Groote Eylandt. The map shows the 3 main towns on the island – Alyangula, Angurugu and Umbakumba. Base Camp was located at the ALC Ranger Station near Alyangula. A few teams also visited 2 of the islands in the IPA – North East Islet (North East Island) and Hawk Island.

Map 1 Location visited, 14 June to 25 June 2021



Note: For a map of collection sites see [Appendix B](#).

Expedition team

Logistics

Bush Blitz provided the logistical coordination and overall leadership for the expedition. The Bush Blitz team consisted of Jo Harding, Helen Cross and Paula Banks.

Scientific

The Museum and Art Gallery of the Northern Territory (MAGNT) and the Northern Territory Herbarium (NT Herbarium) were the host institutions for this expedition, providing the core group of personnel and accessioning the specimens into their collections. Experts from the Australian Museum (AM) and the University of New South Wales (UNSW) and independent researchers conducted field and laboratory work and are included in Table 1.

Bush Blitz TeachLive

Teachers from the Northern Territory participated in [Bush Blitz TeachLive](#), a collaborative program between the Bush Blitz partners and the Australian Science Teachers Association. Working alongside scientists, the teachers reinvigorated their love for science, generated new ideas and learned new skills to take back to their schools. Teachers taught 'live' to their classrooms via the TeachLive website and video conferencing sessions. Jessica Walker and Adam Thompson from Earthwatch Australia coordinated the TeachLive activities. TeachLive participants were Costanzo Costa, Will Forman, Jennifer Frank, Tim Reilly and Veronica Ross.

Photographer

David Webb was the scientific photographer for the expedition.

Figure 1 Some members of the expedition team with ALC staff



Photograph: © Copyright, David Webb.

Methods

Taxonomic groups studied and personnel

A number of taxonomic groups were selected as targets for study. Table 1 lists the groups surveyed and the personnel who undertook the fieldwork, identified specimens and reported on the findings.

Table 1 Taxonomic groups surveyed and personnel

Group	Common name	Personnel and affiliation
Chiroptera	Bats	Paul Barden (Ecological Management Services)
Reptilia and Amphibia	Reptiles and frogs	Dane Trembath (AM) Jodi Rowley (AM)
Actinopterygii	Fishes	Michael Hammer (MAGNT) Adam J. Bourke (EcoScience NT) Olga Biriukova (MAGNT) Jared Archibald (MAGNT)
Lepidoptera and Odonata	Butterflies and moths, dragonflies and damselflies	Jared Archibald (MAGNT)
Heteroptera	True bugs	Arlee McMaha (UNSW)
Mollusca	Molluscs	Richard C. Willan (MAGNT) Adam J. Bourke (EcoScience NT)
Annelida, Nemertea, Platyhelminthes	Segmented worms, ribbon worms, flatworms	Chris Glasby (MAGNT) Olga Biriukova (MAGNT)
Vascular flora	Vascular plants	Donna Lewis (NT Herbarium) Ian Cowie (NT Herbarium) Kym Brennan Ben Wirf (George Brown Darwin Botanic Gardens)

Note: Michael Hammer was unable to attend the expedition but directed others to undertake the fish surveys and participated virtually. Other personnel, including but not limited to Gerry Cassis (UNSW) and Nick Cuff (NT Herbarium) assisted with administration, making identifications and reporting. These personnel and their roles are mentioned in the scientific reports.

Additional (non-target) taxa were recorded opportunistically. For example, mammals and birds were included in the bat report and crustaceans were included in the fish report.

Site selection and collection methods

All scientists surveyed 2 standard survey sites selected by Bush Blitz. Each standard survey site was centred on a point (permanently marked), but the actual area surveyed varied between taxa. Standard methodologies were used to sample these sites. Standard survey sites were in terrestrial habitat so not applicable for the near-shore marine sampling undertaken for segmented worms, and one site was dry so was not applicable for fishes.

The use of standard survey sites provides a unique opportunity to examine broad-spectrum biodiversity. Among other benefits, it allows land managers to use these sites for ongoing monitoring and generates a national dataset that can be used to underpin conservation and land management decisions.

Apart from standard survey sites, site selection and collection methods were left to the discretion of the individual scientist. When selecting sites, scientists prioritised areas that were under-surveyed and had high potential for new or significant discoveries. They also considered the suitability of the site based on access, collection technique, habitat type and time available. For true bugs, sites were selected primarily for plants that were in flower or had fresh vegetation.

Site locations were recorded using global positioning systems. Specific details about site selection and collection methods can be found in the individual scientific reports.

Identification and curation

The specimens taken were identified using the holdings of museums and herbaria and available literature (references are provided in the scientific reports). To confirm the identification of several morphologically cryptic reptile and frog species, mitochondrial DNA sequences were obtained from tissue samples collected during the surveys.

Fauna specimens were deposited at the MAGNT, with duplicates of Heteroptera specimens deposited in the UNSW entomology collection and duplicates of reptiles and frogs lodged at the Australian Museum. Vascular plants were deposited at the NT Herbarium.

Results

Summary of records

Preliminary results indicate that at least 751 species were recorded during the Bush Blitz, including approximately 12 putative new to science – these await formal identification. Five threatened animal species, 1 threatened plant, 2 introduced and pest animal species and 9 weed species were also recorded.

Table 2 provides a summary of the flora and fauna records made on the expedition.

Table 2 Summary of flora and fauna records

Group	Common name	Total species recorded	Putative new species	Threatened species	Introduced and pest species
Mammalia	Mammals	21	0	3	0
Aves	Birds	26	0	1	0
Reptilia	Reptiles	33	1	1	1
Amphibia	Frogs	11	1	0	0
Actinopterygii	Fishes	18	0	0	0
Lepidoptera	Butterflies	43	0	0	0
Heteroptera	True bugs	50	8	0	1
Odonata	Dragonflies and damselflies	33	0	0	0
Crustacea	Crustaceans	2	0	0	0
Chilopoda	Centipedes	1	0	0	0
Mollusca	Molluscs	115	1	0	0
Annelida	Segmented worms	28	1	0	0
Nemertea	Ribbon worms	2	0	0	0
Platyhelminthes	Flatworms	3	0	0	0
Vascular flora	Vascular plants	363	0	1	9
Bryophytes	Mosses	1	0	0	0
Algae	Algae	1	0	0	0
Total		751	12	6	11

Note: Threatened species include those listed as threatened under the Commonwealth EPBC Act or an equivalent listing under the *Territory Parks and Wildlife Conservation Act 1976* (NT). Introduced and pest species may include species that are native to Australia but outside their natural range.

Species lists

Lists of all species recorded during the expedition ([Appendix A](#)) were compiled using data from participating institutions.

Some specimens were only able to be identified to family or genus level. This is partly because identification of specimens is very time-consuming, with detailed microscopic examination needed in many cases. Some groups are also ‘orphans’ – currently no experts are working on

them or are available to work on them and the taxonomic literature is out of date. Species-level identification is therefore not possible for these groups.

Unidentified Bush Blitz specimens are held in institutional collections where they are available for future study. Collections hold many such specimens, among them species not yet described (that is, unnamed species) as well as described species that have not yet been identified. For example, the Australian National Insect Collection holds tens of thousands of unidentified specimens. Specimens often wait decades before the resources become available for their study. A key component of Bush Blitz is the funding of taxonomic work on specimens collected during Bush Blitz expeditions.

An estimated 10,500 mollusc specimens, comprising 800 species, were collected on the expedition, including many shells of dead molluscs. The species list only contains live molluscs collected because there is no way to tell where the specimen lived when only a shell is found.

Nomenclature and taxonomic concepts used in this report are consistent with the Australian Faunal Directory, the World Register of Marine Species, the Australian Plant Name Index, the Australian Plant Census and AusMoss.

Discussion

Putative new species

Here we use the term 'putative new species' to mean an unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz. A putative new species is confirmed as a new species once it is named and its description is published.

At least 12 putative new species were discovered during the expedition. Further research may reveal additional new species in the material collected.

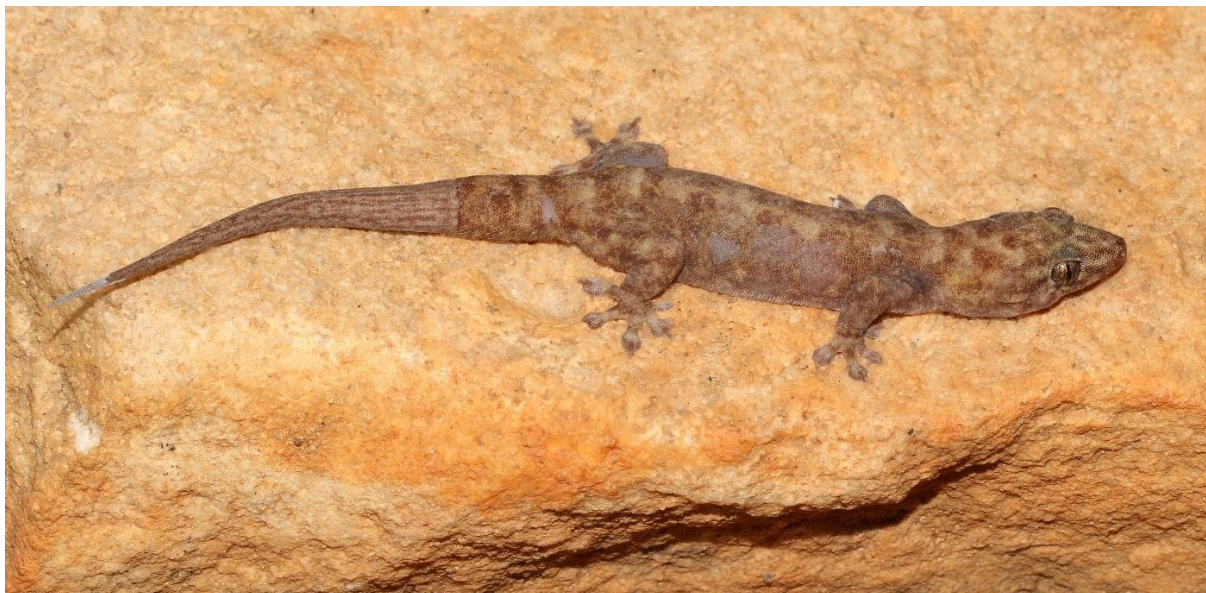
Reptiles and frogs

Preliminary molecular data from reptile and frog specimens collected during the expedition revealed the presence of 2 morphologically cryptic species that are potentially new to western science.

Two individual dtellas (geckos in the genus *Gehyra*) collected may also represent a distinct species, being genetically divergent from the previously known dtellas on the island.

Some of the 7 individuals of Northern Dwarf Tree Frog (*Litoria bicolor*) collected at various localities throughout Groote Eylandt may also represent a distinct species (*Litoria* aff. *bicolor*), as they formed a distinct molecular clade from other individuals on the island. Further molecular, morphological and bioacoustic work is underway to confirm their status.

Figure 2 New species of gecko, *Gehyra* sp. 3



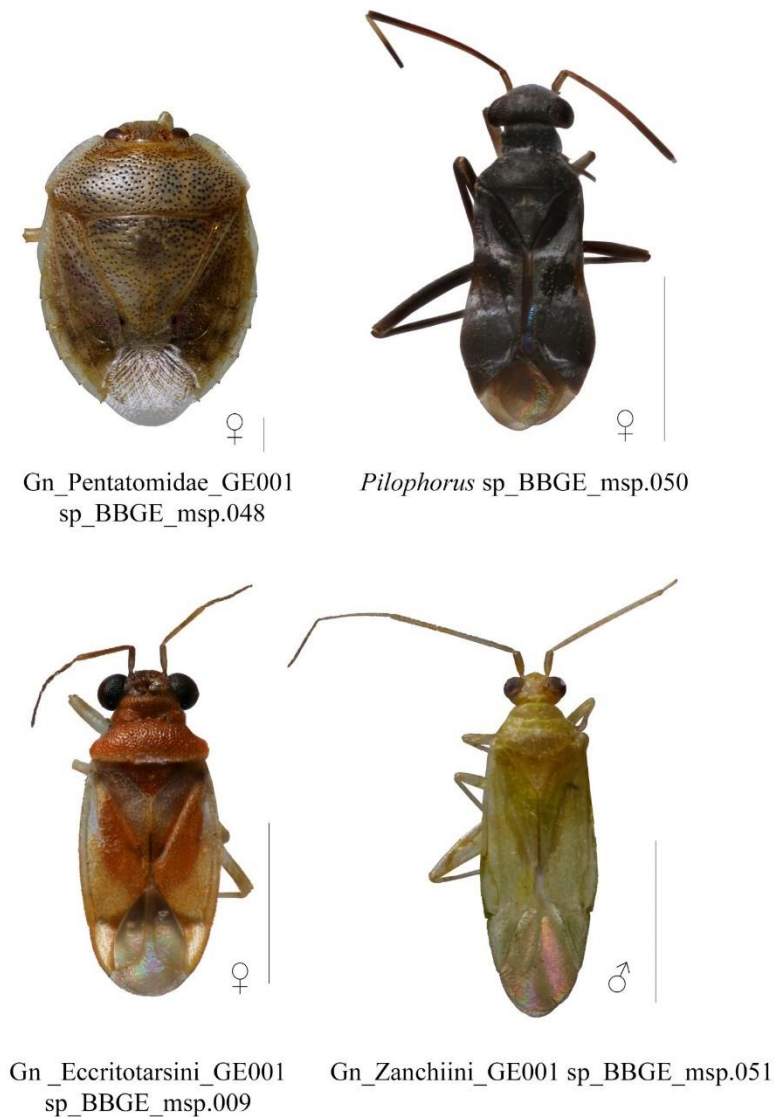
Photograph: Dane Trembath © Copyright, Australian Museum.

True bugs (Heteroptera)

Of the 50 species of true bugs collected during the expedition, 8 are putatively new to science. They require further study and detailed dissections.

Most of the new species belong to the family Miridae (plant bugs). This is expected, given the hyperdiversity of the family worldwide and in Australia. Further study and survey may reveal additional new species among specimens collected from the subfamily Phylinae. In addition to the Miridae, there is one putative new species from the family Tingidae and one from Pentatomidae.

Figure 3 Some of the putative new species of true bugs



Scale bars= 1mm

Photograph: Arlee McMahan © Copyright, UNSW.

Molluscs

One of the larger species of land snails collected, *Xanthomelon* sp. 'North East Isles', is potentially new to science. Specimens are being investigated by an expert in Australian land snails, Dr Frank Koehler.

Figure 4 Live individual of *Xanthomelon* sp. 'North East Isles'



Photograph: © Copyright, Adam Bourke.

This species appears to be endemic to North East Island and Hawk Island. Although collected on both islands, live specimens were only found on North East Island, where they were rare and restricted to small pockets of residual vegetation. The mollusc report includes advice that, if this species is new to science, conservation measures are recommended to protect the snail from the impact of feral animals.

Further analysis is needed to confirm if any of the micromolluscs are new to science.

Worms

One species of bristle worm (*Namalycastis* sp. 'BBG1') was identified as a new species as a direct result of the expedition.

Plants

Although no immediately recognisable new plant taxa were identified during the expedition, 2 non-vascular taxa, an alga and a moss, are awaiting identification by specialist taxonomists.

Threatened species

Approximately 92% of Australian plants, 87% of mammals, 93% of reptiles and 45% of birds are endemic (Chapman 2009). Changes to the landscape resulting from human activity have put many of these unique species at risk. Over the last 200 years, many species have gone extinct; many others are considered to be threatened – that is, at risk of extinction.

In this report, the term 'threatened species' refers to species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth) (EPBC Act) or the *Territory Parks and Wildlife Conservation Act 1976* (Northern Territory) (TPWC Act).

Mammals

A Ghost Bat was observed hunting large moths in dune habitat in the central part of Hawk Island. Subsequent searches of small sandstone overhangs at nearby locations revealed the presence of several nocturnal Ghost Bat feeding sites, identified by characteristic scats and prey remains, including large insects and several birds. This is the first record of a Ghost Bat on Hawk Island, however previous surveys suggest the species is widespread on Groote and adjacent islands.

Reptiles

The semi-aquatic Merten's Water Monitor (*Varanus mertensi*) was recorded at all freshwater sites. This species is known to have experienced population declines in the Daly River region of the Northern Territory due to predation on toxic Cane Toads.

Table 3 Threatened fauna species – mammals, birds and reptiles

Family	Species	Common name	Status
Dasyuridae	<i>Dasyurus hallucatus</i>	Northern Quoll	Endangered (EPBC Act), Critically Endangered (TPWC Act)
Megadermatidae	<i>Macroderma gigas</i>	Ghost Bat	Vulnerable (EPBC Act)
Muridae	<i>Notomys aquilo</i>	Northern Hopping-mouse	Endangered (EPBC Act), Vulnerable (TPWC Act)
Tytonidae	<i>Tyto novaehollandiae kimberli</i>	Northern Masked Owl	Vulnerable (EPBC Act and TPWC Act)
Varanidae	<i>Varanus mertensi</i>	Merten's Water Monitor	Vulnerable (TPWC Act)

Vascular plants

One of the most unexpected findings of the expedition was the discovery of about 50 individuals of the bladderwort *Utricularia singeriana* at Salt Creek on Groote Eylandt. This is the first record of the threatened species on the island and a large range extension, with known records from the Darwin rural area, and Litchfield, Nitmiluk and Kakadu national parks. Further survey effort would be required in seasonally waterlogged habitats, at the optimal time of the year, to determine if the species is present at other locations on Groote Eylandt.

An additional 15 species of conservation significance were collected and are included in Table 4.

Table 4 Threatened flora species and species of conservation significance

Family	Species	Status (TPWC Act)
Araliaceae	<i>Trachymene tenuifolia</i>	Data Deficient
Centrolepidaceae	<i>Centrolepis</i> sp. <i>carinate</i> (L.A.Craven & C.R.Dunlop 6668)	Data Deficient
Centrolepidaceae	<i>Centrolepis</i> sp. <i>squamose seeds</i> (P.K.Latz 3581)	Data Deficient
Convolvulaceae	<i>Polymeria pusilla</i>	Data Deficient
Droseraceae	<i>Drosera finlaysoniana</i>	Data Deficient
Droseraceae	<i>Drosera nana</i>	Data Deficient
Hydatellaceae	<i>Trithuria cowieana</i>	Data Deficient
Lentibulariaceae	<i>Utricularia singeriana</i>	Vulnerable
Linderniaceae	<i>Lindernia tectanthera</i>	Data Deficient
Lindsaeaceae	<i>Lindsaea media</i>	Near Threatened
Menyanthaceae	<i>Nymphoides exiliflora</i>	Data Deficient
Poaceae	<i>Coelachne pulchella</i>	Data Deficient
Rhizophoraceae	<i>Bruguiera sexangula</i>	Near Threatened
Rubiaceae	<i>Oldenlandia mitrasacmoides</i> subsp. <i>nigricans</i>	Data Deficient
Stylidiaceae	<i>Stylidium osculum</i>	Near Threatened
Stylidiaceae	<i>Stylidium tenerum</i>	Data Deficient

Introduced and pest species

Conservation reserves help to protect Australia's rare and threatened ecosystems and provide 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 introduced and pest species records as part of this report is designed to provide land managers with baseline information to assist with further pest management programs.

Very few introduced and pest animal and plant species were encountered during the expedition. In part, this is because the expedition focused on remote parts of the island. The most likely sites for introduced species, including the Gemco wharf at Alyangula, were not sampled.

Vertebrates

Table 5 lists the only introduced vertebrate species officially recorded during the expedition. However, evidence of grazing by feral Rusa Deer (*Cervus timorensis*) was seen on North East Island.

Table 5 Introduced and pest vertebrate species – reptiles

Family	Species	Common name	Comments
Gekkonidae	<i>Hemidactylus frenatus</i>	Asian House Gecko	Common on buildings throughout Alyangula

Although Cane Toads are common throughout much of the Northern Territory, they are not present on Groote Eylandt thanks to a strong biosecurity program. Continued vigilance to prevent their introduction and establishment on Groote Eylandt is of the utmost importance. A specimen that had recently been intercepted at Alyangula was provided for the MAGNT collection.

Invertebrates

Table 6 lists the only pest invertebrate confirmed found in the study area. The Green Mirid (*Creontiades dilutus*) is a major cotton pest in Australia, and is also found on a range of other crops. *Leptocorisa* sp_BBGE_msp.002 is likely to be the pest species *L. acuta* but its identify needs to be confirmed. In addition, *Amblypelta* sp_BBGE_msp.053 may be of economic interest, if it is one of the economic members of the genus. Two additional pest species of true bug have been reported previously from Groote Eylandt – *Phaenacantha australiae* (Colobathristidae) and *Megymenum affine* (Dinidoridae) – but neither were collected during the expedition.

Table 6 Introduced and pest invertebrate species – true bugs

Group	Family	Species	Common name	Comments
True bugs	Miridae	<i>Creontiades dilutus</i>	Green Mirid	Single specimen at base camp light sheet

Vascular plants

Survey sites for plants were generally located in remote areas. As weed species are more likely to be detected in the vicinity of communities and other development, weeds recorded by zoological teams have also been included. During butterfly field work, 2 declared weed species were noted – these are listed in Table 7. Perennial Mission Grass (*Cenchrus polystachios*) and Hyptis (*Mesosphaerum suaveolens*), common weeds found across the Top End of the Northern Territory, are considered Class B weeds under the *Weeds Management Act 2001* (Northern

Territory). Both species were observed along the verge of a number of roads and tracks near Angurugu.

Table 7 Gazetted weeds

Family	Species	Common name	Location and comments
Lamiaceae	<i>Mesosphaerum suaveolens</i> (syn. <i>Hyptis suaveolens</i>)	Hyptis, Mint Weed	Noted in dried stands 1 km SW of Top Crossing, Angurugu River; not seen elsewhere on the island
Poaceae	<i>Cenchrus polystachios</i>	Perennial Mission Grass	On verges of roads around Angurugu township, mostly on first few km of access road to the south of the island; only noted in thick monotypic stands on road verges

An additional 7 introduced plant species were recorded by the botanists and are listed in Table 8. Most of these weeds were recorded at the airport and were first records for Groote Eylandt.

Table 8 Non-gazetted weeds

Family	Species	Common name	Location and comments
Convolvulaceae	<i>Evolvulus nummularius</i>	na	Groote Eylandt Airport; locally common on airstrip; first record for Groote Eylandt
Fabaceae	<i>Alysicarpus ovalifolius</i>	na	Ayarina Bay; locally common on side of track adjacent to drainage system; first record for Groote Eylandt
Fabaceae	<i>Stylosanthes viscosa</i>	Sticky Stylo	Groote Eylandt Airport; locally common on airstrip; first record for Groote Eylandt
Malvaceae	<i>Sida acuta</i>	Spiny-head Sida	Groote Eylandt Airport; locally common on airstrip; numerous records
Molluginaceae	<i>Trigastrotheca pentaphylla</i>	na	Groote Eylandt Airport; locally common on airstrip; first record for Groote Eylandt
Poaceae	<i>Bothriochloa pertusa</i>	na	Groote Eylandt Airport; locally common on airstrip; first record for Groote Eylandt
Poaceae	<i>Digitaria bicornis</i>	na	Makbumanja Point; fourth record for Groote Eylandt

na Not available.

Range extensions

During the expedition, many species were recorded for the first time on Groote Eylandt. Only the most notable range extensions and infills are listed in Table 9. Further details on other new records and range extensions are available in the scientific reports.

The Northern River Prawn (*Macrobrachium bullatum*) and 7 fish species were recorded on Groote Eylandt for the first time. Prior to the survey there were very few documented records of estuarine gobies. The number of *Mugilogobius* species recorded on Groote Eylandt increased from 1 to 5 as part of 7 infill records for estuarine gobies. In addition, Northern Purplespotted Gudgeon (*Mogurnda mogurnda*) was recorded from additional drainages on the north of Groote Eylandt.

Of the 43 species of butterfly recorded during the expedition, 13 are considered range extensions. While 12 of these had been observed on the island before, they were collected for the

first time during this expedition. The Orange Migrant (*Catopsilia scylla etesia*) was a new record for Groote Eylandt.

Although they are not considered significant range extensions, 4 of the true bug species recorded during the expedition were new records for Groote Eylandt.

Of the 33 dragonfly and damselfly species recorded, 18 represent large range extensions and 6 are significant infill records. These include 8 species that were recorded for the first time on Groote Eylandt, and 17 that had been recorded before but were collected for the first time.

All of the described marine worm species recorded during the expedition are considered range extensions because there are no published records of marine worms from Groote Eylandt.

Significant range extensions were recognised for 50 plant taxa, which were recorded for the first time on Groote Eylandt. These newly recorded species were predominantly annual herbs of damp or seasonally wet habitats. The majority represent range extensions of greater than 100 km from similar sandstone habitats and drainage systems in east Arnhem Land. Only the range extensions of more than 200 km are listed in Table 9.

Table 9 Range extensions

Group	Family	Species	Comments
Fishes	Gobiidae	<i>Mugilogobius mertoni</i>	North East Island; 150 km from Nhulunbuy, NT and 1000 km from eastern Australia
	Gobiidae	<i>Mugilogobius platystoma</i>	Lower Angurugu Creek; 300 km from Wessel Islands, NT and 600 km from Weipa, Qld
	Gobiidae	<i>Mugilogobius</i> sp. (yellow)	Emerald River mouth; 500 km from Maningrida, NT and 600 km from Weipa, Qld
Butterflies and moths	Pieridae	<i>Catopsilia scylla etesia</i>	ALC ranger station; ~200 km ENE of Roper River, NT; visual record only
Dragonflies and damselflies	Aeshnidae	<i>Anax gibbosulus</i>	ALC ranger station, Kings Crossing and Market Garden; ~400 km ENE of Elosey NP, NT
	Coenagrionidae	<i>Pseudagrion lucifer</i>	Top Crossing and Kings Crossing; ~450 km ESE of Jim Jim Lagoon, NT
	Libellulidae	<i>Nannophlebia eludens</i>	Top Crossing; ~ 400 km ESE of Radon Springs, NT
	Libellulidae	<i>Nannophlebia mudginberri</i>	20 km ESE of Angurugu; ~400 km ESE of Oenpelli, NT
Molluscs	Onchidiidae	<i>Peronia willani</i>	Previously only known from Darwin Harbour
Segmented worms	Chrysopetalidae	<i>Bhawania amboinensis</i> sp. group	South Point; Nhulunbuy, NT; widely distributed throughout the Indo-west Pacific
	Nereididae	<i>Perinereis helleri</i>	W coast Groote Eylandt; Cape York, Qld; widespread in northern Australia
	Nereididae	<i>Perinereis nigropunctata</i>	South Point; Cape York, Qld; widespread in northern Australia
	Nereididae	<i>Perinereis nuntia</i> sp. group	West coast Groote Eylandt; Lizard Island, northern Great Barrier Reef, Qld; widespread in Indo-west Pacific and northern Australia, but only sand habitats
	Nereididae	<i>Perinereis vancaurica</i>	Emerald Creek; Nhulunbuy, NT; widely distributed throughout the Indo-west Pacific

Group	Family	Species	Comments
	Orbiniidae	<i>Leitoscoloplos latibranchus</i>	Emerald Creek; Darwin, NT; widespread in Australia
	Syllidae	<i>Myrianida pachycera</i>	South Point; Nhulunbuy, NT; widely distributed throughout the Indo-west Pacific and northern Australia
Vascular plants	Convolvulaceae	<i>Evolvulus nummularius</i>	Groote Eylandt Airport; 230 km (Borrooloola, NT); introduced prostrate herb
	Droseraceae	<i>Drosera aquatica</i>	Castle Rock; 210 km (central Arnhem Land, NT); annual insectivorous herb; scattered distribution across the Top End
	Droseraceae	<i>Drosera finlaysoniana</i>	Amungkwalya Beach; 200 km (Limmen NP, NT); annual, insectivorous herb
	Droseraceae	<i>Drosera serpens</i>	Minyara Creek, Castle Rock, Enungwadena Crossing, Amungkwalya Beach, Murrukwulya Creek; 200 km (central Arnhem Land, NT); annual insectivorous herb; widespread in the Top End and very common on Groote Eylandt
	Goodeniaceae	<i>Goodenia neglecta</i>	Murrukwulya Creek; 260 km (Ramingining, east Arnhem Land, NT); annual herb; found in the western Top End between Oenpelli and Darwin
	Hydatellaceae	<i>Trithuria cowieana</i>	Amungkwalya Beach; 440 km (Nitmiluk NP, Northern Marrawal Plateau, NT); annual herb; few records in Darwin region, Kakadu and Nitmiluk NP
	Lentibulariaceae	<i>Utricularia singeriana</i>	Salt Creek; 430 km (Kakadu NP, NT); annual insectivorous herb; Vulnerable (TPWC Act); endemic to NT where known from Nitmiluk NP and Darwin rural area along the margins of drainage flats
	Loganiaceae	<i>Mitrasacme ambigua</i>	Central Hill; 210 km (east Arnhem Land, NT); annual herb; widespread across Top End; occurs from Packhorse Range, WA, to Cooktown, Qld
	Menyanthaceae	<i>Nymphoides exiliflora</i>	Minyara Creek; 200 km (east Arnhem Land, NT); semi-aquatic; in NT known from the Mann River area and from the Goyder River region, east Arnhem Land
	Molluginaceae	<i>Trigastrotheca pentaphylla</i>	Groote Eylandt Airport; 210 km (Ngukurr, NT); introduced herb
	Polygalaceae	<i>Salomonina ciliata</i>	Enungwadena Crossing; 230 km (east Arnhem Land, NT); annual herb; relatively common across Top End in drainage depressions, on seasonally waterlogged soils
	Stylidiaceae	<i>Stylidium osculum</i>	Central Hill; 440 km (Edith Falls area, Katherine, NT); annual herb; Near Threatened (TPWC Act)
	Stylidiaceae	<i>Stylidium tenerum</i>	Minyara Creek; 240 km (east Arnhem Land, NT); annual herb; distribution is low across east Arnhem Land and offshore islands, NT
	Xyridaceae	<i>Xyris pusilla</i>	Enungwadena Crossing; 240 km (Limmen NP, NT); annual herb; scattered distribution in Limmen, Litchfield, Kakadu and Nitmiluk NP

Other significant findings

The expedition provided an opportunity for scientists to make other observations, and collect data and materials important for future research. For example, the expedition allowed scientists to collect vouchered specimens and tissue samples that will facilitate ongoing systematic studies.

Bats

Tissue samples obtained from 13 individuals of forest bats (*Vespadelus* sp.) captured at roosts in Alyangula and Angurugu, will help scientists work out which species of *Vespadelus* is present on Groote Eylandt. Acoustic data indicates strongly that only one species of *Vespadelus* is present, and calls are most similar to *V. finlaysoni*. While there are multiple museum specimens and other records of *Vespadelus caurinus* from Groote Eylandt, the only *Vespadelus* genetically sequenced from Groote in recent years was a single *V. finlaysoni*. This call and genetic data suggests that the species present is *V. finlaysoni* but with a smaller size than mainland individuals, leading to confusion in past identifications based on body measurements. Analysis of the tissue samples is underway at the Australian Museum.

During the bat surveys, several other threatened or noteworthy vertebrate species were observed, including several sightings of Northern Masked Owl (*Tyto novaehollandiae kimberli*), Black Bittern (*Ixobrychus flavicollis*), Merten's Water Monitor (*Varanus mertensi*) and Carpentarian False-antechinus (*Pseudantechinus mimulus*). A list of vertebrate fauna species sighted incidentally during the expedition is included in [Appendix A](#).

Reptiles and frogs

Vouchers and tissue samples collected during the expedition will be vital in resolving the true diversity of amphibians and reptiles on Groote Eylandt. All specimens vouchered had tissue samples preserved in the field. Upon return to the Australian Museum, a subset of specific genera that were difficult to identify or were part of known species complexes were analysed using molecular genetics. These analyses confirmed that:

- 2 species of toadlets, the Floodplain Toadlet (*Uperoleia inundata*) and Stonemason Toadlet (*Uperoleia lithomoda*), are present on the island – these 2 species are very hard to distinguish in the field unless they are calling
- froglets collected were the Remote Froglet (*Crinia remota*), and not the often-confused Bilingual Froglet (*Crinia bilingua*), which have previously been reported from the island
- a large tadpole was confirmed to be a Marbled Frog (*Limnodynastes convexiusculus*), the only record of the species during the expedition
- the Northern Dwarf Tree Frogs (*Litoria* aff. *bicolor*) that are present on the island form 2 distinct genetic clades, with a possible scientifically undescribed species
- the geckos (*Gehyra* sp.) present on the island form 3 distinct genetic clades not present on the mainland and each represents a potentially undescribed species
- the Pygmy Mulga Snakes (*Pseudechis* aff. *weigeli*) present on the island, are possibly an undescribed species that is present throughout the entire Top End of the Northern Territory
- the death adders collected are the Rugose Death Adder (*Acanthophis rugosus*).

- the monitor lizards in the woodlands of Groote Eylandt are Sand Goannas (*Varanus gouldii*).

Fishes

The targeted survey for fishes added significant spatial information on species distributions in the IPA, from escarpment habitats, mangroves and to the near shore North East Island. Tissue samples were taken from all species collected and for multiple individuals and locations of each. These have been accessioned into the MAGNT collection and are available for future taxonomic and phylogenetic studies to better understand the biodiversity and significance of the Groote Eylandt fauna.

Several freshwater fish groups are known to represent a cryptic species complex. Several distinct lineages are known in the Northern Purplespotted Gudgeon and it is unknown which forms/s are present on Groote Eylandt. Samples of Northern Purplespotted Gudgeon were collected from most of the larger drainage systems and these will aid a broader revision of the genus. Similarly, the identity of rainbowfishes on the island has been the subject of historical confusion. Based on examination of material and photos from this expedition, along with a review of historical material, previous reports of Banded Rainbowfish (*Melanotaenia trifasciata*) and Northern Rainbowfish (*Melanotaenia solata*) from Groote Eylandt were actually a slightly more slender local form of Eastern Rainbowfish – the Chequered Rainbowfish (*Melanotaenia splendida inornata*). An outlying and restricted population of Sooty Grunter (*Hephaestus fuliginosus*) was also confirmed in the eastern escarpment.

Some unique goby behaviour was observed within the Groote Eylandt mangrove ecosystems. Two species were recorded resting within woody debris in areas exposed to the air well above the low tide water level, for what would have been considerable periods. Both the Island Mangrovegoby (*Mugilogobius platystoma*) and Threadfin Mangrovegoby (*Mugilogobius filifer*) were found inside cavities in small logs in areas with absolutely no standing water in the habitat. These sorts of gobies are known to live down burrows and crab holes allowing them to access the water table, but resting in woody debris is a unique observation, and an adaptation that may assist survival with the sometimes irregular tidal movements in the area.

Butterflies and Odonata (dragonflies and damselflies)

As there had been no previous dedicated surveys on Groote Eylandt for butterflies or Odonata, this expedition established a baseline list of species. Groote Eylandt was found to support a moderate diversity of species that are characteristic of the tropical woodland, riparian, and escarpment communities of northern Australia. Further surveys at other times of year, and in differing habitats, need to be conducted to ascertain what additional species are present. For odonates, this is especially true of the lakes and wetlands in the southeast of the island that were unable to be sampled during this expedition. A review of ALA and communications with local enthusiasts ascertained there are at least 12 butterfly and 10 odonate species present on the island that were not recorded. Also, 3 dragonfly and 2 damselfly species were observed during the expedition that could not be identified to species.

Voucher specimens were collected for all but one butterfly and one odonate species recorded – Orange Migrant (*Catopsilia scylla etesia*) and Black-headed Skimmer (*Crocothemis nigrifrons*), were only recorded visually. Due to this expedition, the presence of many species can now be confirmed with captured specimens, with visual and photographic records on public databases supplementing these vouchers.

The data collected also indicates the relative abundance of species on Groote Eylandt during the survey period. The most abundant butterfly species were Common Crow (*Euploea corinna*) and Purple Cerulean (*Jamides phaseli*) – both were recorded at 11 of the 19 sites surveyed. As many sites were riparian habitats bordering open woodland (the preferred habitats of these species) this was not an unexpected result. Fifteen butterfly species were only recorded from a single site with a single specimen. The richest survey site in terms of butterfly species diversity was a jungle-lined gorge on the escarpment edge, with a total of 14 species recorded.

The most abundant odonate species was the Pygmy Percher dragonfly (*Nannodiplax rubra*), recorded at 13 of the 18 sites surveyed. This was not surprising, as most sites were near fresh flowing streams, which is the species' preferred habitat. Nine species (6 dragonflies and 3 damselflies) were only recorded from a single site with a single specimen and the richest survey site was Top Crossing on the Angurugu River, with a total of 12 odonate species recorded.

True bugs (Heteroptera)

A high diversity of true bugs was recorded during the expedition – 50 species were collected from 14 families. This was surprising, given the dry season at the time of collecting and the short duration of the survey period. Only 4 of the 50 species collected had been previously recorded on the island. This is most likely an indication of seasonality and monsoonal differences. After the expedition, the total number of true bugs known from Groote Eylandt was 83 species within 19 families. Although many of the identified species are widespread in Australia, there are also species that are restricted to the tropics. The limited surveys of Groote Eylandt and the large number of species collected to date, indicates that future surveys are needed to complete a species list of true bugs for the island.

The majority of species recorded belong to 2 of the 3 most hyperdiverse families, the Miridae (plant bugs) and the Pentatomidae (stink bugs). However, the family with the second largest number of species, the Reduviidae (assassin bugs), was poorly represented.

Many spider and insect species have evolved to resemble ants, often for protection. Among the true bug species collected on the expedition were 4 species that mimic ants.

Groote Eylandt has true bug species that are also known from Papua New Guinea (for example, *Amorbus rhombeus*) and the Oriental region (*Graptostethus servus*). It is unclear whether these species occur naturally on the island. Groote Eylandt is an ideal location for ongoing surveillance because of its location in the Australian Monsoonal Tropics, its proximity to Papua New Guinea and the amount of transport related to mining operations. This expedition will assist with surveillance by contributing to a baseline species list for the island.

Molluscs

Some marine molluscs are consistently larger in size when adult on Groote Eylandt than their mainland counterparts elsewhere in the Northern Territory (for example, *Acanthopleura gemmata*) but others are consistently smaller (for example, *Diodora jukesii*). One mangrove-associated species of gastropod mollusc, *Terebralia sulcata*, displayed a notably greater range of shell sizes when adult than its counterparts on the mainland. Furthermore, this phenomenon was seemingly only restricted to populations of this species on the western coast of Groote Eylandt.

Short-range mainland endemic marine molluscs that are restricted to the north-western most section of the Gulf of Carpentaria are apparently absent from Groote Eylandt.

Although some opportunistic searching in swamps and streams was conducted, no freshwater molluscs were found. However, dedicated sampling of freshwaters in the future might discover previously unknown freshwater mollusc populations, particularly in the lakes at the southern end of Groote Eylandt.

Additional sampling of intertidal or subtidal habitats is recommended, planned to coincide with spring tides and include a subtidal component through SCUBA diving and benthic trawlings.

Worms

Surveys for segmented worms (Annelida), flatworms (Platyhelminthes) and ribbon worms (Nemertea) were conducted in marine coastal habitats on the western shores of the island over 4 days. Seven coastal sites were sampled, including coarse sand beaches, sand bars, and rocky shores. As the habitats sampled were limited, it was not possible to get a full appreciation of 'uniqueness' or 'quality', or to estimate species abundance. The species list therefore underestimates the actual diversity of marine worms on Groote Eylandt. Considering the size and the diversity of habitats on the island, it is possible there are over 500 species. More surveys sampling a greater range of habitats around the island, including offshore substrates are recommended.

Segmented worms, particularly bristle worms, were the most common worms in the intertidal zones, with 29 species representing 15 families, including the Phascolosomatidae (a family of peanut worms). The flatworms and ribbon worms were found only on rocky shores.

Among the segmented worms, the most interesting find was the new record of the bristle worm *Palola* sp. 'BBG1' in a sample of beach rock at South Point. This species is rare in the Northern Territory because its preferred habitat (limestone/beachrock) is limited. Finding this species here highlights how unique the intertidal fauna of the limestone outcrops at South Point and North East Island (not sampled) are, and how important this habitat can be for sheltering endemic species.

Several of the species recorded may be used to indicate the condition of the environment. However, these indicator species were not found in large numbers, suggesting there was no substantial nutrient enrichment.

Vascular plants

Despite the large amount of previous survey effort on Groote Eylandt, and the comprehensive species list, this expedition added 50 new plant taxa to the inventory. In total, 1,040 plant taxa are now known from Groote Eylandt and offshore islands including Bickerton and Winchelsea. There are around 3,300 herbarium specimens from the island, including 487 from this expedition. Further surveys at the right time of the year, that target habitats that have not been well surveyed, may reveal more new records, especially for annual plants (which only live one year) and non-vascular plants.

Six undescribed species were collected during the survey. Although the majority are widespread across the Top End of the NT, there is one endemic to Groote Eylandt (*Sida* sp. Groote Eylandt). One is close to being formally described (*Tephrosia* sp. Muddy Bay).

DNA samples were taken from herbarium specimens at the end of each day or when the samples arrived at the NT Herbarium in Darwin. In total, 409 of the 487 herbarium specimens collected during the expedition have a DNA sample stored at the NT Herbarium.

Seeds were collected from 18 taxa for the Australian Seed Bank Partnership projects and are now housed at the George Brown Darwin Botanic Gardens.

Appendix A: Species lists

Table A1 List of fauna species recorded

Group	Family	Species	Common name
Mammals	Dasyuridae	<i>Dasyurus hallucatus</i> ^{c d}	Northern Quoll
	Dasyuridae	<i>Pseudantechinus mimulus</i>	Carpentarian False-antechinus
	Emballonuridae	<i>Saccolaimus flaviventris</i>	Yellow-bellied Sheath-tail-bat
	Emballonuridae	<i>Taphozous georgianus</i>	Common Sheath-tail-bat
	Hipposideridae	<i>Hipposideros ater</i>	Dusky Leaf-nosed Bat
	Macropodidae	<i>Notamacropus agilis</i>	Agile Wallaby
	Megadermatidae	<i>Macroderma gigas</i> ^c	Ghost Bat
	Molossidae	<i>Chaerephon jobensis</i>	Greater Northern Free-tailed Bat
	Molossidae	<i>Ozimops lumsdenae</i>	Northern Free-tailed Bat
	Muridae	<i>Melomys burtoni</i>	Grassland Melomys
	Muridae	<i>Notomys aquilo</i> ^{c d}	Northern Hopping-mouse
	Muridae	<i>Pseudomys delicatulus</i>	Delicate Mouse
	Muridae	<i>Zygomys argurus</i>	Common Rock-rat
	Petauridae	<i>Petaurus ariel</i>	Savanna Glider
	Pseudocheiridae	<i>Petropseudes dahli</i>	Rock Ringtail Possum
	Pteropodidae	<i>Pteropus alecto</i>	Black Flying-fox
	Vespertilionidae	<i>Chalinolobus nigrogriseus</i>	Hoary Wattled Bat
	Vespertilionidae	<i>Myotis macropus</i>	Southern Myotis
	Vespertilionidae	<i>Nyctophilus arnhemensis</i>	Arnhem Leaf-nosed Bat
	Vespertilionidae	<i>Pipistrellus westralis</i>	Northern Pipistrelle
Vespertilionidae	<i>Vespadelus cf finlaysoni</i>	Finlayson's Cave Bat	
Birds	Acanthizidae	<i>Gerygone chloronota</i>	Green-backed Gerygone
	Acanthizidae	<i>Gerygone levigaster</i>	Mangrove Gerygone
	Ardeidae	<i>Ixobrychus flavicollis</i>	Black Bittern
	Burhinidae	<i>Burhinus grallarius</i>	Bush Stone-curlew
	Campephagidae	<i>Lalage leucomela</i>	Varied Triller
	Caprimulgidae	<i>Eurostopodus argus</i>	Spotted Nightjar
	Charadriidae	<i>Charadrius ruficapillus</i>	Red-capped Plover
	Charadriidae	<i>Vanellus miles</i>	Masked Lapwing
	Dicruridae	<i>Dicrurus bracteatus</i>	Spangled Drongo
	Estrildidae	<i>Stizoptera bichenovii</i>	Double-barred Finch
	Laridae	<i>Chroicocephalus novaehollandiae</i>	Silver Gull
	Megapodiidae	<i>Megapodius reinwardt</i>	Orange-footed Scrubfowl
	Meliphagidae	<i>Lichmera indistincta</i>	Brown Honeyeater

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Group	Family	Species	Common name
	Meliphagidae	<i>Myzomela sanguinolenta</i>	Scarlet Honeyeater
	Meliphagidae	<i>Philemon citreogularis</i>	Little Friarbird
	Meliphagidae	<i>Stomiopera unicolor</i>	White-gaped Honeyeater
	Meropidae	<i>Merops ornatus</i>	Rainbow Bee-eater
	Monarchidae	<i>Myiagra alecto</i>	Shining Flycatcher
	Pachycephalidae	<i>Pachycephala melanura</i>	Mangrove Golden Whistler
	Pachycephalidae	<i>Pachycephala simplex</i>	Grey Whistler
	Pittidae	<i>Pitta iris</i>	Rainbow Pitta
	Ptilonorhynchidae	<i>Chlamydera nuchalis</i>	Great Bowerbird
	Rallidae	<i>Eulabeornis castaneiventris</i>	Chestnut Rail
	Rallidae	<i>Porphyrio porphyrio</i>	Purple Swamphen
	Strigidae	<i>Ninox novaeseelandiae</i>	Southern Boobook
	Tytonidae	<i>Tyto novaehollandiae kimberli</i> ^{c d}	Northern Masked Owl
Reptiles	Agamidae	<i>Chlamydosaurus kingii</i>	Frilled Lizard
	Agamidae	<i>Diporiphora bilineata</i>	Two-lined Dragon
	Agamidae	<i>Lophognathus gilberti</i>	Gilbert's Dragon
	Colubridae	<i>Boiga irregularis</i>	Brown Tree Snake
	Colubridae	<i>Dendrelaphis punctulatus</i>	Common Tree Snake
	Colubridae	<i>Tropidonophis mairii</i>	Freshwater Snake
	Diplodactylidae	<i>Amalosia rhombifer</i>	Zigzag Velvet Gecko
	Diplodactylidae	<i>Lucasium stenodactylus</i>	Western Sandplain Gecko
	Diplodactylidae	<i>Oedura nesos</i>	Marbled Velvet Gecko
	Elapidae	<i>Acanthophis rugosus</i>	Papuan Death Adder
	Elapidae	<i>Furina ornata</i>	Moon Snake
	Elapidae	<i>Pseudechis</i> aff. <i>weigeli</i>	na
	Gekkonidae	<i>Gehyra</i> sp. 1	na
	Gekkonidae	<i>Gehyra</i> sp. 2	na
	Gekkonidae	<i>Gehyra</i> sp. 3 ^a	na
	Gekkonidae	<i>Hemidactylus frenatus</i> ^b	Asian House Gecko
	Gekkonidae	<i>Heteronotia binoei</i>	Bynoe's Gecko
	Pygopodidae	<i>Delma borea</i>	Rusty-topped Delma
	Pythonidae	<i>Morelia spilota variegata</i>	Carpet Python
	Scincidae	<i>Carlia amax</i>	Bauxite Rainbow-skink
	Scincidae	<i>Carlia munda</i>	Shaded-litter Rainbow-skink
	Scincidae	<i>Carlia sexdentata</i>	Robust Rainbow Skink
	Scincidae	<i>Cryptoblepharus metallicus</i>	Metallic Snake-eyed Skink
	Scincidae	<i>Ctenotus inornatus</i>	Bar-shouldered Ctenotus
	Scincidae	<i>Ctenotus quirinus</i>	Arnhem Land Ctenotus
	Scincidae	<i>Eremiascincus isolepis</i>	Northern Bar-lipped Skink
	Scincidae	<i>Lerista carpentariae</i>	Carpentarian Slider

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Group	Family	Species	Common name	
	Scincidae	<i>Menetia alanae</i>	Top-end Dwarf Skink	
	Scincidae	<i>Notoscincus ornatus</i>	Ornate Soil-crevice Skink	
	Scincidae	<i>Tiliqua scincoides intermedia</i>	Northern Blue-tongued Skink	
	Varanidae	<i>Varanus gouldii</i>	Gould's Goanna	
	Varanidae	<i>Varanus mertensi</i> ^d	Mertens' Water Monitor	
	Varanidae	<i>Varanus scalaris</i>	Spotted Tree Monitor	
Frogs	Hylidae	<i>Litoria</i> aff. <i>bicolor</i> ^a	na	
	Hylidae	<i>Litoria bicolor</i>	Northern Dwarf Tree Frog	
	Hylidae	<i>Litoria nasuta</i>	Rocket Frog	
	Hylidae	<i>Litoria rothii</i>	Northern Laughing Tree Frog	
	Hylidae	<i>Litoria rubella</i>	Desert Tree Frog	
	Hylidae	<i>Litoria spaldingi</i>	Spalding's Rocket Frog	
	Limnodynastidae	<i>Limnodynastes convexiusculus</i>	Marbled Frog	
	Myobatrachidae	<i>Crinia remota</i>	Remote Froglet	
	Myobatrachidae	<i>Platyplectrum ornatum</i>	Ornate Burrowing Frog	
	Myobatrachidae	<i>Uperoleia inundata</i>	Floodplain Toadlet	
	Myobatrachidae	<i>Uperoleia lithomoda</i>	Stonemason Toadlet	
Fishes	Ambassidae	<i>Ambassis</i> sp. NW	Northwest Glassfish	
	Apogonidae	<i>Glossamia aprion</i>	Mouth Almighty	
	Eleotridae	<i>Hypseleotris compressa</i>	Empire Gudgeon	
	Eleotridae	<i>Mogurnda mogurnda</i>	Northern Purplespotted Gudgeon	
	Gobiidae	<i>Chlamydogobius ranunculus</i>	Tadpole Goby	
	Gobiidae	<i>Mugilogobius filifer</i>	Threadfin Mangrovegoby	
	Gobiidae	<i>Mugilogobius littoralis</i>	Beachrock Mangrovegoby	
	Gobiidae	<i>Mugilogobius mertoni</i>	Chequered Mangrovegoby	
	Gobiidae	<i>Mugilogobius platystoma</i>	Island Mangrovegoby	
	Gobiidae	<i>Mugilogobius</i> sp. (yellow)	Unnamed mangrovegoby	
	Gobiidae	<i>Mugilogobius wilsoni</i>	Wilson's Mangrovegoby	
	Gobiidae	<i>Pseudogobius aquilonius</i>	Northern Snubnose Goby	
	Gobiidae	<i>Pseudogobius hoesei</i>	Bandtail Snubnose Goby	
	Melanotaeniidae	<i>Melanotaenia nigrans</i>	Blackbanded Rainbowfish	
	Melanotaeniidae	<i>Melanotaenia splendida inornata</i>	Chequered Rainbowfish	
	Plotosidae	<i>Neosilurus ater</i>	Black Catfish	
	Terapontidae	<i>Amniataba percoides</i>	Barred Grunter	
	Terapontidae	<i>Hephaestus fuliginosus</i>	Sooty Grunter	
	Butterflies	Hesperiidae	<i>Pelopidas lyelli lyelli</i>	Lyell's Swift
		Hesperiidae	<i>Telicota augias krefftii</i>	Bright-orange Darter
Lycaenidae		<i>Anthene seltuttus affinis</i>	Dark Ciliate-blue	
Lycaenidae		<i>Arhopala eupolis asopus</i>	Purple Oak-blue	

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Group	Family	Species	Common name
	Lycaenidae	<i>Arhopala micale</i>	Shining Oak-blue
	Lycaenidae	<i>Candalides urumelia</i>	Spotted Opal
	Lycaenidae	<i>Catochrysops panormus platissa</i>	Pale Pea-blue
	Lycaenidae	<i>Catopyrops florinda estrella</i>	Speckled Line-blue
	Lycaenidae	<i>Eirmocides margarita gilberti</i>	Trident Pencil-blue
	Lycaenidae	<i>Erina erinus erinus</i>	Small Dusky-blue
	Lycaenidae	<i>Euchrysops cnejus cnidus</i>	Spotted Pea-blue
	Lycaenidae	<i>Famegana nisa</i>	Black-spotted Grass-blue
	Lycaenidae	<i>Freyeria putli putli</i>	Jewelled Grass-blue
	Lycaenidae	<i>Hypolycaena phorbas phorbas</i>	Black-spotted Flash
	Lycaenidae	<i>Jamides phaseli</i>	Purple Cerulean
	Lycaenidae	<i>Liphyra brassolis major</i>	Moth Butterfly
	Lycaenidae	<i>Nacaduba biocellata biocellata</i>	Two-spotted Line-blue
	Lycaenidae	<i>Prosotas dubiosa dubiosa</i>	Purple Line-blue
	Lycaenidae	<i>Theclinesthes miskini miskini</i>	Wattle Blue
	Lycaenidae	<i>Theclinesthes sulphitius</i>	Samphire Blue
	Lycaenidae	<i>Zizina otis labradus</i>	Common Grass-blue
	Nymphalidae	<i>Acraea andromacha andromacha</i>	Glasswing
	Nymphalidae	<i>Acraea terpsicore</i>	Tawny Coster
	Nymphalidae	<i>Danaus affinis affinis</i>	Swamp Tiger
	Nymphalidae	<i>Danaus petilia</i>	Lesser Wanderer
	Nymphalidae	<i>Euploea corinna</i>	Common Crow
	Nymphalidae	<i>Euploea darchia darchia</i>	Small Brown Crow
	Nymphalidae	<i>Hypocysta adiante antirius</i>	Orange Ringlet
	Nymphalidae	<i>Hypolimnas alimena darwinensis</i>	Blue-banded Eggfly
	Nymphalidae	<i>Hypolimnas misippus</i>	Danaid Eggfly
	Nymphalidae	<i>Junonia orithya albicincta</i>	Blue Argus
	Nymphalidae	<i>Junonia villida villida</i>	Meadow Argus
	Nymphalidae	<i>Mydosama sirius sirius</i>	Cedar Bush-brown
	Nymphalidae	<i>Ypthima arctous arctous</i>	Dusky Knight
	Papilionidae	<i>Cressida cressida cressida</i>	Clearwing Swallowtail
	Pieridae	<i>Appias paulina ega</i>	Yellow Albatross
	Pieridae	<i>Catopsilia pomona</i>	Lemon Migrant
	Pieridae	<i>Catopsilia scylla etesia</i>	Orange Migrant
	Pieridae	<i>Cepora perimale</i>	Caper Gull
	Pieridae	<i>Elodina walkeri</i>	Small Pearl-white
	Pieridae	<i>Eurema alitha novaguineensis</i>	Scalloped Grass-yellow
	Pieridae	<i>Eurema hecabe</i>	Large Grass-yellow
	Pieridae	<i>Eurema laeta sana</i>	Lined Grass-yellow
True bugs	Alydidae	<i>Leptocoris</i> sp. BBGE_msp.002	na

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Group	Family	Species	Common name
	Alydidae	<i>Mutusca brevicornis</i>	na
	Alydidae	<i>Noliphus</i> sp. BBGE_msp.021	na
	Alydidae	<i>Riptortus</i> sp. BBGE_msp.022	na
	Coreidae	<i>Amblypelta</i> sp. BBGE_msp.053	na
	Coreidae	<i>Aulacosternum nigrorubrum</i>	na
	Enicocephalidae	<i>Oncycotis</i> sp. BBGE_msp.008	na
	Geocoridae	<i>Germalus</i> sp. BBGE_msp.045	na
	Lygaeidae	<i>Graptostethus servus</i>	na
	Lygaeidae	<i>Oncopeltus</i> GE001 sp. BBGE_msp.004	na
	Mesoveliidae	<i>Mesovelia</i> sp. BBGE_msp.005	na
	Miridae	<i>Arafuramiris queenslandensis</i>	na
	Miridae	<i>Creontiades dilutus</i> ^b	Green Mirid
	Miridae	Gn_Eccritotarsini_GE001 sp. BBGE_msp.009 ^a	na
	Miridae	Gn_Mirinae_GE001 sp. BBGE_msp.017	na
	Miridae	Gn_Mirinae_GE001 sp. BBGE_msp.039	na
	Miridae	Gn_Orthotylinae_GE001 sp. BBGE_msp.020 ^a	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.001	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.006	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.016	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.030	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.034	na
	Miridae	Gn_Phylinae_GE001 sp. BBGE_msp.046	na
	Miridae	Gn_Phylinae_GE002 sp. BBGE_msp.011	na
	Miridae	Gn_Phylinae_GE002 sp. BBGE_msp.023 ^a	na
	Miridae	Gn_Zanchiini_GE001 sp. BBGE_msp.051 ^a	na
	Miridae	<i>Oecophyloides</i> GE001 sp. BBGE_msp.029	na
	Miridae	<i>Pilophorus</i> sp. BBGE_msp.050 ^a	na
	Miridae	<i>Rayieria</i> sp. BBGE_msp.036	na
	Miridae	<i>Setocoris</i> sp. BBGE_msp.042 ^a	na
	Pachygronthidae	<i>Pachygrontha austrina</i>	na
	Pentatomidae	<i>Aspideurus</i> sp. BBGE_msp.037	na
	Pentatomidae	<i>Aspideurus</i> sp. BBGE_msp.047	na
	Pentatomidae	<i>Austromalaya reticulata</i>	na
	Pentatomidae	<i>Cuspicona</i> sp. BBGE_msp.035	na
	Pentatomidae	Gn_Pentatomidae_GE001 sp. BBGE_msp.044	na
	Pentatomidae	Gn_Pentatomidae_GE001 sp. BBGE_msp.048 ^a	na

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Group	Family	Species	Common name
	Pentatomidae	Gn_Rhynchocorrini_GE001 sp. BBGE_msp.049	na
	Pentatomidae	<i>Ocirrhoe</i> sp. BBGE_msp.040	na
	Pentatomidae	<i>Ocirrhoe</i> sp. BBGE_msp.043	na
	Pentatomidae	<i>Oncocoris</i> GE001 sp. BBGE_msp.003	na
	Pentatomidae	<i>Spermatodes</i> sp. BBGE_msp.041	na
	Reduviidae	Gn_Harpactocorini_GE001 sp. BBGE_msp.018	na
	Rhyparochromidae	Gn_Myodochini_GE001 sp. BBGE_msp.025	na
	Rhyparochromidae	Gn_Rhyparochrominae_GE001 sp. BBGE_msp.052	na
	Scutelleridae	<i>Lampromica senator</i>	na
	Tingidae	<i>Eritingis</i> sp. BBGE_msp.028 ^a	na
	Tingidae	<i>Nethersia</i> sp. BBGE_msp.014	na
	Veliidae	<i>Austromicrovelia</i> sp. BBGE_msp.012+	na
	Veliidae	<i>Austromicrovelia</i> sp. BBGE_msp.013+	na
Dragonflies and damselflies	Aeshnidae	<i>Anax gibbosulus</i>	Green Emperor
	Aeshnidae	<i>Anax papuensis</i>	Australian Emperor
	Aeshnidae	<i>Gynacantha nourlangie</i>	Cave Duskhawker
	Coenagrionidae	<i>Aciagrion fragilis</i>	Blue Slim
	Coenagrionidae	<i>Argiocnemis pygmaea</i>	Pygmy Wisp
	Coenagrionidae	<i>Argiocnemis rubescens</i>	Red-tipped Shade-fly
	Coenagrionidae	<i>Austroagrion exclamationis</i>	Northern Billabongfly
	Coenagrionidae	<i>Austroagrion watsoni</i>	Eastern Billabongfly
	Coenagrionidae	<i>Ceriagrion aeruginosum</i>	Redtail
	Coenagrionidae	<i>Ischnura aurora</i>	Aurora Bluetail
	Coenagrionidae	<i>Ischnura heterosticta</i>	Common Bluetail
	Coenagrionidae	<i>Pseudagrion lucifer</i>	Citrine-headed Riverdamsel
	Coenagrionidae	<i>Pseudagrion microcephalum</i>	Blue Riverdamsel
	Corduliidae	<i>Hemicordulia intermedia</i>	Yellow-spotted Emerald
	Libellulidae	<i>Aethriamanta circumsignata</i>	Square-spot Basker
	Libellulidae	<i>Agrionoptera insignis allogenens</i>	Red Swampdragon
	Libellulidae	<i>Crocothemis nigrifrons</i>	Black-headed Skimmer
	Libellulidae	<i>Diplacodes bipunctata</i>	Wandering Glider
	Libellulidae	<i>Diplacodes haematodes</i>	Scarlet Percher
	Libellulidae	<i>Diplacodes trivialis</i>	Chalky Percher
	Libellulidae	<i>Lathrecista asiatica</i>	Australasian Slimwing
	Libellulidae	<i>Nannodiplax rubra</i>	Pygmy Percher
	Libellulidae	<i>Nannophlebia eludens</i>	Elusive Archtail
	Libellulidae	<i>Nannophlebia mudginberri</i>	Top End Archtail

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Group	Family	Species	Common name
	Libellulidae	<i>Neurothemis stigmatizans</i>	Painted Grasshawk
	Libellulidae	<i>Orthetrum caledonicum</i>	Blue Skimmer
	Libellulidae	<i>Orthetrum migratum</i>	Rosy Skimmer
	Libellulidae	<i>Orthetrum sabina</i>	Slender Skimmer
	Libellulidae	<i>Pantala flavescens</i>	Wandering Glider
	Libellulidae	<i>Rhyothemis graphiptera</i>	Graphic Flutterer
	Libellulidae	<i>Tholymis tillarga</i>	Twister
	Libellulidae	<i>Tramea loewii</i>	Common Glider
	Platycnemididae	<i>Nososticta fraterna</i>	Northern Threadtail
Crustaceans	Palaemonidae	<i>Macrobrachium bullatum</i>	Northwest Australian River Prawn
	Parastacidae	<i>Cherax quadricarinatus</i>	Redclaw Yabby
Centipedes	[Order Scolopendromorpha]	Scolopendromorpha sp. BBG 1	na
Molluscs	Achatinidae	<i>Erepeas interioris</i>	na
	Arcidae	<i>Anadara antiquata</i>	na
	Camaenidae	<i>Torresitrachia</i> sp. Bush Blitz Groote 1	na
	Camaenidae	<i>Xanthomelon jannellei</i>	na
	Camaenidae	<i>Xanthomelon</i> sp. Bush Blitz Groote 'North East Isles' ^a	na
	Cardiidae	<i>Vasticardium vertebratum</i>	na
	Carditidae	<i>Beguina semiorbiculata</i>	na
	Carditidae	<i>Cardita pica</i>	na
	Cerithiidae	<i>Cerithium coralium</i>	na
	Cerithiidae	<i>Cerithium columna</i>	na
	Cerithiidae	<i>Clypeomorus bifasciata</i>	na
	Cerithiidae	<i>Rhinoclavis sinensis</i>	na
	Chitonidae	<i>Acanthopleura gemmata</i>	na
	Columbellidae	<i>Euplica scripta</i>	na
	Columbellidae	<i>Euplica varians</i>	na
	Columbellidae	<i>Pictocolumbella ocellata</i>	na
	Columbellidae	<i>Zafra pumila</i>	na
	Conidae	<i>Conus coronatus</i>	na
	Conidae	<i>Conus scabriusculus</i>	na
	Corbulidae	<i>Notocorbula macgillivrayi</i>	na
	Corbulidae	<i>Serracorbula coxi</i>	na
	Cypraeidae	<i>Erronea erronea</i>	na
	Cypraeidae	<i>Lyncina vitellus</i>	na
	Cypraeidae	<i>Mauritia arabica</i>	na
	Cypraeidae	<i>Mauritia eglantina</i>	na
	Cypraeidae	<i>Melicerona listeri</i>	na

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	Cyrenidae	<i>Geloina oviformis</i>	na
	Donacidae	<i>Donax faba</i>	na
	Ellobiidae	<i>Cassidula angulifera</i>	na
	Ellobiidae	<i>Cassidula nucleus</i>	na
	Ellobiidae	<i>Ellobium cf. semisculptum</i>	na
	Ellobiidae	<i>Melampus</i> sp. Bush Blitz Groote 1	na
	Facelinidae	<i>Phyllodesmium poindimiei</i>	na
	Gastrocoptidae	<i>Gastrocopta pediculus</i>	na
	Glauconomidae	<i>Glauconome plankta</i>	na
	Gryphaeidae	<i>Hytissa inermis</i>	na
	Haliotidae	<i>Haliotis squamosa</i>	na
	Haminoeidae	<i>Bakawan rotundata</i>	na
	Helicodiscidae	<i>Stenopylis coarctata</i>	na
	Isognomonidae	<i>Isognomon ephippium</i>	na
	Isognomonidae	<i>Isognomon nucleus</i>	na
	Littorinidae	<i>Echinolittorina austrotrochoides</i>	na
	Littorinidae	<i>Echinolittorina vidua</i>	na
	Littorinidae	<i>Littoraria articulata</i>	na
	Littorinidae	<i>Littoraria filosa</i>	na
	Littorinidae	<i>Littoraria pallescens</i>	na
	Littorinidae	<i>Littoraria undulata</i>	na
	Littorinidae	<i>Littoria intermedia</i>	na
	Littorinidae	<i>Peasiella lutulenta</i>	na
	Lucinidae	<i>Anodontia</i> sp. Bush Blitz Groote 1	na
	Lucinidae	<i>Ctena divergens</i>	na
	Lucinidae	<i>Divaricella irpex</i>	na
	Lucinidae	<i>Wallucina</i> sp. Bush Blitz Groote 1	na
	Mactridae	<i>Mactra maculata</i>	na
	Mactridae	<i>Spisula trigonella</i>	na
	Mesodesmatidae	<i>Atactodea striata</i>	na
	Muricidae	<i>Cronia amygdala</i>	na
	Muricidae	<i>Morulaanaxeres</i>	na
	Muricidae	<i>Morula</i> sp. Bush Blitz Groote 1	na
	Muricidae	<i>Muricodrupa</i> sp. Bush Blitz Groote 1	na
	Muricidae	<i>Tenguella granulata</i>	na
	Muricidae	<i>Thalessa aculeata</i>	na
	Myidae	<i>Tugonia</i> sp. Bush Blitz Groote 1	na
	Mytilidae	<i>Brachidontes crebristriatus</i>	na
	Mytilidae	<i>Leiosolenus malaccanus</i>	na
	Mytilidae	<i>Lithophaga teres</i>	na

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	Mytilidae	<i>Septifer bilocularis</i>	na
	Neritidae	<i>Clithon oualaniense</i>	na
	Neritidae	<i>Neripteron violaceum</i>	na
	Neritidae	<i>Nerita albicilla</i>	na
	Neritidae	<i>Nerita balteata</i>	na
	Neritidae	<i>Nerita chamaeleon</i>	na
	Neritidae	<i>Nerita histrio</i>	na
	Neritidae	<i>Nerita polita</i>	na
	Neritidae	<i>Nerita undata</i>	na
	Noetiidae	<i>Arcopsis afra</i>	na
	Onchidiidae	<i>Peronia willani</i>	na
	Ostreidae	<i>Saccostrea cucullata</i>	na
	Ostreidae	<i>Saccostrea mytiloides</i>	na
	Ostreidae	<i>Saccostrea scyphophilla</i>	na
	Pisaniidae	<i>Cantharus fumosus</i>	na
	Pisaniidae	<i>Cantharus undosus</i>	na
	Planaxidae	<i>Planaxis sulcatus</i>	na
	Plicatulidae	<i>Plicatula australis</i>	na
	Potamididae	<i>Cerithidea anticipata</i>	na
	Potamididae	<i>Cerithideopsis australiensis</i>	na
	Potamididae	<i>Pirenella austrocingulata</i>	na
	Potamididae	<i>Pirenella delicatula</i>	na
	Potamididae	<i>Telescopium telescopium</i>	na
	Potamididae	<i>Terebralia palustris</i>	na
	Potamididae	<i>Terebralia semistriata</i>	na
	Potamididae	<i>Terebralia sulcata</i>	na
	Pupillidae	<i>Pupoides pacificus</i>	na
	Pyramidellidae	<i>Otopleura auriscati</i>	na
	Siphonariidae	<i>Siphonaria cf. normalis</i>	na
	Spondylidae	<i>Spondylus anacanthus</i>	na
	Spondylidae	<i>Spondylus ocellatus</i>	na
	Strombidae	<i>Canarium erythrinum</i>	na
	Strombidae	<i>Canarium labiatum</i>	na
	Strombidae	<i>Canarium orrae</i>	na
	Tellinidae	<i>Iridona iridescens</i>	na
	Tellinidae	<i>Macoma</i> sp. Bush Blitz Groote 1	na
	Tellinidae	<i>Serratina capsoides</i>	na
	Triphoridae	<i>Coriophora fusca</i>	na
	Trochidae	<i>Calthalotia cf. arruensis</i>	na
	Trochidae	<i>Eurytrochus charopiformis</i>	na

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	Trochidae	<i>Monodonta labio</i>	na
	Trochidae	<i>Trochus nigropunctatus</i>	na
	Truncatellidae	<i>Truncatella</i> sp. Bush Blitz Groote 1	na
	Turbinidae	<i>Lunella cinerea</i>	na
	Veneridae	<i>Gafrarium pectinatum</i>	na
	Veneridae	<i>Marcia hiantina</i>	na
	Veneridae	<i>Gafrarium dispar</i>	na
	Vermetidae	<i>Thylacodes adamsii</i>	na
	Volutidae	<i>Melo amphora</i>	na
Segmented worms	[Order Sipuncula]	Sipuncula sp. BBG2	na
	Capitellidae	Capitellidae sp.	na
	Chaetopterae	<i>Spiochaetopterus</i> sp. BBG1	na
	Chrysopetalidae	<i>Bhawania amboinensis</i> sp. group	na
	Chrysopetalidae	<i>Chrysopetalum</i> sp. 7 complex	na
	Eunicidae	<i>Lysidice</i> sp. BBG1	na
	Eunicidae	<i>Palola</i> sp. BBG1	na
	Nereididae	<i>Ceratonereis</i> sp. BBG1	na
	Nereididae	<i>Namalycastis</i> sp. BBG1 ^a	na
	Nereididae	<i>Neanthes</i> sp. BBG1	na
	Nereididae	<i>Perinereis helleri</i>	na
	Nereididae	<i>Perinereis nigropunctata</i>	na
	Nereididae	<i>Perinereis nuntia</i> sp. group	na
	Nereididae	<i>Perinereis vancaurica</i>	na
	Nereididae	<i>Pseudonereis</i> sp. BBG1	na
	Oeonidae	<i>Oeonidae</i> sp. BBG1	na
	Onuphidae	<i>Diopatra</i> sp. BBG1	na
	Orbiniidae	<i>Leitoscoloplos latibranchus</i>	na
	Orbiniidae	<i>Leitoscoloplos</i> sp. BBG1	na
	Phascolosomatidae	<i>Phascolosoma</i> sp. BBG1	na
	Polynoidae	<i>Lepidonotus</i> sp. BBG1	na
	Serpulidae	<i>Serpulidae</i> sp. BBG1	na
	Spionidae	<i>Polydora</i> sp. BBG1	na
	Spionidae	<i>Rhynchospio</i> sp. BBG1	na
	Spionidae	<i>Scolecopsis</i> sp. BBG1	na
	Syllidae	<i>Myrianida pachycera</i>	na
	Syllidae	<i>Syllidae</i> sp.	na
	Terebellidae	<i>Amphitritides</i> sp. BBG1	na
Ribbon worms	[Phylum Nemertea]	Nemertea sp. BBG 1	na
	[Phylum Nemertea]	Nemertea sp. BBG 2	na
Flatworms	Pseudocerotidae	<i>Pseudoceros</i> sp. BBG 1	na

Group	Family	Species	Common name
	[Order Polycladida]	Polycladida sp. BBG 1	na
	[Order Polycladida]	Polycladida sp. BBG 2	na

a Putative new species. **b** Introduced and/or pest species. **c** Listed as threatened under the EPBC Act. **d** Listed as threatened under the TPWC Act. **na** Not available.

Table A2 List of flora species recorded

Group	Family	Species	Common name
Vascular plants	Acanthaceae	<i>Avicennia marina</i> subsp. <i>eucalyptifolia</i>	Grey Mangrove
	Acanthaceae	<i>Hypoestes floribunda</i> var. <i>varia</i>	na
	Acanthaceae	<i>Nelsonia campestris</i>	na
	Amaranthaceae	<i>Gomphrena canescens</i>	Batchelors Buttons
	Amaranthaceae	<i>Gomphrena flaccida</i>	Bunched Gomphrena
	Amaranthaceae	<i>Ptilotus fusiformis</i>	Pom-pom Bottlebrush
	Anacardiaceae	<i>Buchanania obovata</i>	Green Plum, Wild Mango
	Apocynaceae	<i>Alyxia spicata</i>	na
	Apocynaceae	<i>Cynanchum viminale</i> subsp. <i>brunonianum</i>	na
	Apocynaceae	<i>Vincetoxicum carnosum</i>	na
	Apocynaceae	<i>Wrightia saligna</i>	Milk Bush
	Araliaceae	<i>Trachymene tenuifolia</i>	na
	Asparagaceae	<i>Lomandra tropica</i>	na
	Asparagaceae	<i>Thysanotus chinensis</i>	na
	Asteraceae	<i>Allopterigeron filifolius</i>	na
	Asteraceae	<i>Blainvillea cunninghamii</i>	na
	Asteraceae	<i>Blumea diffusa</i>	na
	Asteraceae	<i>Blumea saxatilis</i>	na
	Asteraceae	<i>Blumea tenella</i>	na
	Asteraceae	<i>Pterocaulon tricholobum</i>	na
	Asteraceae	<i>Thespidium basiflorum</i>	na
	Asteraceae	<i>Wollastonia biflora</i> var. <i>biflora</i>	na
	Boraginaceae	<i>Cordia dichotoma</i>	na
	Boraginaceae	<i>Heliotropium bracteatum</i>	na
	Boraginaceae	<i>Trichodesma zeylanicum</i>	Cattle Bush, Camel Bush
	Burmanniaceae	<i>Burmannia juncea</i>	na
	Campanulaceae	<i>Lobelia dioica</i>	na
	Cannabaceae	<i>Celtis philippensis</i>	na
	Cannabaceae	<i>Trema tomentosa</i>	Poison Peach
	Caryophyllaceae	<i>Polycarpaea corymbosa</i>	na
	Caryophyllaceae	<i>Polycarpaea</i> sp. sandstone (C.R.Dunlop 4567)	na
	Casuarinaceae	<i>Casuarina equisetifolia</i>	Coastal She-Oak
	Celastraceae	<i>Denhamia obscura</i>	na
Celastraceae	<i>Stackhousia intermedia</i>	na	
Centrolepidaceae	<i>Centrolepis banksii</i>	na	
Centrolepidaceae	<i>Centrolepis exserta</i>	na	
Centrolepidaceae	<i>Centrolepis</i> sp. carinate (L.A.Craven & C.R.Dunlop 6668)	na	

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Group	Family	Species	Common name
	Centrolepidaceae	<i>Centrolepis</i> sp. squamose seeds (P.K.Latz 3581)	na
	Chenopodiaceae	<i>Tecticornia indica</i> subsp. <i>indica</i>	na
	Combretaceae	<i>Lumnitzera racemosa</i>	White-flowered Black Mangrove
	Combretaceae	<i>Terminalia carpentariae</i>	Billy Goat Plum, Wild Peach
	Combretaceae	<i>Terminalia latipes</i>	na
	Commelinaceae	<i>Cartonema parviflorum</i>	na
	Commelinaceae	<i>Murdannia graminea</i>	Grass Lily
	Convolvulaceae	<i>Evolvulus nummularius</i> ^a	na
	Convolvulaceae	<i>Ipomoea coptica</i>	na
	Convolvulaceae	<i>Ipomoea eriocarpa</i>	na
	Convolvulaceae	<i>Ipomoea pes-caprae</i>	na
	Convolvulaceae	<i>Jacquemontia paniculata</i>	na
	Convolvulaceae	<i>Operculina brownii</i>	na
	Convolvulaceae	<i>Polymeria pusilla</i>	na
	Convolvulaceae	<i>Xenostegia tridentata</i>	na
	Cucurbitaceae	<i>Trichosanthes cucumerina</i> var. <i>cucumerina</i>	na
	Cupressaceae	<i>Callitris intratropica</i>	na
	Cyperaceae	<i>Cladium mariscus</i>	na
	Cyperaceae	<i>Cyperus aquatilis</i>	na
	Cyperaceae	<i>Cyperus cristulatus</i>	na
	Cyperaceae	<i>Cyperus haspan</i> subsp. <i>juncoides</i>	na
	Cyperaceae	<i>Eleocharis dulcis</i>	Water Chestnut
	Cyperaceae	<i>Eleocharis geniculata</i>	na
	Cyperaceae	<i>Eleocharis rivalis</i>	na
	Cyperaceae	<i>Eleocharis spiralis</i>	na
	Cyperaceae	<i>Eleocharis sundaica</i>	na
	Cyperaceae	<i>Fimbristylis acicularis</i>	na
	Cyperaceae	<i>Fimbristylis acuminata</i>	na
	Cyperaceae	<i>Fimbristylis ferruginea</i>	na
	Cyperaceae	<i>Fimbristylis furva</i>	na
	Cyperaceae	<i>Fimbristylis lanceolata</i>	na
	Cyperaceae	<i>Fimbristylis pauciflora</i>	na
	Cyperaceae	<i>Fimbristylis polytrichoides</i>	na
	Cyperaceae	<i>Fimbristylis rara</i>	na
	Cyperaceae	<i>Fimbristylis squarrolosa</i>	Overlapping Fringe-rush
	Cyperaceae	<i>Fimbristylis stenostachya</i>	na
	Cyperaceae	<i>Fuirena ciliaris</i>	Small Club Rush
	Cyperaceae	<i>Fuirena umbellata</i>	na

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Group	Family	Species	Common name
	Cyperaceae	<i>Rhynchospora heterochaeta</i>	na
	Cyperaceae	<i>Rhynchospora pterochaeta</i>	Rusty Heads
	Cyperaceae	<i>Schoenus calostachyus</i>	na
	Cyperaceae	<i>Schoenus sparteus</i>	na
	Cyperaceae	<i>Scleria ciliaris</i>	na
	Cyperaceae	<i>Scleria laxa</i>	na
	Cyperaceae	<i>Scleria novae-hollandiae</i>	na
	Cyperaceae	<i>Scleria pygmaea</i>	na
	Dennstaedtiaceae	<i>Pteridium aquilinum</i> subsp. <i>wightianum</i>	na
	Dilleniaceae	<i>Dillenia alata</i>	na
	Dilleniaceae	<i>Hibbertia complanata</i>	na
	Dilleniaceae	<i>Hibbertia lepidota</i>	na
	Dilleniaceae	<i>Hibbertia oblongata</i>	na
	Dilleniaceae	<i>Hibbertia oblongata</i> subsp. <i>brevifolia</i>	na
	Dilleniaceae	<i>Hibbertia oblongata</i> subsp. <i>oblongata</i>	na
	Dilleniaceae	<i>Hibbertia tomentosa</i>	na
	Droseraceae	<i>Drosera aquatica</i>	na
	Droseraceae	<i>Drosera banksii</i>	na
	Droseraceae	<i>Drosera burmanni</i>	Tropical Sundew
	Droseraceae	<i>Drosera finlaysoniana</i>	na
	Droseraceae	<i>Drosera nana</i>	na
	Droseraceae	<i>Drosera serpens</i>	na
	Ebenaceae	<i>Diospyros humilis</i>	Ebony
	Ebenaceae	<i>Diospyros rugosula</i>	na
	Elaeocarpaceae	<i>Elaeocarpus arnhemicus</i>	na
	Eriocaulaceae	<i>Eriocaulon cinereum</i>	na
	Eriocaulaceae	<i>Eriocaulon depressum</i>	na
	Eriocaulaceae	<i>Eriocaulon fistulosum</i>	na
	Eriocaulaceae	<i>Eriocaulon odontospermum</i>	na
	Eriocaulaceae	<i>Eriocaulon pusillum</i>	na
	Eriocaulaceae	<i>Eriocaulon setaceum</i>	na
	Eriocaulaceae	<i>Eriocaulon spectabile</i>	na
	Eriocaulaceae	<i>Eriocaulon tortuosum</i>	na
	Euphorbiaceae	<i>Euphorbia bifida</i>	na
	Euphorbiaceae	<i>Euphorbia tannensis</i>	Desert Spurge
	Euphorbiaceae	<i>Microstachys chamaelea</i>	na
	Fabaceae	<i>Acacia alleniana</i>	na
	Fabaceae	<i>Acacia humifusa</i>	na
	Fabaceae	<i>Acacia lamprocarpa</i>	na
	Fabaceae	<i>Acacia latescens</i>	na

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	Fabaceae	<i>Acacia linarioides</i>	na
	Fabaceae	<i>Acacia multisiliqua</i>	na
	Fabaceae	<i>Acacia nuperrima</i>	na
	Fabaceae	<i>Acacia oncinocarpa</i>	na
	Fabaceae	<i>Acacia simsii</i>	na
	Fabaceae	<i>Acacia sublanata</i>	na
	Fabaceae	<i>Acacia torulosa</i>	Torulosa Wattle, Deep-gold Wattle
	Fabaceae	<i>Acacia yirrkallensis</i>	na
	Fabaceae	<i>Alysicarpus ovalifolius</i> ^a	na
	Fabaceae	<i>Aphyllodium schindleri</i>	na
	Fabaceae	<i>Bossiaea bossiaeoides</i>	na
	Fabaceae	<i>Cajanus acutifolius</i>	na
	Fabaceae	<i>Cajanus reticulatus</i> var. <i>maritimus</i>	na
	Fabaceae	<i>Canavalia papuana</i>	na
	Fabaceae	<i>Chamaecrista absus</i> var. <i>absus</i>	Hairy Cassia
	Fabaceae	<i>Chamaecrista nigricans</i>	na
	Fabaceae	<i>Chamaecrista nomame</i>	na
	Fabaceae	<i>Crotalaria brevis</i>	na
	Fabaceae	<i>Crotalaria medicaginea</i> var. <i>neglecta</i>	Trefoil Rattlepod
	Fabaceae	<i>Crotalaria retusa</i>	Wedge-leaf Rattlepod
	Fabaceae	<i>Erythrophleum chlorostachys</i>	Cooktown Ironwood
	Fabaceae	<i>Flemingia lineata</i>	na
	Fabaceae	<i>Flemingia parviflora</i>	na
	Fabaceae	<i>Galactia tenuiflora</i>	Poison Pea
	Fabaceae	<i>Gompholobium subulatum</i>	na
	Fabaceae	<i>Grona trichostachya</i>	na
	Fabaceae	<i>Indigofera colutea</i>	Sticky Indigo
	Fabaceae	<i>Jacksonia dilatata</i>	na
	Fabaceae	<i>Leptosema bossiaeoides</i>	na
	Fabaceae	<i>Leptosema villosum</i>	na
	Fabaceae	<i>Sophora tomentosa</i>	na
	Fabaceae	<i>Stylosanthes viscosa</i> ^a	Sticky Stylo
	Fabaceae	<i>Tephrosia conspicua</i>	na
	Fabaceae	<i>Tephrosia juncea</i>	na
	Fabaceae	<i>Tephrosia phaeosperma</i>	na
	Fabaceae	<i>Tephrosia remotiflora</i>	na
	Fabaceae	<i>Tephrosia</i> sp. Muddy Bay (P.I.Forster+ PIF15313)	na
	Fabaceae	<i>Tephrosia spechtii</i>	na
	Fabaceae	<i>Vigna lanceolata</i> var. <i>filiformis</i>	Maloga Bean

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Group	Family	Species	Common name
	Fabaceae	<i>Vigna vexillata</i>	na
	Gleicheniaceae	<i>Dicranopteris linearis</i> var. <i>linearis</i>	Hay Rake Fern
	Goodeniaceae	<i>Goodenia armstrongiana</i>	na
	Goodeniaceae	<i>Goodenia hispida</i>	na
	Goodeniaceae	<i>Goodenia neglecta</i>	na
	Goodeniaceae	<i>Goodenia pilosa</i>	na
	Goodeniaceae	<i>Goodenia pumilio</i>	na
	Goodeniaceae	<i>Scaevola angulata</i>	na
	Goodeniaceae	<i>Scaevola taccada</i>	na
	Haloragaceae	<i>Gonocarpus chinensis</i>	na
	Haloragaceae	<i>Gonocarpus leptothecus</i>	na
	Hemerocallidaceae	<i>Dianella odorata</i>	na
	Hydatellaceae	<i>Trithuria cowieana</i>	na
	Hydatellaceae	<i>Trithuria lanterna</i>	na
	Lamiaceae	<i>Anisomeles carpentarica</i>	na
	Lamiaceae	<i>Mesosphaerum suaveolens</i> (syn. <i>Hyptis suaveolens</i>) ^a	Hyptis, Mint Weed
	Lamiaceae	<i>Plectranthus scutellarioides</i>	na
	Lentibulariaceae	<i>Utricularia aurea</i>	na
	Lentibulariaceae	<i>Utricularia bifida</i>	na
	Lentibulariaceae	<i>Utricularia caerulea</i>	na
	Lentibulariaceae	<i>Utricularia capilliflora</i>	na
	Lentibulariaceae	<i>Utricularia chrysantha</i>	na
	Lentibulariaceae	<i>Utricularia gibba</i>	na
	Lentibulariaceae	<i>Utricularia limosa</i>	na
	Lentibulariaceae	<i>Utricularia quinquedentata</i>	na
	Lentibulariaceae	<i>Utricularia singeriana</i> ^b	na
	Lentibulariaceae	<i>Utricularia uliginosa</i>	na
	Linderniaceae	<i>Buchnera gracilis</i>	na
	Linderniaceae	<i>Buchnera linearis</i>	Dainty Bush Flower
	Linderniaceae	<i>Buchnera tetragona</i>	na
	Linderniaceae	<i>Centranthera cochinchinensis</i>	na
	Linderniaceae	<i>Lindernia alsinoides</i>	na
	Linderniaceae	<i>Lindernia aplectra</i>	na
	Linderniaceae	<i>Lindernia scapigera</i>	na
	Linderniaceae	<i>Lindernia tectanthera</i>	na
	Linderniaceae	<i>Striga curviflora</i>	na
	Lindsaeaceae	<i>Lindsaea media</i>	na
	Loganiaceae	<i>Mitrasacme ambigua</i>	na
	Loganiaceae	<i>Mitrasacme elata</i>	na

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	Loganiaceae	<i>Mitrasacme laevis</i>	na
	Loganiaceae	<i>Mitrasacme laricifolia</i>	na
	Loganiaceae	<i>Mitrasacme multicaulis</i>	na
	Loganiaceae	<i>Mitrasacme</i> sp. Bush Blitz Groote1	na
	Loganiaceae	<i>Mitrasacme stellata</i>	na
	Lythraceae	<i>Ammannia triflora</i>	na
	Lythraceae	<i>Rotala mexicana</i>	na
	Malvaceae	<i>Brachychiton paradoxus</i>	Red-flowered Kurrajong, Red-flowering Kurrajong
	Malvaceae	<i>Corchorus sidoides</i> subsp. <i>rostrisepalus</i>	na
	Malvaceae	<i>Corchorus sidoides</i> subsp. <i>sidoides</i>	na
	Malvaceae	<i>Grewia retusifolia</i>	Dog's Balls, Emu Berry, Dysentery Bush
	Malvaceae	<i>Helicteres angustifolia</i>	na
	Malvaceae	<i>Helicteres cana</i> subsp. <i>cana</i>	na
	Malvaceae	<i>Hibiscus leptocladus</i>	Variable-leaf Hibiscus, Slender Hibiscus
	Malvaceae	<i>Hibiscus zonatus</i>	na
	Malvaceae	<i>Melhania oblongifolia</i>	Velvet Hibiscus
	Malvaceae	<i>Seringia corollata</i>	na
	Malvaceae	<i>Sida acuta</i> ^a	Spiny-head Sida
	Malvaceae	<i>Sida magnifica</i>	na
	Malvaceae	<i>Sida</i> sp. Groote Eylandt (C.R.Dunlop 9300 & G.J.Leach)	na
	Malvaceae	<i>Triumfetta albida</i>	na
	Malvaceae	<i>Triumfetta denticulata</i>	na
	Malvaceae	<i>Triumfetta pannosa</i>	na
	Malvaceae	<i>Triumfetta sylvicola</i>	na
	Malvaceae	<i>Waltheria indica</i>	na
	Melastomataceae	<i>Memecylon pauciflorum</i>	na
	Melastomataceae	<i>Osbeckia chinensis</i>	na
	Meliaceae	<i>Aglaiia brownii</i>	na
	Meliaceae	<i>Owenia vernicosa</i>	Emu Apple
	Meliaceae	<i>Xylocarpus moluccensis</i>	Cedar Mangrove
	Menyanthaceae	<i>Nymphoides exiliflora</i>	na
	Molluginaceae	<i>Trigastrotheca pentaphylla</i> ^a	na
	Moraceae	<i>Ficus aculeata</i> var. <i>aculeata</i>	na
	Moraceae	<i>Ficus henneana</i>	Superb Fig
	Myristicaceae	<i>Myristica insipida</i> var. <i>insipida</i>	Native Nutmeg
	Myrtaceae	<i>Asteromyrtus magnifica</i>	na
	Myrtaceae	<i>Asteromyrtus symphyocarpa</i>	Liniment Bush

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Group	Family	Species	Common name
	Myrtaceae	<i>Calytrix brownii</i>	na
	Myrtaceae	<i>Corymbia bella</i>	Ghost Gum
	Myrtaceae	<i>Corymbia ferruginea</i>	Rusty Bloodwood
	Myrtaceae	<i>Corymbia kombolgiensis</i>	Paper-fruited Bloodwood
	Myrtaceae	<i>Corymbia pauciseta</i>	na
	Myrtaceae	<i>Corymbia polycarpa</i>	Long-fruited Bloodwood
	Myrtaceae	<i>Eucalyptus alba</i> var. <i>australasica</i>	Salmon Gum
	Myrtaceae	<i>Eucalyptus miniata</i>	Darwin Woollybutt
	Myrtaceae	<i>Eucalyptus tetradonta</i>	Darwin Stringybark
	Myrtaceae	<i>Homalocalyx ericaeus</i>	na
	Myrtaceae	<i>Lithomyrtus retusa</i>	na
	Myrtaceae	<i>Melaleuca acacioides</i>	Coastal Paperbark
	Myrtaceae	<i>Melaleuca cajuputi</i> subsp. <i>cajuputi</i>	Cajuput
	Myrtaceae	<i>Melaleuca viridiflora</i>	Broad-leaved Paperbark
	Myrtaceae	<i>Xanthostemon umbrosus</i>	na
	Nymphaeaceae	<i>Nymphaea violacea</i>	Water Lily
	Oleaceae	<i>Jasminum didymum</i>	Native Jasmine
	Onagraceae	<i>Ludwigia octovalvis</i>	Willow Primrose
	Onagraceae	<i>Ludwigia perennis</i>	Upright Primrose
	Orchidaceae	<i>Dendrobium dicuphum</i>	na
	Orchidaceae	<i>Nervilia holochila</i>	na
	Pandanaceae	<i>Pandanus spiralis</i>	Screw Palm
	Philydraceae	<i>Philydrum lanuginosum</i>	Frogsmouth, Woolly Waterlily
	Phrymaceae	<i>Uvedalia</i> sp. Groote Eylandt (R.L.Specht 335)	na
	Phyllanthaceae	<i>Bridelia tomentosa</i>	na
	Phyllanthaceae	<i>Phyllanthus carpentariae</i>	na
	Phyllanthaceae	<i>Phyllanthus exilis</i>	na
	Phyllanthaceae	<i>Phyllanthus hebecarpus</i>	na
	Phyllanthaceae	<i>Phyllanthus minutiflorus</i>	na
	Phyllanthaceae	<i>Phyllanthus urinaria</i>	na
	Phyllanthaceae	<i>Sauropus stenocladus</i>	na
	Picrodendraceae	<i>Petalostigma banksii</i>	Smooth-leaved Quinine
	Picrodendraceae	<i>Petalostigma pubescens</i>	Quinine Bush, Quinine Tree
	Picrodendraceae	<i>Petalostigma quadriloculare</i>	na
	Plantaginaceae	<i>Bacopa floribunda</i>	na
	Plantaginaceae	<i>Limnophila fragrans</i>	na
	Plantaginaceae	<i>Scoparia dulcis</i>	na
	Plantaginaceae	<i>Stemodia debilis</i>	na
	Plantaginaceae	<i>Stemodia lythrifolia</i>	na

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	Poaceae	<i>Aristida exserta</i>	na
	Poaceae	<i>Aristida holathera</i>	Erect Kerosene Grass
	Poaceae	<i>Aristida schultzii</i>	na
	Poaceae	<i>Aristida utilis</i> var. <i>utilis</i>	na
	Poaceae	<i>Arundinella nepalensis</i>	Reedgrass
	Poaceae	<i>Bothriochloa pertusa</i> ^a	na
	Poaceae	<i>Cenchrus polystachios</i> ^a	Perennial Mission Grass
	Poaceae	<i>Coelachne pulchella</i>	na
	Poaceae	<i>Cymbopogon procerus</i>	Lemon Grass
	Poaceae	<i>Digitaria bicornis</i> ^a	na
	Poaceae	<i>Digitaria papposa</i>	na
	Poaceae	<i>Dimeria acinaciformis</i>	na
	Poaceae	<i>Dimeria chloridiformis</i>	na
	Poaceae	<i>Dimeria ornithopoda</i>	na
	Poaceae	<i>Ectrosia agrostoides</i>	na
	Poaceae	<i>Ectrosia leporina</i>	Hare's Foot Grass
	Poaceae	<i>Eragrostis</i> sp. Bush Blitz Groote1	na
	Poaceae	<i>Eriachne avenacea</i>	na
	Poaceae	<i>Eriachne filiformis</i>	na
	Poaceae	<i>Eriachne stipacea</i>	na
	Poaceae	<i>Eriachne trisetata</i>	na
	Poaceae	<i>Heterachne gulliveri</i> var. <i>gulliveri</i>	na
	Poaceae	<i>Isachne confusa</i>	na
	Poaceae	<i>Ischaemum decumbens</i>	na
	Poaceae	<i>Ischaemum fragile</i>	na
	Poaceae	<i>Mnesithea formosa</i>	Silkytop Grass
	Poaceae	<i>Panicum mindanaense</i>	na
	Poaceae	<i>Panicum seminudum</i> var. <i>cairnsianum</i>	na
	Poaceae	<i>Panicum trichoides</i>	na
	Poaceae	<i>Pheidochloa gracilis</i>	na
	Poaceae	<i>Phragmites karka</i>	na
	Poaceae	<i>Pseudopogonatherum irritans</i>	na
	Poaceae	<i>Sacciolepis indica</i>	na
	Poaceae	<i>Sacciolepis myosuroides</i>	na
	Poaceae	<i>Schizachyrium pseudeulalia</i>	Short-leaved Silk Grass
	Poaceae	<i>Setaria apiculata</i>	Pigeon Grass
	Poaceae	<i>Sorghum stipoideum</i>	Annual Native Sorghum
	Poaceae	<i>Spinifex longifolius</i>	na
	Poaceae	<i>Thaumastochloa brassii</i>	na
	Poaceae	<i>Thaumastochloa major</i>	na

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	Poaceae	<i>Whiteochloa airoides</i>	na
	Poaceae	<i>Xerochloa imberbis</i>	na
	Polygalaceae	<i>Polygala longifolia</i>	na
	Polygalaceae	<i>Salomonina ciliata</i>	na
	Polypodiaceae	<i>Drynaria quercifolia</i>	Rock Fern
	Portulacaceae	<i>Calandrinia gracilis</i>	na
	Portulacaceae	<i>Calandrinia spergularina</i>	na
	Primulaceae	<i>Aegiceras corniculatum</i>	River Mangrove
	Proteaceae	<i>Grevillea heliosperma</i>	Rock Grevillea
	Proteaceae	<i>Grevillea pteridifolia</i>	Fern-leaved Grevillea
	Proteaceae	<i>Grevillea pungens</i>	na
	Proteaceae	<i>Hakea arborescens</i>	Yellow Hakea, Common Hakea
	Pteridaceae	<i>Ceratopteris thalictroides</i>	na
	Pteridaceae	<i>Cheilanthes caudata</i>	na
	Restionaceae	<i>Dapsilanthus elatior</i>	na
	Rhamnaceae	<i>Alphitonia excelsa</i>	Soap Tree, Red Ash
	Rhizophoraceae	<i>Bruguiera gymnorhiza</i>	Large-leaved Mangrove
	Rhizophoraceae	<i>Bruguiera sexangula</i>	Northern Large-leaved Mangrove
	Rhizophoraceae	<i>Carallia brachiata</i>	na
	Rhizophoraceae	<i>Rhizophora stylosa</i>	Stilt-root Mangrove
	Rubiaceae	<i>Gardenia schwarzii</i>	Native Gardenia, Wild Gardenia
	Rubiaceae	<i>Morinda citrifolia</i>	Cheese-fruit, Great Morinda
	Rubiaceae	<i>Oldenlandia galioides</i>	na
	Rubiaceae	<i>Oldenlandia mitrasacmoides</i> subsp. <i>nigricans</i>	na
	Rubiaceae	<i>Spermacoce dolichosperma</i>	na
	Rubiaceae	<i>Spermacoce elaiosoma</i>	na
	Rubiaceae	<i>Spermacoce gilliesae</i>	na
	Rubiaceae	<i>Spermacoce membranacea</i>	na
	Rubiaceae	<i>Tarenna pentamera</i>	na
	Rutaceae	<i>Boronia lanceolata</i>	na
	Rutaceae	<i>Boronia lanuginosa</i>	na
	Santalaceae	<i>Anthobolus filifolius</i>	na
	Santalaceae	<i>Exocarpos latifolius</i>	Native Cherry
	Santalaceae	<i>Santalum album</i>	na
	Santalaceae	<i>Santalum lanceolatum</i>	Plumbush, Northern Sandalwood
	Sapindaceae	<i>Dodonaea arnhemica</i>	na
	Sapindaceae	<i>Dodonaea lanceolata</i>	Hopbush
	Selaginellaceae	<i>Selaginella ciliaris</i>	na
	Smilacaceae	<i>Smilax australis</i>	na

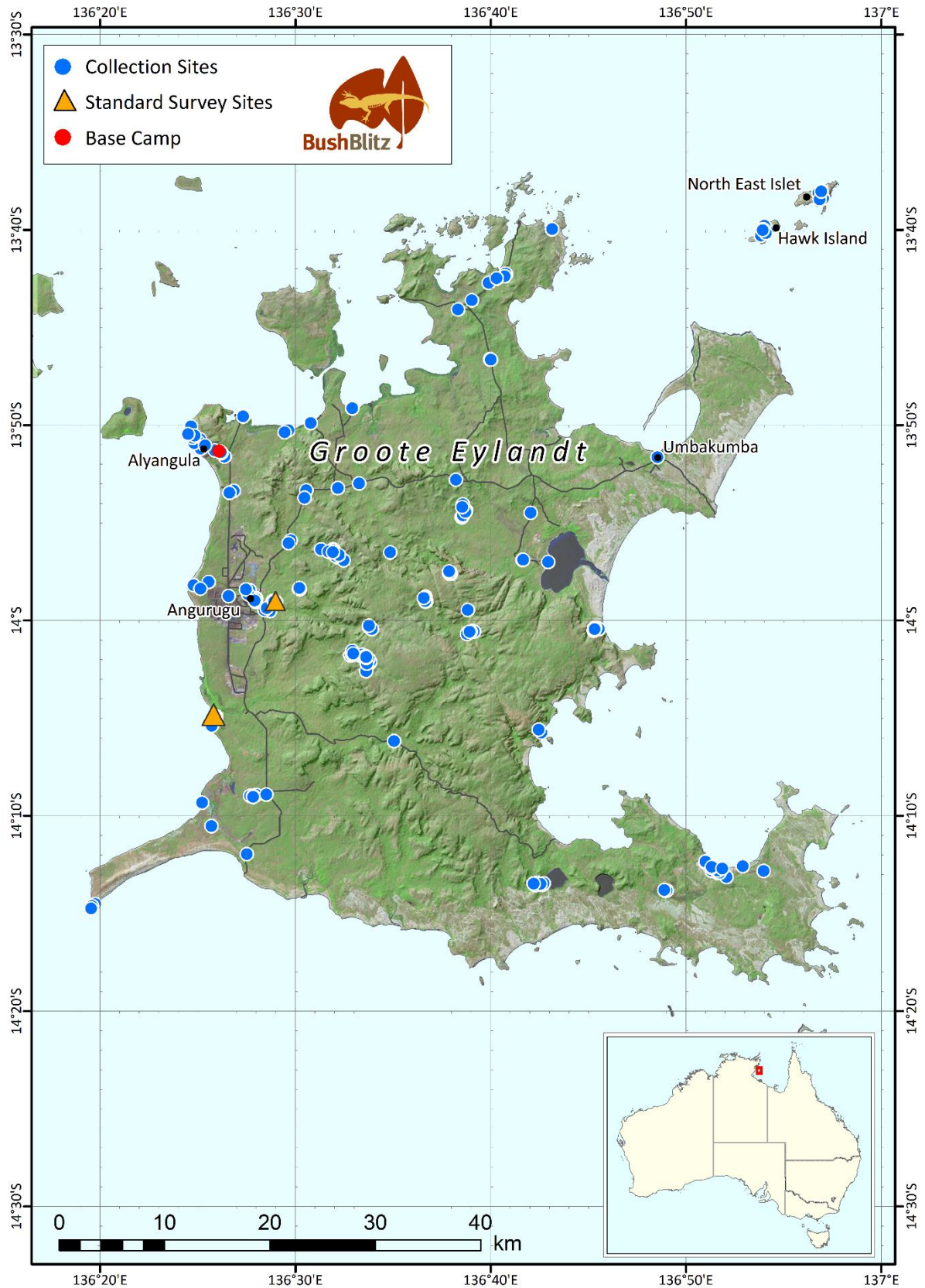
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Group	Family	Species	Common name
	Stylidiaceae	<i>Stylidium dunlopianum</i>	na
	Stylidiaceae	<i>Stylidium floodii</i>	na
	Stylidiaceae	<i>Stylidium floribundum</i>	na
	Stylidiaceae	<i>Stylidium muscicola</i>	na
	Stylidiaceae	<i>Stylidium osculum</i>	na
	Stylidiaceae	<i>Stylidium pedunculatum</i>	na
	Stylidiaceae	<i>Stylidium rotundifolium</i>	na
	Stylidiaceae	<i>Stylidium schizanthum</i>	na
	Stylidiaceae	<i>Stylidium tenerum</i>	na
	Verbenaceae	<i>Phyla nodiflora</i>	Lippia
	Violaceae	<i>Afrohybanthus enneaspermus</i>	Blue Spade Flower
	Xyridaceae	<i>Xyris complanata</i>	Hatpins
	Xyridaceae	<i>Xyris oligantha</i>	na
	Xyridaceae	<i>Xyris pauciflora</i>	na
	Xyridaceae	<i>Xyris pusilla</i>	na
Mosses	Pterigynandraceae	Pterigynandraceae sp. Bush Blitz Groote1	na
Algae	Characeae	<i>Chara</i> sp. Bush Blitz Groote1	na

a Introduced and pest species. **b** Listed as threatened under the TPWC Act. **na** Not available.

Appendix B: Collection sites

Map B1 Map of collection sites



Glossary

Term	Definition
ALA	Atlas of Living Australia
AM	Australian Museum
Clade	A group of organisms that have evolved from a common ancestor.
Cryptic species	Species that are physically similar but genetically different and reproductively isolated from each other.
Endemic	Native to or limited to a certain region.
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Commonwealth)
Introduced	Not indigenous; not native to the area in which it now occurs.
Lineage	A sequence of species each of which is considered to have evolved from its predecessor.
Pest species	A species that has the potential to have a negative environmental, social or economic impact.
Putative new species	An unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz.
Range extension	Increase in the known distribution or area of occurrence of a species.
Taxon (plural taxa)	A member of any particular taxonomic group (e.g. a 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.
Threatened	Fauna or flora that are listed under Section 178 of the EPBC Act (or equivalent State legislation) in any one of the following categories – extinct, extinct in the wild, critically endangered, endangered, vulnerable, conservation dependent.
TPWC Act	<i>Territory Parks and Wildlife Conservation Act 1976</i> (Northern Territory)
Undescribed taxon	A taxon (usually a species) that has not yet been formally described and named.
UNSW	University of New South Wales
Vascular plants	A lineage of plants that possess well-developed veins (vascular tissue) in their stems, roots and leaves. Vascular plants include the majority of familiar land plants: flowering plants, ferns, conifers, cycads and fern allies, but not mosses, liverworts or algae.
Vouchers (voucher specimens)	Any specimen, usually a dead animal or preserved plant sample, that serves as a basis of study and is retained as a reference.

References

ALC 2016, [Anindilyakwa Indigenous Protected Area Plan of Management \[31MB\]](#). Anindilyakwa Land Council, Alyangula, NT.

Chapman, AD 2009, [Numbers of Living Species in Australia and the World](#) 2nd edn, Australian Biological Resources Study, Canberra.

DENR & ALC 2019, [Groote Archipelago Threatened Species Management Plan 2019-2028](#). Department of Environment and Natural Resources and the Anindilyakwa Land Council.