

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	monocots	Poaceae	<i>Paspalidium rarum</i>			C		2/2
plants	monocots	Poaceae	<i>Aristida latifolia</i>	feathertop wiregrass		C		3/3
plants	monocots	Poaceae	<i>Aristida lazaridis</i>			C		1/1
plants	monocots	Poaceae	<i>Astrelba pectinata</i>	barley mitchell grass		C		1/1
plants	monocots	Poaceae	<i>Cenchrus setigerus</i>		Y			1/1
plants	monocots	Poaceae	<i>Echinochloa colona</i>	awnless barnyard grass	Y			2/2
plants	monocots	Poaceae	<i>Aristida polyclados</i>			C		1/1
plants	monocots	Poaceae	<i>Cymbopogon ambiguus</i>	lemon grass		C		1/1
plants	monocots	Poaceae	<i>Digitaria ctenantha</i>			C		1/1
plants	monocots	Poaceae	<i>Enteropogon ramosus</i>			C		1/1
plants	monocots	Poaceae	<i>Enneapogon avenaceus</i>			C		1/1
plants	monocots	Poaceae	<i>Eragrostis tenellula</i>	delicate lovegrass		C		2/2
plants	monocots	Poaceae	<i>Urochloa praetervisa</i>			C		1/1
plants	monocots	Poaceae	<i>Heteropogon contortus</i>	black speargrass		C		1/1
plants	monocots	Poaceae	<i>Iseilema membranaceum</i>	small flinders grass		C		1/1
plants	monocots	Poaceae	<i>Bothriochloa ewartiana</i>	desert bluegrass		C		2/2
plants	monocots	Poaceae	<i>Brachyachne convergens</i>	common native couch		C		2/2
plants	monocots	Poaceae	<i>Enneapogon lindleyanus</i>			C		3/3
plants	monocots	Poaceae	<i>Enneapogon polyphyllus</i>	leafy nineawn		C		1/1
plants	monocots	Poaceae	<i>Sporobolus actinocladus</i>	katoora grass		C		1/1
plants	monocots	Poaceae	<i>Cenchrus pennisetiformis</i>		Y			1/1
plants	monocots	Poaceae	<i>Sporobolus australasicus</i>			C		1/1
plants	monocots	Poaceae	<i>Eriachne pulchella subsp. dominii</i>			C		1/1
plants	monocots	Poaceae	<i>Dichanthium sericeum subsp. humilium</i>			C		1/1
plants	monocots	Poaceae	<i>Digitaria divaricatissima var. divaricatissima</i>			C		1/1
plants	monocots	Poaceae	<i>Eriachne mucronata forma (Alpha C.E.Hubbard 7882)</i>			C		1/1
plants	monocots	Poaceae	<i>Sehima nervosum</i>			C		1/1
plants	monocots	Poaceae	<i>Eulalia aurea</i>	silky browntop		C		2/2
plants	monocots	Poaceae	<i>Chloris virgata</i>	feathertop rhodes grass	Y			1/1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.



Wildlife Online Extract

Search Criteria: Species List for a Defined Area
Species: All
Type: All
Status: All
Records: All
Date: All
Latitude: 20.9945 to 21.66
Longitude: 140.4 to 141
Email: bares@placedesigngroup.com
Date submitted: Wednesday 13 Jun 2012 13:06:40
Date extracted: Wednesday 13 Jun 2012 13:10:41

The number of records retrieved = 214

Disclaimer

As the DERM is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

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Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	amphibians	Hylidae	<i>Litoria rubella</i>	ruddy treefrog		C		2
animals	amphibians	Hylidae	<i>Litoria caerulea</i>	common green treefrog		C		1
animals	amphibians	Hylidae	<i>Cyclorana australis</i>	northern snapping frog		C		3
animals	amphibians	Limnodynastidae	<i>Platyplectrum ornatum</i>	ornate burrowing frog		C		2
animals	birds	Acanthizidae	<i>Acanthiza chrysorrhoa</i>	yellow-rumped thornbill		C		3
animals	birds	Acanthizidae	<i>Smicronis brevirostris</i>	weebill		C		10
animals	birds	Accipitridae	<i>Hamirostra melanosternon</i>	black-breasted buzzard		C		1
animals	birds	Accipitridae	<i>Haliastur sphenurus</i>	whistling kite		C		3
animals	birds	Accipitridae	<i>Accipiter fasciatus</i>	brown goshawk		C		2
animals	birds	Accipitridae	<i>Elanus axillaris</i>	black-shouldered kite		C		2
animals	birds	Accipitridae	<i>Aquila audax</i>	wedge-tailed eagle		C		1
animals	birds	Accipitridae	<i>Milvus migrans</i>	black kite		C		4
animals	birds	Aegothelidae	<i>Aegotheles cristatus</i>	Australian owl-nightjar		C		1
animals	birds	Anatidae	<i>Anas gracilis</i>	grey teal		C		2
animals	birds	Anatidae	<i>Dendrocygna arcuata</i>	wandering whistling-duck		C		1
animals	birds	Anhingidae	<i>Anhinga novaehollandiae</i>	Australasian darter		C		4
animals	birds	Ardeidae	<i>Ardea intermedia</i>	intermediate egret		C		2
animals	birds	Ardeidae	<i>Ardea modesta</i>	eastern great egret		C		2
animals	birds	Ardeidae	<i>Ardea pacifica</i>	white-necked heron		C		5
animals	birds	Ardeidae	<i>Egretta novaehollandiae</i>	white-faced heron		C		3
animals	birds	Artamidae	<i>Artamus leucorhynchus</i>	white-breasted woodswallow		C		1
animals	birds	Artamidae	<i>Cracticus nigrogularis</i>	piebald butcherbird		C		11
animals	birds	Artamidae	<i>Cracticus torquatus</i>	grey butcherbird		C		1
animals	birds	Artamidae	<i>Cracticus tibicen</i>	Australian magpie		C		5
animals	birds	Artamidae	<i>Artamus superciliosus</i>	white-browed woodswallow		C		1
animals	birds	Artamidae	<i>Artamus personatus</i>	masked woodswallow		C		1
animals	birds	Artamidae	<i>Artamus minor</i>	little woodswallow		C		3
animals	birds	Artamidae	<i>Artamus cinereus</i>	black-faced woodswallow		C		12
animals	birds	Burhinidae	<i>Burhinus grallarius</i>	bush stone-curlew		C		1
animals	birds	Cacatuidae	<i>Cacatua galerita</i>	sulphur-crested cockatoo		C		7
animals	birds	Cacatuidae	<i>Cacatua sanguinea</i>	little corella		C		1
animals	birds	Cacatuidae	<i>Nymphicus hollandicus</i>	cockatiel		C		8
animals	birds	Cacatuidae	<i>Eolophus roseicapillus</i>	galah		C		7
animals	birds	Campephagidae	<i>Coracina novaehollandiae</i>	black-faced cuckoo-shrike		C		6
animals	birds	Campephagidae	<i>Coracina maxima</i>	ground cuckoo-shrike		C		1
animals	birds	Campephagidae	<i>Coracina papuensis</i>	white-bellied cuckoo-shrike		C		2
animals	birds	Campephagidae	<i>Lalage sueurii</i>	white-winged triller		C		9
animals	birds	Casuariidae	<i>Dromaius novaehollandiae</i>	emu		C		1
animals	birds	Charadriidae	<i>Elseyornis melanops</i>	black-fronted dotterel		C		3
animals	birds	Climacteridae	<i>Climacteris melanura</i>	black-tailed treecreeper		C		8
animals	birds	Columbidae	<i>Geopelia striata</i>	peaceful dove		C		14
animals	birds	Columbidae	<i>Geopelia cuneata</i>	diamond dove		C		10
animals	birds	Columbidae	<i>Ocyphaps lophotes</i>	crested pigeon		C		6
animals	birds	Columbidae	<i>Geophaps plumifera</i>	spinifex pigeon		C		6
animals	birds	Columbidae	<i>Phaps chalcoptera</i>	common bronzewing		C		6
animals	birds	Corcoracidae	<i>Struthidea cinerea</i>	apostlebird		C		2

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animals	birds	Corvidae	<i>Corvus orru</i>	Torresian crow		C		1
animals	birds	Corvidae	<i>Corvus coronoides</i>	Australian raven		C		8
animals	birds	Corvidae	<i>Corvus sp.</i>					1
animals	birds	Cuculidae	<i>Cacomantis variolosus</i>	brush cuckoo		C		2
animals	birds	Cuculidae	<i>Eudynamys orientalis</i>	eastern koel		C		1
animals	birds	Cuculidae	<i>Cacomantis pallidus</i>	pallid cuckoo		C		2
animals	birds	Cuculidae	<i>Chalcites osculans</i>	black-eared cuckoo		C		2
animals	birds	Cuculidae	<i>Chalcites basalus</i>	Horsfield's bronze-cuckoo		C		1
animals	birds	Estrildidae	<i>Taeniopygia guttata</i>	zebra finch		C		15
animals	birds	Estrildidae	<i>Taeniopygia bichenovii</i>	double-barred finch		C		1
animals	birds	Estrildidae	<i>Emblema pictum</i>	painted finch		C		3
animals	birds	Eurostopodidae	<i>Eurostopodus argus</i>	spotted nightjar		C		10
animals	birds	Falconidae	<i>Falco berigora</i>	brown falcon		C		2
animals	birds	Falconidae	<i>Falco cenchroides</i>	nankeen kestrel		C		3
animals	birds	Falconidae	<i>Falco subniger</i>	black falcon		C		2
animals	birds	Falconidae	<i>Falco longipennis</i>	Australian hobby		C		2
animals	birds	Gruidae	<i>Grus rubicunda</i>	brilga		C		1
animals	birds	Halcyonidae	<i>Dacelo leachii</i>	blue-winged kookaburra		C		5
animals	birds	Halcyonidae	<i>Todiramphus sanctus</i>	sacred kingfisher		C		8
animals	birds	Halcyonidae	<i>Todiramphus pyrrhopygius</i>	red-backed kingfisher		C		3
animals	birds	Hirundinidae	<i>Cheramoeca leucosterna</i>	white-backed swallow		C		1
animals	birds	Maluridae	<i>Malurus leucopterus</i>	white-winged fairy-wren		C		1
animals	birds	Maluridae	<i>Malurus lamberti</i>	variegated fairy-wren		C		4
animals	birds	Maluridae	<i>Amytornis ballarae</i>	Kalkadoon grasswren		C		1
animals	birds	Megaluridae	<i>Cincloramphus mathewsi</i>	rufous songlark		C		1
animals	birds	Megaluridae	<i>Eremiornis carteri</i>	spinifexbird		C		1
animals	birds	Meliphagidae	<i>Ptilotula penicillatus</i>	white-plumed honeyeater		C		15
animals	birds	Meliphagidae	<i>Philemon corniculatus</i>	noisy friarbird		C		2
animals	birds	Meliphagidae	<i>Ptilotula keartlandi</i>	grey-headed honeyeater		C		6
animals	birds	Meliphagidae	<i>Philemon argenticeps</i>	silver-crowned friarbird		C		1
animals	birds	Meliphagidae	<i>Lichmera indistincta</i>	brown honeyeater		C		13
animals	birds	Meliphagidae	<i>Acanthagenys rufogularis</i>	spiny-cheeked honeyeater		C		2
animals	birds	Meliphagidae	<i>Conopophila rufogularis</i>	rufous-throated honeyeater		C		1
animals	birds	Meliphagidae	<i>Philemon citreogularis</i>	little friarbird		C		10
animals	birds	Meliphagidae	<i>Manorina flavigula</i>	yellow-throated miner		C		16
animals	birds	Meliphagidae	<i>Ptilotula plumulus</i>	grey-fronted honeyeater		C		6
animals	birds	Meliphagidae	<i>Epthianura tricolor</i>	crimson chat		C		3
animals	birds	Meliphagidae	<i>Gavicalis virescens</i>	singing honeyeater		C		7
animals	birds	Meliphagidae	<i>Cissomela pectoralis</i>	banded honeyeater		C		2
animals	birds	Meropidae	<i>Merops ornatus</i>	rainbow bee-eater		C		12
animals	birds	Monarchidae	<i>Grallina cyanoleuca</i>	magpie-lark		C		11
animals	birds	Monarchidae	<i>Myiagra inquieta</i>	restless flycatcher		C		1
animals	birds	Nectariniidae	<i>Dicaeum hirundinaceum</i>	mistletoebird		C		10
animals	birds	Neosittidae	<i>Daphoenositta chrysoptera</i>	varied sittella		C		1
animals	birds	Oriolidae	<i>Oriolus sagittatus</i>	olive-backed oriole		C		3
animals	birds	Otididae	<i>Ardeotis australis</i>	Australian bustard		C		2

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animals	birds	Pachycephalidae	<i>Oreoica gutturalis</i>	crested bellbird		C		3
animals	birds	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler		C		12
animals	birds	Pachycephalidae	<i>Colluricincla harmonica</i>	grey shrike-thrush		C		8
animals	birds	Pardalotidae	<i>Pardalotus rubricatus</i>	red-browed pardalote		C		8
animals	birds	Pardalotidae	<i>Pardalotus striatus</i>	striated pardalote		C		4
animals	birds	Pelecanidae	<i>Pelecanus conspicillatus</i>	Australian pelican		C		1
animals	birds	Petroicidae	<i>Melanodryas cucullata</i>	hooded robin		C		1
animals	birds	Petroicidae	<i>Microeca fascians</i>	jacky winter		C		10
animals	birds	Phalacrocoracidae	<i>Microcarbo melanoleucos</i>	little pied cormorant		C		1
animals	birds	Phasianidae	<i>Coturnix ypsilophora</i>	brown quail		C		1
animals	birds	Phasianidae	<i>Coturnix pectoralis</i>	stubble quail		C		1
animals	birds	Podargidae	<i>Podargus strigoides</i>	tawny frogmouth		C		1
animals	birds	Pomatostomidae	<i>Pomatostomus temporalis</i>	grey-crowned babbler		C		7
animals	birds	Psittacidae	<i>Barnardius zonarius macgillivrayi</i>	Cloncurry parrot		C		1
animals	birds	Psittacidae	<i>Melopsittacus undulatus</i>	budgerigar		C		10
animals	birds	Psittacidae	<i>Pezoporus occidentalis</i>	night parrot		E	E	1
animals	birds	Psittacidae	<i>Psitteuteles versicolor</i>	varied lorikeet		C		10
animals	birds	Psittacidae	<i>Aprosmictus erythropterus</i>	red-winged parrot		C		7
animals	birds	Psittacidae	<i>Barnardius zonarius</i>	Australian ringneck		C		5
animals	birds	Ptilonorhynchidae	<i>Ptilonorhynchus nuchalis</i>	great bowerbird		C		1
animals	birds	Ptilonorhynchidae	<i>Ptilonorhynchus maculatus</i>	spotted bowerbird		C		8
animals	birds	Rallidae	<i>Fulica atra</i>	Eurasian coot		C		1
animals	birds	Rhipiduridae	<i>Rhipidura leucophrys</i>	willie wagtail		C		11
animals	birds	Strigidae	<i>Ninox boobook</i>	southern boobook		C		4
animals	birds	Threskiornithidae	<i>Threskiornis spinicollis</i>	straw-necked ibis		C		1
animals	birds	Turnicidae	<i>Turnix velox</i>	little button-quail		C		2
animals	insects	Nymphalidae	<i>Hypolimnas bolina nerina</i>	varied eggfly				1
animals	mammals	Macropodidae	<i>Macropus rufus</i>	red kangaroo		C		1
animals	mammals	Macropodidae	<i>Petrogale purpureicollis</i>	purple-necked rock-wallaby		V		4/2
animals	mammals	Macropodidae	<i>Macropus robustus</i>	common wallaroo		C		1
animals	mammals	Muridae	<i>Pseudomys johnsoni</i>			C		4/2
animals	mammals	Tachyglossidae	<i>Tachyglossus aculeatus</i>	short-beaked echidna		C		1
animals	reptiles	Agamidae	<i>Diporiphora magna</i>			C		1
animals	reptiles	Agamidae	<i>Ctenophorus caudicinctus</i>	ring-tailed dragon		C		1
animals	reptiles	Boidae	<i>Antaresia stimsoni</i>	Stimson's python		C		1
animals	reptiles	Boidae	<i>Liasis olivaceus</i>	olive python		C		1
animals	reptiles	Carphodactylidae	<i>Nephrurus asper</i>	spiny knob-tailed gecko		C		1/1
animals	reptiles	Elapidae	<i>Suta suta</i>	myall snake		C		1
animals	reptiles	Elapidae	<i>Pseudechis australis</i>	king brown snake		C		1/1
animals	reptiles	Gekkonidae	<i>Heteronotia binoei</i>	Bynoe's gecko		C		1
animals	reptiles	Scincidae	<i>Carlia amax</i>			C		2
animals	reptiles	Scincidae	<i>Lerista fragilis</i>			C		1
animals	reptiles	Scincidae	<i>Ctenotus pantherinus</i>			C		2
animals	reptiles	Scincidae	<i>Ctenotus lateralis</i>			C		2
animals	reptiles	Scincidae	<i>Ctenotus robustus</i>			C		1
animals	reptiles	Varanidae	<i>Varanus acanthurus</i>	ridge-tailed monitor		C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	uncertain	Indeterminate	<i>Indeterminate</i>	Unknown or Code Pending		C		1
fungi	uncertain	Ascomycota	<i>Lichenothelia</i>			C		2/2
plants	higher dicots	Amaranthaceae	<i>Gomphrena lanata</i>			C		1/1
plants	higher dicots	Amaranthaceae	<i>Ptilotus nobilis subsp. nobilis</i>			C		1/1
plants	higher dicots	Apocynaceae	<i>Carissa lanceolata</i>			C		1/1
plants	higher dicots	Apocynaceae	<i>Sarcostemma brevipedicellatum</i>			C		1/1
plants	higher dicots	Asteraceae	<i>Bidens bipinnata</i>	bipinnate beggar's ticks	Y			1/1
plants	higher dicots	Boraginaceae	<i>Heliotropium frohlichii</i>			C		2/2
plants	higher dicots	Capparaceae	<i>Capparis umbonata</i>			C		1/1
plants	higher dicots	Capparaceae	<i>Capparis mitchellii</i>			C		1/1
plants	higher dicots	Caryophyllaceae	<i>Polycarpaea spirostylis subsp. glabra</i>			C		1/1
plants	higher dicots	Caryophyllaceae	<i>Polycarpaea spirostylis subsp. spirostylis</i>			C		1/1
plants	higher dicots	Celastraceae	<i>Denhamia oleaster</i>			C		2/2
plants	higher dicots	Celastraceae	<i>Maytenus cunninghamii</i>	yellow berry bush		C		1/1
plants	higher dicots	Chenopodiaceae	<i>Maireana georgei</i>			C		1/1
plants	higher dicots	Chenopodiaceae	<i>Sclerolaena cuneata</i>	tangled copperburr		C		1/1
plants	higher dicots	Cleomaceae	<i>Cleome viscosa</i>	tick-weed		C		1/1
plants	higher dicots	Fabaceae	<i>Tephrosia virens</i>			C		1/1
plants	higher dicots	Fabaceae	<i>Indigofera leucotricha</i>			C		1/1
plants	higher dicots	Fabaceae	<i>Gastrolobium grandiflorum</i>			C		1/1
plants	higher dicots	Frankeniaceae	<i>Frankenia serpyllifolia</i>			C		2/2
plants	higher dicots	Goodeniaceae	<i>Goodenia scaevolina</i>			C		1/1
plants	higher dicots	Loranthaceae	<i>Lysiana spathulata subsp. spathulata</i>			C		1/1
plants	higher dicots	Loranthaceae	<i>Amyema preissii</i>			C		1/1
plants	higher dicots	Malvaceae	<i>Abutilon hannii</i>			C		1/1
plants	higher dicots	Malvaceae	<i>Sida cunninghamii</i>			C		1/1
plants	higher dicots	Malvaceae	<i>Hibiscus meraukensis</i>	Merauke hibiscus		C		1/1
plants	higher dicots	Malvaceae	<i>Sida sp. (Musselbrook M.B.Thomas+ MRS437)</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia acradenia</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia monticola</i>			C		2/2
plants	higher dicots	Mimosaceae	<i>Acacia melleodora</i>			C		2/2
plants	higher dicots	Mimosaceae	<i>Acacia orthocarpa</i>			C		3/3
plants	higher dicots	Mimosaceae	<i>Acacia tenuissima</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia asperulacea</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia sp. (Coolullah M.Lazarides 3988)</i>			C		3/3
plants	higher dicots	Mimosaceae	<i>Acacia salicina</i>	doolan		C		1/1
plants	higher dicots	Moraceae	<i>Ficus opposita</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila maculata subsp. maculata</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila latrobei subsp. latrobei</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila mitchellii</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila longifolia</i>	berrigan		C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila acrida</i>			C		2/2
plants	higher dicots	Myoporaceae	<i>Eremophila oppositifolia subsp. rubra</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Eucalyptus leucophylla</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Eucalyptus leucophloia subsp. euroa</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Melaleuca nervosa</i>			C		3/3

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Myrtaceae	<i>Corymbia capricornia</i>			C		1/1
plants	higher dicots	Nyctaginaceae	<i>Boerhavia pubescens</i>			C		1/1
plants	higher dicots	Phyllanthaceae	<i>Flueggea leucopyrus</i>			C		1/1
plants	higher dicots	Polygalaceae	<i>Polygala linariifolia</i>			C		1/1
plants	higher dicots	Rhamnaceae	<i>Ziziphus mauritiana</i>	Indian jujube	Y			1/1
plants	higher dicots	Rhamnaceae	<i>Alphitonia excelsa</i>	soap tree		C		2/2
plants	higher dicots	Rubiaceae	<i>Psydrax attenuata</i>			C		1/1
plants	higher dicots	Rubiaceae	<i>Psydrax attenuata forma myrmecophila</i>			C		1/1
plants	higher dicots	Sapindaceae	<i>Atalaya hemiglauc</i>			C		1/1
plants	higher dicots	Solanaceae	<i>Solanum echinatum</i>			C		1/1
plants	higher dicots	Sparrmanniaceae	<i>Corchorus sericeus subsp. densiflorus</i>			C		2/2
plants	higher dicots	Sparrmanniaceae	<i>Triumfetta marsupiata</i>			C		1/1
plants	higher dicots	Sparrmanniaceae	<i>Triumfetta johnstonii</i>			C		1/1
plants	higher dicots	Ulmaceae	<i>Trema tomentosa</i>			C		1/1
plants	higher dicots	Violaceae	<i>Hybanthus aurantiacus</i>			C		1/1
plants	liverworts	Aytoniaceae	<i>Plagiochasma rupestre</i>			C		1/1
plants	lower dicots	Menispermaceae	<i>Tinospora smilacina</i>	snakevine		C		1/1
plants	monocots	Cyperaceae	<i>Fimbristylis elegans</i>			C		1/1
plants	monocots	Cyperaceae	<i>Cyperus dactylotes</i>			C		1/1
plants	monocots	Cyperaceae	<i>Cyperus vaginatus</i>			C		1/1
plants	monocots	Cyperaceae	<i>Cyperus difformis</i>	rice sedge		C		1/1
plants	monocots	Poaceae	<i>Triodia molesta</i>			C		2/2
plants	monocots	Poaceae	<i>Aristida nitidula</i>			C		1/1
plants	monocots	Poaceae	<i>Triodia brizoides</i>			C		1/1
plants	monocots	Poaceae	<i>Triodia longiceps</i>	giant grey spinifex		C		1/1
plants	monocots	Poaceae	<i>Paspalidium gracile</i>	slender panic		C		1/1
plants	monocots	Poaceae	<i>Enneapogon lindleyanus</i>			C		1/1
plants	monocots	Poaceae	<i>Eriachne mucronata forma (Alpha C.E.Hubbard 7882)</i>			C		1/1
plants	monocots	Poaceae	<i>Eriachne mucronata forma (Burnham R.W.Purdie 1370)</i>			C		1/1
protists	blue-green algae	Cyanophyceae	<i>Cyanophyceae</i>			C		1/1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.



Wildlife Online Extract

Search Criteria: Species List for a Defined Area
Species: All
Type: All
Status: All
Records: All
Date: All
Latitude: 21.66 to 22.1
Longitude: 139.7784 to 140.4
Email: bares@placedesigngroup.com
Date submitted: Wednesday 13 Jun 2012 13:05:19
Date extracted: Wednesday 13 Jun 2012 13:10:38

The number of records retrieved = 184

Disclaimer

As the DERM is still in a process of collating and vetting data, it is possible the information given is not complete. The information provided should only be used for the project for which it was requested and it should be appropriately acknowledged as being derived from Wildlife Online when it is used.

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Feedback about Wildlife Online should be emailed to Wildlife.Online@derm.qld.gov.au

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Acanthizidae	<i>Smicrornis brevirostris</i>	weebill		C		1
animals	birds	Accipitridae	<i>Aquila audax</i>	wedge-tailed eagle		C		4
animals	birds	Accipitridae	<i>Milvus migrans</i>	black kite		C		3
animals	birds	Accipitridae	<i>Haliastur sphenurus</i>	whistling kite		C		3
animals	birds	Anatidae	<i>Anas gracilis</i>	grey teal		C		1
animals	birds	Anatidae	<i>Aythya australis</i>	hardhead		C		1
animals	birds	Anatidae	<i>Anas superciliosa</i>	Pacific black duck		C		3
animals	birds	Anhingidae	<i>Anhinga novaehollandiae</i>	Australasian darter		C		1
animals	birds	Ardeidae	<i>Egretta novaehollandiae</i>	white-faced heron		C		2
animals	birds	Ardeidae	<i>Ardea intermedia</i>	intermediate egret		C		1
animals	birds	Ardeidae	<i>Ardea pacifica</i>	white-necked heron		C		3
animals	birds	Artamidae	<i>Artamus cinereus</i>	black-faced woodswallow		C		6
animals	birds	Artamidae	<i>Cracticus nigrogularis</i>	piebald butcherbird		C		3
animals	birds	Artamidae	<i>Artamus minor</i>	little woodswallow		C		1
animals	birds	Artamidae	<i>Cracticus tibicen</i>	Australian magpie		C		4
animals	birds	Cacatuidae	<i>Eolophus roseicapillus</i>	galah		C		10
animals	birds	Cacatuidae	<i>Nymphicus hollandicus</i>	cockatiel		C		6
animals	birds	Cacatuidae	<i>Cacatua sanguinea</i>	little corella		C		8
animals	birds	Campephagidae	<i>Coracina novaehollandiae</i>	black-faced cuckoo-shrike		C		4
animals	birds	Campephagidae	<i>Lalage sueurii</i>	white-winged triller		C		1
animals	birds	Campephagidae	<i>Coracina maxima</i>	ground cuckoo-shrike		C		1
animals	birds	Casuariidae	<i>Dromaius novaehollandiae</i>	emu		C		4
animals	birds	Charadriidae	<i>Charadrius australis</i>	inland dotterel		C		1
animals	birds	Charadriidae	<i>Elseyornis melanops</i>	black-fronted dotterel		C		1
animals	birds	Columbidae	<i>Geophaps plumifera</i>	spinifex pigeon		C		4
animals	birds	Columbidae	<i>Phaps histrionica</i>	flock bronzewing		C		1
animals	birds	Columbidae	<i>Phaps chalcoptera</i>	common bronzewing		C		2
animals	birds	Columbidae	<i>Ocyphaps lophotes</i>	crested pigeon		C		7
animals	birds	Columbidae	<i>Geopelia cuneata</i>	diamond dove		C		3
animals	birds	Columbidae	<i>Geopelia striata</i>	peaceful dove		C		2
animals	birds	Corcoracidae	<i>Struthidea cinerea</i>	apostlebird		C		1
animals	birds	Corvidae	<i>Corvus orru</i>	Torresian crow		C		1
animals	birds	Corvidae	<i>Corvus sp.</i>					2
animals	birds	Corvidae	<i>Corvus coronoides</i>	Australian raven		C		4
animals	birds	Estrildidae	<i>Emblema pictum</i>	painted finch		C		1
animals	birds	Estrildidae	<i>Taeniopygia guttata</i>	zebra finch		C		9
animals	birds	Falconidae	<i>Falco cenchroides</i>	nankeen kestrel		C		5
animals	birds	Falconidae	<i>Falco berigora</i>	brown falcon		C		2
animals	birds	Glareolidae	<i>Stiltia isabella</i>	Australian pratincole		C		1
animals	birds	Gruidae	<i>Grus rubicunda</i>	brulga		C		4
animals	birds	Halcyonidae	<i>Todiramphus pyrrhopygius</i>	red-backed kingfisher		C		2
animals	birds	Halcyonidae	<i>Dacelo leachii</i>	blue-winged kookaburra		C		2
animals	birds	Halcyonidae	<i>Todiramphus sanctus</i>	sacred kingfisher		C		1
animals	birds	Hirundinidae	<i>Petrochelidon ariel</i>	fairy martin		C		1
animals	birds	Maluridae	<i>Stipiturus ruficeps</i>	rufous-crowned emu-wren		C		1/1
animals	birds	Maluridae	<i>Malurus lamberti</i>	variegated fairy-wren		C		2

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
animals	birds	Megaluridae	<i>Cincloramphus mathewsi</i>	rufous songlark		C		1
animals	birds	Megaluridae	<i>Cincloramphus cruralis</i>	brown songlark		C		1
animals	birds	Megaluridae	<i>Eremiornis carteri</i>	spinifexbird		C		1
animals	birds	Meliphagidae	<i>Ptilotula penicillatus</i>	white-plumed honeyeater		C		4
animals	birds	Meliphagidae	<i>Conopophila rufogularis</i>	rufous-throated honeyeater		C		1
animals	birds	Meliphagidae	<i>Acanthagenys rufogularis</i>	spiny-cheeked honeyeater		C		1
animals	birds	Meliphagidae	<i>Manorina flavigula</i>	yellow-throated miner		C		8
animals	birds	Meliphagidae	<i>Epthianura tricolor</i>	crimson chat		C		1
animals	birds	Meliphagidae	<i>Gavicalis virescens</i>	singing honeyeater		C		3
animals	birds	Meliphagidae	<i>Lichmera indistincta</i>	brown honeyeater		C		3
animals	birds	Meliphagidae	<i>Ptilotula flavescens</i>	yellow-tinted honeyeater		C		1
animals	birds	Meliphagidae	<i>Ptilotula keartlandi</i>	grey-headed honeyeater		C		4
animals	birds	Meliphagidae	<i>Philemon citreogularis</i>	little friarbird		C		2
animals	birds	Meropidae	<i>Merops ornatus</i>	rainbow bee-eater		C		3
animals	birds	Monarchidae	<i>Grallina cyanoleuca</i>	magpie-lark		C		5
animals	birds	Motacillidae	<i>Anthus novaeseelandiae</i>	Australasian pipit		C		1
animals	birds	Nectariniidae	<i>Dicaeum hirundinaceum</i>	mistletoebird		C		1
animals	birds	Oriolidae	<i>Oriolus sagittatus</i>	olive-backed oriole		C		1
animals	birds	Otididae	<i>Ardeotis australis</i>	Australian bustard		C		3
animals	birds	Pachycephalidae	<i>Oreoica gutturalis</i>	crested bellbird		C		1
animals	birds	Pachycephalidae	<i>Colluricincla harmonica</i>	grey shrike-thrush		C		2
animals	birds	Pachycephalidae	<i>Pachycephala rufiventris</i>	rufous whistler		C		2
animals	birds	Pardalotidae	<i>Pardalotus rubricatus</i>	red-browed pardalote		C		2
animals	birds	Pardalotidae	<i>Pardalotus striatus</i>	striated pardalote		C		1
animals	birds	Petroicidae	<i>Microeca fascinans</i>	jacky winter		C		1
animals	birds	Phalacrocoracidae	<i>Phalacrocorax sulcirostris</i>	little black cormorant		C		2
animals	birds	Podargidae	<i>Podargus strigoides</i>	tawny frogmouth		C		1
animals	birds	Pomatostomidae	<i>Pomatostomus temporalis</i>	grey-crowned babbler		C		4
animals	birds	Psittacidae	<i>Psitteuteles versicolor</i>	varied lorikeet		C		2
animals	birds	Psittacidae	<i>Aprosmictus erythropterus</i>	red-winged parrot		C		1
animals	birds	Psittacidae	<i>Melopsittacus undulatus</i>	budgerigar		C		6
animals	birds	Psittacidae	<i>Barnardius zonarius</i>	Australian ringneck		C		2
animals	birds	Rhipiduridae	<i>Rhipidura leucophrys</i>	willie wagtail		C		4
animals	birds	Strigidae	<i>Ninox boobook</i>	southern boobook		C		1
animals	birds	Threskiornithidae	<i>Platalea regia</i>	royal spoonbill		C		1
fungi	sac fungi	Peltulaceae	<i>Peltula obscurans</i>			C		1/1
plants	higher dicots	Aizoaceae	<i>Zaleya galericulata</i>			C		1/1
plants	higher dicots	Amaranthaceae	<i>Ptilotus nobilis subsp. nobilis</i>			C		1/1
plants	higher dicots	Amaranthaceae	<i>Ptilotus obovatus</i>			C		2/2
plants	higher dicots	Amaranthaceae	<i>Ptilotus leucocoma</i>			C		1/1
plants	higher dicots	Amaranthaceae	<i>Ptilotus schwartzii</i>			C		2/2
plants	higher dicots	Apocynaceae	<i>Rhyncharhena linearis</i>			C		2/1
plants	higher dicots	Apocynaceae	<i>Sarcostemma brevipedicellatum</i>			C		1/1
plants	higher dicots	Apocynaceae	<i>Carissa lanceolata</i>			C		1
plants	higher dicots	Asteraceae	<i>Streptoglossa odora</i>			C		1/1
plants	higher dicots	Asteraceae	<i>Centipeda minima subsp. minima</i>			C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Asteraceae	<i>Lactuca serriola forma serriola</i>		Y			1/1
plants	higher dicots	Asteraceae	<i>Blumea tenella</i>			C		1/1
plants	higher dicots	Asteraceae	<i>Pluchea dentex</i>	bowl daisy		C		1/1
plants	higher dicots	Asteraceae	<i>Olearia stuartii</i>			C		1/1
plants	higher dicots	Byttneriaceae	<i>Waltheria indica</i>			C		1/1
plants	higher dicots	Caesalpiniaceae	<i>Senna notabilis</i>			C		1/1
plants	higher dicots	Caesalpiniaceae	<i>Senna artemisioides subsp. sturtii</i>			C		2
plants	higher dicots	Caesalpiniaceae	<i>Petalostylis labicheoides</i>			C		1/1
plants	higher dicots	Caesalpiniaceae	<i>Petalostylis cassioides</i>			C		1/1
plants	higher dicots	Caesalpiniaceae	<i>Senna phyllodinea</i>			C		1/1
plants	higher dicots	Capparaceae	<i>Capparis nummularia</i>			C		2/2
plants	higher dicots	Chenopodiaceae	<i>Sclerolaena eriacantha</i>			C		1/1
plants	higher dicots	Chenopodiaceae	<i>Rhagodia spinescens</i>	thorny saltbush		C		1/1
plants	higher dicots	Chenopodiaceae	<i>Dysphania rhadinostachya subsp. rhadinostachya</i>			C		1/1
plants	higher dicots	Chenopodiaceae	<i>Atriplex nummularia</i>			C		1/1
plants	higher dicots	Chenopodiaceae	<i>Dysphania kalpari</i>			C		1/1
plants	higher dicots	Chenopodiaceae	<i>Maireana triptera</i>	three-wing bluebush		C		1/1
plants	higher dicots	Convolvulaceae	<i>Ipomoea muelleri</i>	poison morning-glory		C		1/1
plants	higher dicots	Euphorbiaceae	<i>Euphorbia parvicaruncula</i>	rough-seeded spurge		C		1/1
plants	higher dicots	Euphorbiaceae	<i>Euphorbia tannensis subsp. eremophila</i>			C		1/1
plants	higher dicots	Fabaceae	<i>Tephrosia supina</i>			C		1/1
plants	higher dicots	Fabaceae	<i>Tephrosia brachyodon var. longifolia</i>			C		2/2
plants	higher dicots	Fabaceae	<i>Zornia muriculata subsp. angustata</i>			C		1/1
plants	higher dicots	Fabaceae	<i>Rhynchosia minima var. tomentosa</i>			C		2/2
plants	higher dicots	Goodeniaceae	<i>Scaevola sp. (Mt Isa P.L.Harris 699)</i>			C		1/1
plants	higher dicots	Loranthaceae	<i>Lysiana subfalcata</i>			C		1/1
plants	higher dicots	Lythraceae	<i>Ammannia multiflora</i>	jerry-jerry		C		2
plants	higher dicots	Malvaceae	<i>Abutilon otocarpum</i>			C		1
plants	higher dicots	Malvaceae	<i>Gossypium australe</i>			C		2
plants	higher dicots	Malvaceae	<i>Hibiscus meraukensis</i>	Merauke hibiscus		C		1/1
plants	higher dicots	Malvaceae	<i>Sida sp. (Musselbrook M.B.Thomas+ MRS437)</i>			C		2/2
plants	higher dicots	Malvaceae	<i>Sida cleisocalyx</i>			C		2/2
plants	higher dicots	Mimosaceae	<i>Acacia phlebocarpa</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia aneura</i>			C		2
plants	higher dicots	Mimosaceae	<i>Acacia elachantha</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia holosericea</i>			C		2/2
plants	higher dicots	Mimosaceae	<i>Acacia excelsa</i>			C		2
plants	higher dicots	Mimosaceae	<i>Acacia limbata</i>			C		3/3
plants	higher dicots	Mimosaceae	<i>Acacia hemsleyi</i>			C		1/1
plants	higher dicots	Mimosaceae	<i>Acacia victoriae</i>			C		1/1
plants	higher dicots	Molluginaceae	<i>Glinus lotoides</i>	hairy carpet weed		C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila acrida</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila latrobei</i>			C		3/1
plants	higher dicots	Myoporaceae	<i>Eremophila bowmanii subsp. latifolia</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila latrobei subsp. glabra</i>			C		1/1
plants	higher dicots	Myoporaceae	<i>Eremophila oppositifolia subsp. rubra</i>			C		1/1

Kingdom	Class	Family	Scientific Name	Common Name	I	Q	A	Records
plants	higher dicots	Myrtaceae	<i>Eucalyptus tereticornis</i>			C		2
plants	higher dicots	Myrtaceae	<i>Corymbia terminalis</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Corymbia</i>			C		1
plants	higher dicots	Myrtaceae	<i>Melaleuca trichostachya</i>			C		1/1
plants	higher dicots	Myrtaceae	<i>Melaleuca nervosa subsp. crosslandiana</i>			C		2/2
plants	higher dicots	Myrtaceae	<i>Eucalyptus normantonensis</i>	Normanton box		C		1/1
plants	higher dicots	Proteaceae	<i>Grevillea striata</i>	beefwood		C		3
plants	higher dicots	Rhamnaceae	<i>Ventilago viminalis</i>	supplejack		C		2
plants	higher dicots	Rubiaceae	<i>Psydrax attenuata</i>			C		1/1
plants	higher dicots	Rubiaceae	<i>Psydrax oleifolia</i>			C		1/1
plants	higher dicots	Sapindaceae	<i>Atalaya hemiglauca</i>			C		2
plants	higher dicots	Solanaceae	<i>Solanum nigrum</i>		Y			1
plants	higher dicots	Ulmaceae	<i>Trema tomentosa var. aspera</i>			C		1/1
plants	higher dicots	Violaceae	<i>Hybanthus aurantiacus</i>			C		1/1
plants	monocots	Cyperaceae	<i>Fimbristylis dichotoma</i>	common fringe-rush		C		3
plants	monocots	Poaceae	<i>Setaria surgens</i>			C		1
plants	monocots	Poaceae	<i>Triodia molesta</i>			C		4/4
plants	monocots	Poaceae	<i>Aristida ingrata</i>			C		1
plants	monocots	Poaceae	<i>Themeda triandra</i>	kangaroo grass		C		1
plants	monocots	Poaceae	<i>Urochloa gilesii</i>			C		1
plants	monocots	Poaceae	<i>Aristida calycina</i>			C		1
plants	monocots	Poaceae	<i>Aristida contorta</i>	bunched kerosene grass		C		3
plants	monocots	Poaceae	<i>Aristida nitidula</i>			C		1/1
plants	monocots	Poaceae	<i>Digitaria brownii</i>			C		4
plants	monocots	Poaceae	<i>Mnesithea formosa</i>			C		1/1
plants	monocots	Poaceae	<i>Triodia brizoides</i>			C		2/2
plants	monocots	Poaceae	<i>Triodia longiceps</i>	giant grey spinifex		C		1/1
plants	monocots	Poaceae	<i>Eriachne aristidea</i>			C		1
plants	monocots	Poaceae	<i>Eriachne mucronata</i>			C		1
plants	monocots	Poaceae	<i>Eriachne pulchella</i>			C		1
plants	monocots	Poaceae	<i>Leptochloa digitata</i>			C		1/1
plants	monocots	Poaceae	<i>Eragrostis basedowii</i>			C		1
plants	monocots	Poaceae	<i>Tripogon loliiformis</i>	five minute grass		C		1
plants	monocots	Poaceae	<i>Aristida biglandulosa</i>			C		1
plants	monocots	Poaceae	<i>Aristida helicophylla</i>			C		1/1
plants	monocots	Poaceae	<i>Aristida jerichoensis</i>			C		1
plants	monocots	Poaceae	<i>Cymbopogon bombycinus</i>	silky oilgrass		C		1
plants	monocots	Poaceae	<i>Aristida inaequiglumis</i>			C		1
plants	monocots	Poaceae	<i>Enneapogon polyphyllus</i>	leafy nineawn		C		3/1
plants	monocots	Poaceae	<i>Paraneurachne muelleri</i>			C		2
plants	monocots	Poaceae	<i>Sporobolus australasicus</i>			C		3
plants	monocots	Poaceae	<i>Austrochloris dichanthioides</i>			C		1
plants	monocots	Poaceae	<i>Aristida holathera var. holathera</i>			C		3
plants	monocots	Poaceae	<i>Eriachne mucronata forma (Burnham R.W.Purdie 1370)</i>			C		1/1
plants	monocots	Poaceae	<i>Perotis rara</i>	comet grass		C		1
plants	monocots	Poaceae	<i>Eulalia aurea</i>	silky browntop		C		1

CODES

I - Y indicates that the taxon is introduced to Queensland and has naturalised.

Q - Indicates the Queensland conservation status of each taxon under the *Nature Conservation Act 1992*. The codes are Extinct in the Wild (PE), Endangered (E), Vulnerable (V), Near Threatened (NT), Least Concern (C) or Not Protected ().

A - Indicates the Australian conservation status of each taxon under the *Environment Protection and Biodiversity Conservation Act 1999*. The values of EPBC are Conservation Dependent (CD), Critically Endangered (CE), Endangered (E), Extinct (EX), Extinct in the Wild (XW) and Vulnerable (V).

Records – The first number indicates the total number of records of the taxon for the record option selected (i.e. All, Confirmed or Specimens).

This number is output as 99999 if it equals or exceeds this value. The second number located after the / indicates the number of specimen records for the taxon.

This number is output as 999 if it equals or exceeds this value.

Appendix C

Survey Methodology

C1. FLORA SURVEY METHODOLOGY

C1.1. PLANT SPECIES LIST

Dominant and new plant species were listed at most quaternary sites and full species lists made at most tertiary sites. Opportunistic sightings of new species were noted without recording location information unless they were considered significant. Unknown plants were collected for desktop identification or identification by the Queensland Herbarium.

C1.2. PLANT COMMUNITY DESCRIPTIONS

Photo patterns relating to plant communities were identified through aerial photo and satellite imagery interpretation. Field investigation of observed plant community and landform pattern followed and plant communities were surveyed using methods in line with those outlined by Neldner et al. (2005).

Descriptions (after Wannan, 2010) are given in **APPENDIX D.2**. Integrity ratings, also after Wannan (2010) are included in each Plant Community descriptions. All woody plants noted in each community are listed. In most cases, only dominant ground layer species are listed. A complete species list indicating which species occur in each unit is given as Attachment 1. Plant names follow Bostock and Holland (2010) except where more recent names are known. Vegetation structure categories follow the modified Specht categories given in Neldner et al. (2005). RE and VC codes are derived from Department of Environment and Resource Management (2012) except where noted in **APPENDIX D.2**. An FPC value of '+' indicates a species was present and that its FPC was at or below 1%. Dominant species in any vegetation layer are underlined and occasionally recorded species are bracketed. FPC was derived by multiplying measured canopy cover by a crown density factor estimated in the field. Species marked with an asterisk (*) are listed as exotic by Bostock and Holland (2010). Species in Plant Community descriptions are listed in order of dominance.

C1.3. PLANT COMMUNITY MAPPING

DERM RE mapping does not yet exist for this region in Queensland. RE mapping, based on observed Plant Communities was developed as part of field preparation. Plant community boundaries were roughly delineated using stereoscopic aerial photo interpretation and GIS prior to fieldwork. A number of land resource information sources were used including:

- Scanned 1:250,000 scale geology map and vector layers for Duchess (Department of Mines and Energy, 2008)
- Aerial imagery: 6954 Duchess 2004 Program Aerial Photography; frames 57 and 58, film number QAP6049 (DERM 2012)
- Satellite imagery: Cloncurry_26Apr2010_50cm_StudyArea.tif

C1.4. SEARCHES FOR SPECIES OF CONSERVATION CONCERN

Areas of specialised habitat (fire refuges, uncommon landscape features, highly productive areas etc.) on the mining lease were targeted for detailed survey and any unknown plants collected for later identification, with particular attention given to those plant groups likely to contain SOCS.

C1.5. LPA, WONS AND LGA PMP LISTED WEED SPECIES

Any occurrences of exotic species were recorded.

C1.6. REFERENCES

Bostock, P. D., & Holland, A. E. (2010) *Census of the Queensland Flora 2010*. Brisbane, Queensland: Queensland Herbarium, Department of Environment and Resource Management.

Department of Environment and Resource Management (2004) 6954 DUCHESS 2004 PROGRAM AERIAL PHOTOGRAPHY; Frames 57 and 58, Film Number QAP6049.

Department of Environment and Resource Management (2011) *Wildlife Online*. Retrieved May 2, 2012 from Environment and Resource Management Web Site: http://www.derm.qld.gov.au/wildlife-ecosystems/wildlife/wildlife_online/. Last updated 16 December 2011.

Department of Environment and Resource Management (2012) *Regional Ecosystems (REDD)*. Retrieved May 2, 2012 from Environment and Resource Management Web Site: http://www.derm.qld.gov.au/wildlife-ecosystems/biodiversity/regional_ecosystems/index.php

Department of Sustainability, Environment, Water, Population and Communities (2009) *Species Profile and Threats Database: EPBC Act List of Threatened Flora*. Retrieved May 2, 2012 from website: <http://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=flora>. Site Updated 26 November 2009.

Department of Sustainability, Environment, Water, Population and Communities (2012) *Environment Protection and Biodiversity Conservation Act (the EPBC Act) home page*. Retrieved May 2, 2012 from Protected Matters Search Tool: <http://www.environment.gov.au/epbc/pmst/index.html>

England, R. (2008) *Southern Gulf Catchments Regional Pest Management Plan*. Report prepared by Alluvium Consulting for Southern Gulf Catchments.

GRASS Development Team (2008) *Geographic Resource Analysis Support System (GRASS)*. Software, Version 6.3.0. <http://grass.org>

Department of Mines and Energy (2008) *Queensland Geological Mapping (polygonised vector) Data Regional and 1:100 000 Sheet areas*. DVD.

Jessop, J. (Ed.). (1981). *Flora of Central Australia*. Sydney, New South Wales: The Australian Systematic Botany Society.

Milson, J. (2000). *Pasture Plants of North-west Queensland*. Brisbane, Queensland: Department of Primary Industries.

Milson, J. (1995). *Plant Identification in the Arid Zone*. Brisbane, Queensland: Department of Primary Industries and Fisheries.

Milson, J. (2000). *Trees and Shrubs of North-west Queensland*. Brisbane, Queensland: Department of Primary Industries.

QGIS Development Team, (2008) *Quantum GIS*. Software. Versions 0.8-1.1. <http://www.qgis.org/>

Neldner, V. J., Wilson, B. A., Thompson, E. J., & Dillewaard, H. A. (2005). *Methodology for Survey and Mapping of Regional Ecosystems and Vegetation Communities in Queensland V3.1*. Brisbane, Queensland: Queensland Herbarium, Environmental Protection Agency.

Tothill, J. C., & Hacker, J. B. (1996). *The Grasses of Southern Queensland*. Brisbane, Queensland: Tropical Grassland Society of Australia inc.

Taylor, D. and Brearly, G. (2010) *Ivanhoe Cloncurry Mine Leases and Associated Infrastructure, Baseline Ecological Report*. PLACE Design Group Pty Ltd report to Ivanhoe Cloncurry Mines Pty Ltd.

Wannan, B. (2010). *Guidelines for Flora Survey in Northern Queensland. Technical Note*. Cairns, Queensland: Department of Environment and Resource Management.

C2. FAUNA SURVEY METHODOLOGY

C2.1. SITE SELECTION

Three major terrestrial faunal habitats within the major regional ecosystems will be surveyed. The trap sites will be established in regional ecosystem types of sufficient area to be surveyed by trapping (Mt Dore 1.3.7, Mt Dore 1.11.2 & Mt Elliott 1.3.7). A site is defined as a 3 ha area of homogeneous habitat either within a 100 m radius of a point (usually demarcated by a pitfall site) or a strip 300 m by 100 m for habitats with a linear configuration (e.g. riparian). Both trapping and intensive searching methods will be employed, however trapping will only be used in the major vegetation/habitat types. Trapping (pit-traps and small mammal traps) will not occur in vegetation types with areas less than 5 ha, and on those with terrain unsuitable for trap establishment – although they were diurnally searched for reptiles, birds, larger mammals and traces). Search sites were: Mt Elliott Camp; Mt Elliott Airstrip; Mt Dore 1-4. The location of all trap sites, spotlighting and diurnal search routes will be entered into the GIS mapping programme as will the location of any incidental records of conservation significant faunal species (refer **FIGURE C2.1**). Incidental observations of fauna were recorded over the whole ML.

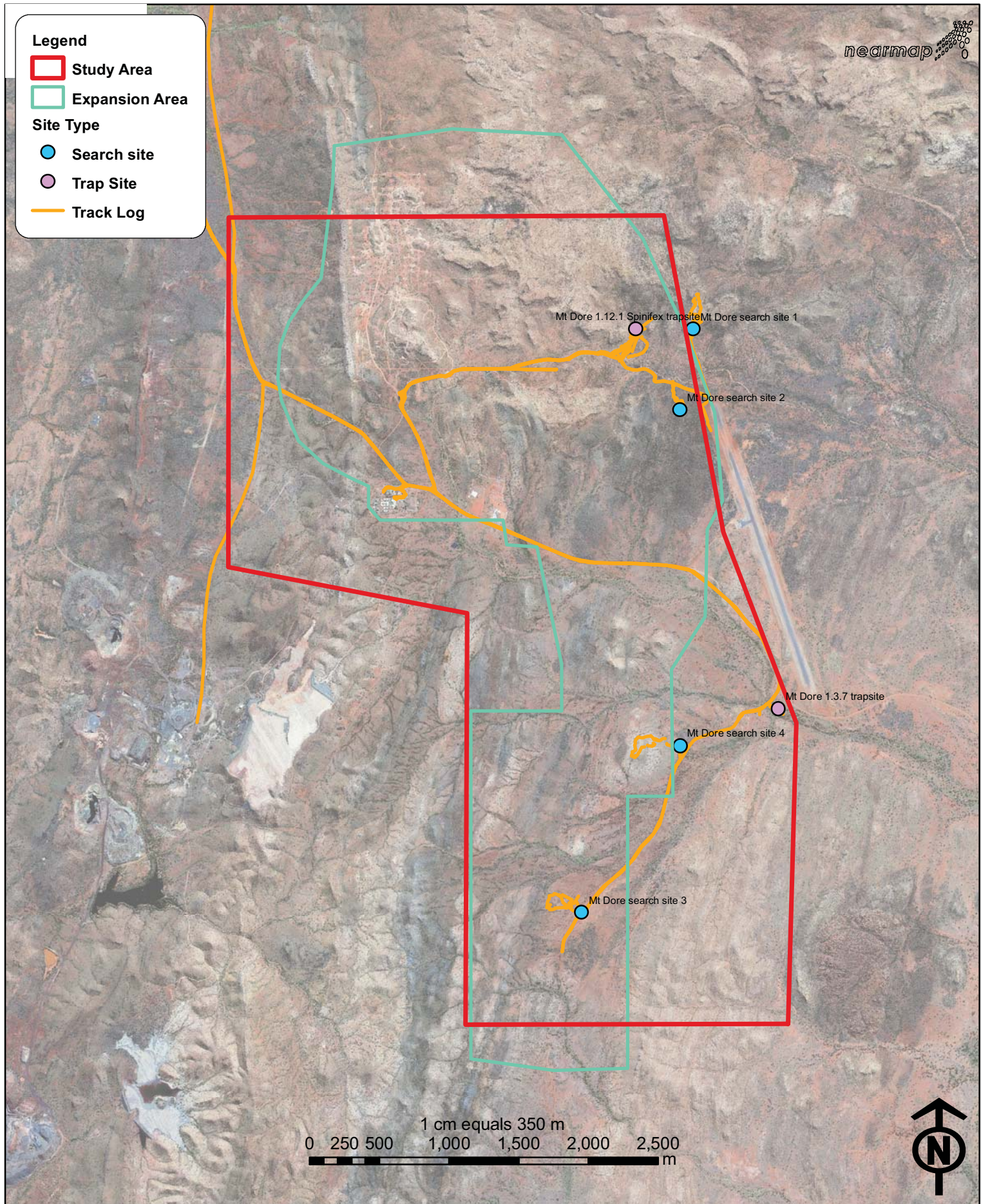
C2.2. SITE HABITAT CHARACTERISTICS

At two points 50 m apart at each trap site, the following detailed vertebrate habitat characteristics were assessed:

- basal area of live trees using a basal area wedge;
- stem density of trees >10 cm dbh;
- density of living and dead hollow-bearing trees (HBTs);
- average height of tallest trees;
- proportion of overstorey canopy cover;
- proportion of foliage cover above 5 m;
- sapling, shrub and acacia density;
- basal area of live trees with decorticated bark using a basal area wedge;
- basal area of dead trees with exfoliating bark using a basal area wedge;
- density of hollow and solid logs;
- percentage ground cover of grass, low shrubs, leaf litter, twig litter, and rocks within a 10 m radius providing shelter for ground fauna;
- presence of crevices, hollows or exfoliating rocks;
- soil type;
- presence of cracks in soil;
- Presence of water or caves.

C2.3. FAUNA SURVEY METHODS

Vertebrate fauna associated with each site in a 3 ha area (approximately a 100 m radius around each trap site within the same habitat, or a linear shape in the case of riparian habitats) was surveyed using standard techniques over a five day survey period. **TABLE 12** provides the details of each technique and effort spent. All traps were checked twice daily to avoid trap losses of fauna. In addition, opportunistic sightings were made during the day and night from the vehicle or on foot transects while traversing the ML.



This mapping document utilizes geographic information and digital data resources under agreement with the following suppliers: The State of Queensland (DERM); Google Earth pro (image dated:)

TABLE 12: FAUNAL SAMPLING TECHNIQUES AND THEIR APPLICATION

Technique	Description	Effort
Pitfall traplines	3 shaded 20 litre buckets under and 8 snake/reptile traps on either side of a 30 m of drift fence	5 days/4 nights
Elliott A and B traps	23 A traps and 2 B traps for small mammals, baited with a mixture of peanut butter, rolled oats and pet jerky were placed at 5 to 20 m intervals depending on the terrain	5 days/4 nights
Mawbey traps	2 large Mawbey Traps for possums, quolls and bandicoots baited with jam coated apple and pet jerky were placed at the base of trees in woodland sites and under grass clumps at the grassland site	5 days/4 nights
Intensive diurnal searches	Daytime searches for reptiles and animal traces such as scats, tracks, skeletal remains, scratch marks on trees and carcasses, under logs, within leaf litter, quiet observation	Two-person hours during the middle part of the day per site
Intensive nocturnal searches	Nighttime searches for nocturnal mammals, birds, geckos, snakes and frogs and spotlighting from vehicles along the roads and tracks of the Study Area for nocturnal mammals and birds	One-person hour per site
Animal traces	Scats, owl pellets, tracks, skeletal remains, scratch marks on trees and carcasses	Part of intensive diurnal and nocturnal searches
ANABAT recordings of bats	Insectivorous bats were recorded for an entire night at each site using ANABAT equipment.	Overnight at each site
Diurnal bird observations	Two searches, based on a minimum of two searches in the early morning	Two person hours per site
Owl playback tapes	Owl audio observations using recorded calls to elicit calls from nearby birds (3 minutes replay of relevant species calls and two minutes listening time)	30 minutes per site
Motion Cameras	A motion camera was set up at each trap site focusing on a baited area or waterhole if possible.	24 hr period
Incidental	Opportunistic sightings during the day and night from the vehicle or on foot transects while traversing the study area	

C2.4. ABUNDANCE

Estimates of the abundance of species within the ML were made, definitions of abundance class differed for birds and other vertebrates:

- birds were defined as uncommon (U) - one or two individuals; common (C) - three to 19 individuals at more than one site or locally common (LC) three to 19 individuals at one site only; abundant (A) - 20 to 49 individuals; and very abundant (VA) - ≥ 50 individuals;
- Abundance classes of other vertebrates were based on a combination of frequency of occurrence at trap sites and abundance (1 trap site only was uncommon (U) while an abundance ≥ 10 individuals was abundant (A) with the remainder common (C)).
- The trace of a vertebrate or the registering of a bat species by ANABAT at a site was counted as '1' at that site.
- The abundance of any species at a particular site was determined by the most of that species recorded at the site at one time.

C2.5. IDENTIFICATION

Preliminary identification of mammals, birds, reptiles and amphibians was made by the survey team using several reference books containing illustrations, taxonomic keys and descriptions (Cogger 2000; Menkhorst and Knight 2004; Pizzey and Knight 2006; Tyler and Knight 2009; Wilson 2005). Where

appropriate, one or two specimens of any unidentified species were retained for confirmation of identification and sent to the Queensland Museum. To verify field identifications of released mammals, hair samples were taken prior to their release and sent to an expert in identifying vertebrates from such material (B. Triggs) (Triggs 1996). Scats were also sent to B. Triggs and skeletal remains to the Queensland Museum.

Common and scientific names of birds, mammals, reptiles and amphibians were based on those in published documents (Christidis and Bowles 2008; Cogger 2000; Tyler and Knight 2009; Van Dyck and Strahan 2008; Wilson and Swan 2008). When reporting results, common names are used where possible (e.g. birds and mammals) but for taxa where many species lack common names (e.g. frogs and reptiles), scientific names were used.

Anabat recordings were analysed by Greg Ford using the appropriate referencing (Churchill 1998; Reinhold et al. 2001).

C2.6. REFERENCES

Christidis L. & Bowles W. E. (2008) *Systematics and Taxonomy of Australian Birds* CSIRO Publishing, Collingwood.

Churchill S. (1998) *Australian Bats*. New Holland, Sydney.

Cogger H. G. (2000) *Reptiles & amphibians of Australia*. Reed Books Australia, Chatswood, N.S.W.

Menkhorst P. & Knight F. (2004) *A field guide to the mammals of Australia*. Oxford University Press, Melbourne.

Pizzey G. & Knight F. (2006) *The field guide to the birds of Australia*. Harper Collins Publishers, Sydney, Australia.

Reinhold L., Law B., Ford G. & Pennay M. (2001) *Key to the bat calls of south-east Queensland and north-east New South Wales*. Department of Natural Resources and Mines, Brisbane.

Triggs B. (1996) *Tracks, scats and other traces: a field guide to Australian mammals*. Oxford University Press, Melbourne, Vic.

Tyler M. J. & Knight F. (2009) *Field Guide of the Frogs of Australia*. CSIRO Publishing, Collingwood.

Van Dyck S. & Strahan R. (2008) *The Mammals of Australia*. New Holland, Chatswood, Australia.

Wilson S. (2005) *A Field Guide to Reptiles of Queensland*. New Holland Publishers, Frenchs Forest.

Wilson S. & Swan g. (2008) *A Complete Guide to the Reptiles of Australia*. New Holland Publishers, Chatswood.

Appendix D

Flora Survey Results

Appendix D.1.

Flora Species List

PLACE Design Group

Family	Scientific Name	Common Name	Incidental	1.3.6x1a	1.3.7	1.5.6	1.5.8	1.11.2a	1.11.2e	1.11.2x2	1.11.2x6	1.11.3b	1.12.1xa	1.12.1x4	1.12.1xb	1.12.1x2	Exotic	NC Act Listing	EPBC Act listing
Adiantaceae	<i>Cheilanthes sieberi</i> subsp. <i>pseudovellea</i>	a resurrection fern						x										LC	
Adiantaceae	<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>	a resurrection fern		x											x			LC	
Amaranthaceae	<i>Aerva javanica</i> *	kapok bush	x														Y		
Amaranthaceae	<i>Alternanthera nana</i>	hairy joyweed	x															LC	
Amaranthaceae	<i>Ptilotus fusiformis</i>		x															LC	
Amaranthaceae	<i>Ptilotus obovatus</i>			x		x	x	x	x	x								LC	
Amaranthaceae	<i>Ptilotus sessilifolius</i>											x						LC	
Apocynaceae	<i>Carissa lanceolata</i>	conkerberry					x											LC	
Apocynaceae	<i>Sarcostemma brevipedicellatum</i>	band-aid bush					x											LC	
Asteraceae	<i>Bidens bipinnata</i> *	bipinnate beggar's ticks													x		Y		
Asteraceae	<i>Cyanthillium cinereum</i>							x						x				LC	
Asteraceae	<i>Epaltes australis</i>	spreading nut-heads	x																
Asteraceae	<i>Pluchea dentex</i>	bowl daisy			x											x		LC	
Asteraceae	<i>Pterocaulon serrulatum</i>	apple bush				x	x	x										LC	
Asteraceae	<i>Streptoglossa decurrens</i>		x															LC	
Boraginaceae	<i>Ehretia saligna</i>		x															LC	
Boraginaceae	<i>Heliotropium</i> sp.					x		x	x						x			LC	
Boraginaceae	<i>Heliotropium tenuifolium</i>						x											LC	
Boraginaceae	<i>Trichodesma zeylanicum</i>	camel bush	x															LC	
Byttneriaceae	<i>Waltheria indica</i>				x													LC	
Caesalpiniaceae	<i>Chamaecrista exigua</i> var. <i>minor</i>		x															LC	
Caesalpiniaceae	<i>Senna artemisioides</i> subsp. <i>helmsii</i>							x	x		x							LC	
Caesalpiniaceae	<i>Senna artemisioides</i> subsp. <i>oligophylla</i>			x		x	x		x		x							LC	
Caesalpiniaceae	<i>Senna artemisioides</i> subsp. <i>sturtii</i>					x	x		x		x							LC	
Caesalpiniaceae	<i>Senna forma quadrifolia</i>		x															LC	
Caesalpiniaceae	<i>Senna glutinosa</i> subsp. <i>pruinosa</i>		x															LC	
Caesalpiniaceae	<i>Senna notabilis</i>	cockroach bush	x															LC	
Capparaceae	<i>Apophyllum anomalum</i>						x											LC	
Capparaceae	<i>Capparis lasiantha</i>	nipan						x			x			x				LC	
Caryophyllaceae	<i>Polycarpaea breviflora</i>						x											LC	
Caryophyllaceae	<i>Polycarpaea</i> sp.						x							x				LC	
Celastraceae	<i>Denhamia oleaster</i>		x															LC	
Celastraceae	<i>Maytenus cunninghamii</i>	yellow berry bush														x		LC	
Chenopodiaceae	<i>Maireana villosa</i>						x											LC	
Chenopodiaceae	<i>Salsola australis</i>	roly poly							x									LC	
Chenopodiaceae	<i>Sclerolaena cornishiana</i>					x	x											LC	
Chenopodiaceae	<i>Sclerolaena cuneata</i>	tangled copperburr	x															LC	
Chenopodiaceae	<i>Enchylaena tomentosa</i>	ruby saltbush					x											LC	
Chenopodiaceae	<i>Sclerolaena eriacantha</i>					x												LC	
Cleomaceae	<i>Cleome viscosa</i>	tick-weed		x	x	x			x		x							LC	
Convolvulaceae	<i>Evolvulus alsinoides</i>					x	x		x						x			LC	

PLACE Design Group

Family	Scientific Name	Common Name	Incidental	1.3.6x1a	1.3.7	1.5.6	1.5.8	1.11.2a	1.11.2e	1.11.2x2	1.11.2x6	1.11.3b	1.12.1xa	1.12.1x4	1.12.1xb	1.12.1x2	Exotic	NC Act Listing	EPBC Act listing
Convolvulaceae	<i>Ipomoea muelleri</i>	poison morning-glory	x															LC	
Convolvulaceae	<i>Ipomoea plebeia</i>	bellvine		x	x						x							LC	
Cucurbitaceae	<i>Cucumis argenteus</i>					x												LC	
Cyperaceae	<i>Cyperus exaltatus</i>	tall flatsedge			x													LC	
Cyperaceae	<i>Cyperus sp.</i>							x							x			LC	
Cyperaceae	<i>Fimbristylis dichotoma</i>							x										LC	
Euphorbiaceae	<i>Chamaesyce drummondii</i>	caustic-weed				x												LC	
Euphorbiaceae	<i>Chamaesyce hirta</i> *	asthma plant			x												Y		
Euphorbiaceae	<i>Euphorbia tannensis subsp. eremophila</i>								x									LC	
Fabaceae	<i>Crotalaria medicaginea</i>	trefoil rattlepod		x	x						x							LC	
Fabaceae	<i>Glycine canescens</i>	silky glycine		x	x													LC	
Fabaceae	<i>Indigofera brevidens</i>							x										LC	
Fabaceae	<i>Indigofera hirsuta</i>	hairy indigo			x													LC	
Fabaceae	<i>Indigofera linifolia</i>				x		x											LC	
Fabaceae	<i>Indigofera linnaei</i>	Birdsville indigo				x					x		x					LC	
Fabaceae	<i>Macroptilium atropurpureum</i> *	siratro	x														Y		
Fabaceae	<i>Rhynchosia minima</i>			x														LC	
Fabaceae	<i>Sesbania cannabina var. cannabina</i>		x															LC	
Fabaceae	<i>Sesbania javanica</i>				x													LC	
Fabaceae	<i>Swainsona burkei</i>											x						LC	
Fabaceae	<i>Tephrosia brachyodon</i>		x															LC	
Fabaceae	<i>Tephrosia sp. (Mt Isa P.L. Harris 277)</i>							x										LC	
Fabaceae	<i>Tephrosia supina</i>														x			LC	
Fabaceae	<i>Vigna sp.</i>				x													LC	
Fabaceae	<i>Zornia muriculata subsp. angustata</i>		x															LC	
Goodeniaceae	<i>Goodenia grandiflora</i>													x				LC	
Goodeniaceae	<i>Scaevola ovalifolia</i>											x						LC	
Lauraceae	<i>Cassytha filiformis</i>	dodder laurel					x	x	x			x						LC	
Loranthaceae	<i>Diplatia grandibractea</i>	a mistletoe						x										LC	
Loranthaceae	<i>Lysiana sp.</i>	a mistletoe									x							LC	
Malvaceae	<i>Abutilon andrewsianum</i>					x												LC	
Malvaceae	<i>Abutilon fraseri ssp. fraseri</i>			x														LC	
Malvaceae	<i>Abutilon leucopetalum</i>			x			x	x		x	x							LC	
Malvaceae	<i>Abutilon otocarpum</i>			x							x							LC	
Malvaceae	<i>Gossypium australe</i>	native cotton		x		x	x		x		x	x			x			LC	
Malvaceae	<i>Hibiscus burtonii</i>		x															LC	
Malvaceae	<i>Hibiscus sp.</i>							x										LC	
Malvaceae	<i>Hibiscus meraukensis</i>	Merauke hibiscus	x															LC	
Malvaceae	<i>Hibiscus sturtii</i>											x			x			LC	
Malvaceae	<i>Malvastrum americanum</i> *												x				Y		
Malvaceae	<i>Sida sp. (Musselbrook M.B. Thomas + MRS437)</i>		x															LC	

PLACE Design Group

Family	Scientific Name	Common Name	Incidental	1.3.6x1a	1.3.7	1.5.6	1.5.8	1.11.2a	1.11.2e	1.11.2x2	1.11.2x6	1.11.3b	1.12.1xa	1.12.1x4	1.12.1xb	1.12.1x2	Exotic	NC Act Listing	EPBC Act listing
Malvaceae	<i>Sida fibulifera</i>					x	x	x	x			x			x			LC	
Malvaceae	<i>Sida platycalyx</i>	lifesaver burr					x											LC	
Malvaceae	<i>Sida sp.</i>												x					LC	
Meliaceae	<i>Owenia acidula</i>	emu apple	x															LC	
Mimosaceae	<i>Acacia acradenia</i>							x			x	x						LC	
Mimosaceae	<i>Acacia cambagei</i>	gidgee				x	x		x	x								LC	
Mimosaceae	<i>Acacia chippendalei</i>							x					x					LC	
Mimosaceae	<i>Acacia chisholmii</i>	Chisholm's wattle		x	x				x		x	x			x	x		LC	
Mimosaceae	<i>Acacia dictyophleba</i>														x			LC	
Mimosaceae	<i>Acacia excelsa subsp. angusta</i>	ironwood		x			x				x							LC	
Mimosaceae	<i>Acacia holosericea var. holosericea</i>	soap bush		x														LC	
Mimosaceae	<i>Acacia retivenaea subsp. retivenaea</i>							x										LC	
Mimosaceae	<i>Acacia tenuissima</i>												x			x		LC	
Myoporaceae	<i>Eremophila latrobei</i>						x	x			x				x			LC	
Myoporaceae	<i>Eremophila longifolia</i>	berrigan		x					x		x							LC	
Myoporaceae	<i>Eremophila macdonnellii (CK170312#5)</i>						x											LC	
Myrtaceae	<i>Corymbia aparrerinja</i>	ghost gum		x														LC	
Myrtaceae	<i>Corymbia aspera</i>												x			x		LC	
Myrtaceae	<i>Corymbia terminalis</i>	desert bloodwood		x					x			x				x		LC	
Myrtaceae	<i>Eucalyptus camaldulensis subsp. obtusa</i>	river red gum			x													LC	
Myrtaceae	<i>Eucalyptus leucophloia subsp. euroa</i>	snappy gum		x				x	x		x		x		x	x		LC	
Myrtaceae	<i>Eucalyptus leucophylla</i>	Cloncurry box		x					x							x		LC	
Myrtaceae	<i>Eucalyptus normantonensis</i>	Normanton box						x			x							LC	
Nyctaginaceae	<i>Boerhavia paludosa</i>	a tarvine				x	x				x				x			LC	
Oleaceae	<i>Jasminum didymum subsp. lineare</i>	native jasmine		x														LC	
Pentapetaceae	<i>Melhania oblongifolia</i>			x							x							LC	
Phyllanthaceae	<i>Phyllanthus maderaspatensis</i>			x	x				x									LC	
Phyllanthaceae	<i>Flueggea luecopyros</i>				x													LC	
Poaceae	<i>Aristida contorta</i>	bunched kerosene grass							x									LC	
Poaceae	<i>Aristida holathera var. holathera</i>					x	x	x										LC	
Poaceae	<i>Aristida hygrometrica</i>										x							LC	
Poaceae	<i>Aristida pruinosa</i>			x	x	x	x		x		x							LC	
Poaceae	<i>Arundinella setosa</i>				x													LC	
Poaceae	<i>Bothriochloa decipiens var. cloncurrensis</i>			x														LC	
Poaceae	<i>Bothriochloa ewartiana</i>	desert bluegrass			x		x		x		x							LC	
Poaceae	<i>Bothriochloa pertusa*</i>	Indian bluegrass			x												Y		
Poaceae	<i>Cenchrus pennisetiformis*</i>								x								Y		
Poaceae	<i>Chloris truncata*</i>	purpletop chloris					x										Y		
Poaceae	<i>Chloris virgata*</i>	feathertop rhodes grass	x														Y		
Poaceae	<i>Chrysopogon fallax</i>	ribbon grass		x	x													LC	
Poaceae	<i>Cymbopogon bombycinus</i>	silky oilgrass						x			x							LC	

PLACE Design Group

Family	Scientific Name	Common Name	Incidental	1.3.6x1a	1.3.7	1.5.6	1.5.8	1.11.2a	1.11.2e	1.11.2x2	1.11.2x6	1.11.3b	1.12.1xa	1.12.1x4	1.12.1xb	1.12.1x2	Exotic	NC Act Listing	EPBC Act listing
Poaceae	<i>Cymbopogon oblectus</i>						x					x						LC	
Poaceae	<i>Cynodon dactylon</i> *	blue couch			x												Y		
Poaceae	<i>Dactyloctenium radulans</i>	button grass				x		x										LC	
Poaceae	<i>Dichanthium fecundum</i>	curly bluegrass			x						x							LC	
Poaceae	<i>Digitaria brownii</i>			x			x											LC	
Poaceae	<i>Digitaria divaricatissima</i>						x		x									LC	
Poaceae	<i>Elytrophorus spicatus</i>		x															LC	
Poaceae	<i>Enneapogon avenaceus</i>								x									LC	
Poaceae	<i>Enneapogon polyphyllus</i>	leafy nineawn		x		x	x	x	x		x							LC	
Poaceae	<i>Enneapogon robustissimus</i>												x	x				LC	
Poaceae	<i>Enteropogon acicularis</i>	curly windmill grass				x	x											LC	
Poaceae	<i>Eragrostis sp.</i>				x													LC	
Poaceae	<i>Eriachne mucronata forma (Alpha C.E. Hubbard 7882)</i>						x	x										LC	
Poaceae	<i>Eriachne mucronata forma (Burnham R.D. Purdie 1370)</i>									x								LC	
Poaceae	<i>Eulalia aurea</i>	silky browntop		x			x											LC	
Poaceae	<i>Heteropogon contortus</i>	black speargrass		x	x													LC	
Poaceae	<i>Oxychloris scariosa</i>	winged chloris				x	x											LC	
Poaceae	<i>Paraneurachne muelleri</i>											x						LC	
Poaceae	<i>Pennisetum ciliare</i> *	buffel grass		x	x												Y		
Poaceae	<i>Pennisetum setigerum</i> *			x	x			x			x						Y		
Poaceae	<i>Perotis rara</i>	comet grass										x						LC	
Poaceae	<i>Sehima nervosum</i>			x	x		x				x							LC	
Poaceae	<i>Sporobolus actinocladius</i>	katoora grass				x												LC	
Poaceae	<i>Sporobolus caroli</i>	fairy grass		x														LC	
Poaceae	<i>Themeda avenacea</i>			x	x						x							LC	
Poaceae	<i>Themeda triandra</i>	kangaroo grass		x	x		x	x			x							LC	
Poaceae	<i>Triodia molesta</i>	a spinifex		x		x	x		x	x	x		x		x	x		LC	
Poaceae	<i>Tripogon loliformis</i>	five minute grass				x	x		x				x		x			LC	
Portulacaceae	<i>Portulaca filifolia</i>					x	x											LC	
Portulacaceae	<i>Portulaca oleracea</i> *	pigweed				x											Y		
Proteaceae	<i>Grevillea striata</i>	beefwood					x	x	x		x							LC	
Proteaceae	<i>Grevillea wickhamii subsp. aprica</i>							x										LC	
Proteaceae	<i>Hakea chordophylla</i>			x				x										LC	
Proteaceae	<i>Hakea lorea subsp. lorea</i>		x															LC	
Rhamnaceae	<i>Alphitonia excelsa</i>	soap tree											x	x				LC	
Rhamnaceae	<i>Ventilago viminalis</i>	supplejack					x											LC	
Santalaceae	<i>Santalum lanceolatum</i>	sandalwood		x			x	x	x		x	x						LC	
Sapindaceae	<i>Atalaya hemiglauc</i>	whitewood		x		x	x					x		x				LC	
Sapindaceae	<i>Distichostemon barklyanus</i>							x										LC	
Sapindaceae	<i>Dodonaea stenophylla</i>													x				LC	
Solanaceae	<i>Solanum ellipticum</i>			x		x	x						x	x				LC	

Family	Scientific Name	Common Name	Incidental	1.3.6x1a	1.3.7	1.5.6	1.5.8	1.11.2a	1.11.2e	1.11.2x2	1.11.2x6	1.11.3b	1.12.1xa	1.12.1x4	1.12.1xb	1.12.1x2	Exotic	NC Act Listing	EPBC Act listing
Solanaceae	<i>Solanum ferocissimum</i>			x														LC	
Sparmanniaceae	<i>Corchorus sericeus ssp. densiflorus</i>															x	x	LC	
Sterculiaceae	<i>Brachychiton collinus</i>	a bottle tree												x				LC; Type A	
Ulmaceae	<i>Trema tomentosa</i>													x				LC	
Violaceae	<i>Hybanthus aurantiacus</i>	orange spade-flower						x	x			x						LC	
Violaceae	<i>Hybanthus enneaspermus</i>	purple spade-flower							x									LC	

Key

NC Act Listing: (E) Endangered, (V) Vulnerable, (NT) Near Threatened, Least Concern (LC)

EPBC Act Listing: (E) Endangered, (V) Vulnerable

Appendix D.2.

Vegetation Community Descriptions

Refer to **FIGURE D2.1** for a graphical presentation of the following descriptions.

PLANT COMMUNITIES ON UNCONSOLIDATED MATERIAL (LAND ZONES 3 AND 5)

Plant Community 1: Mixed woodland including Cloncurry box (*Eucalyptus leucophylla*), snappy gum (*Eucalyptus leucophloia*), desert bloodwood (*Corymbia terminalis*) and ghost gum (*Corymbia aparrrerinja*) on stream banks, levees and floodplains. RE 1.3.6x1a.

Upper Tree Layer: ((4)8–12m, FPC 5%) *Eucalyptus leucophylla*, *Eucalyptus leucophloia*, *Corymbia terminalis*, *Corymbia aparrrerinja*, (*Atalaya hemiglauc*a, *Acacia excelsa* spp angusta).

Shrub Layer: (0.5–2m, FPC 0–13%) *Acacia chisholmii*, *Eremophila longifolia*, *Acacia chisholmii*, *Senna artemisioides* ssp. *oligophylla*, *Acacia holosericea*, *Gossypium australe*, *Santalum lanceolatum*, *Hakea chordophylla*.

Ground Layer: (0–0.5m, FPC 70%) *Pennisetum ciliare**, *Bothriochloa ewartiana*, *Sehima nervosa*, *Eulalia aurea*, *Triodia molesta*, *Themeda triandra*, *Themeda avenacea*, *Heteropogon contortus*, *Abutilon leucopetalum*, *Abutilon fraseri* ssp. *fraseri*, *Pennisetum setigerum**, *Ipomoea plebeia*, *Glycine canescens*, *Crotalaria medicaginea*, *Rhynchosia minima*, *Phyllanthus maderaspatensis*, *Sida* sp., *Ptilotus obovatus*, *Chrysopogon fallax*, *Digitaria brownii*, *Solanum ferocissimum*, *Cleome viscosa*, *Sporobolus caroli*, *Melhanian oblongifolia*, *Jasminum didymum* ssp. *lineare*, *Cheilanthes sieberi*.

Soil, Landform and Geology: Valley floors, small floodplains and creek levees all with loamy soil.

Representative Sites and Photos: Tertiary Site MTD012, MTD008; Quaternary Sites 78,97; Photos P3170155– P3170166.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal (although the two *Pennisetum* spp. do dominate the ground layer in places), Woody layer intact, herbaceous layer 80–100% native, no physical disturbance.

Plant Community 2: River red gum (*Eucalyptus camaldulensis*) low woodland with bare sand or tussock grass ground layer on streambeds and lower banks. RE 1.3.7.

Upper Tree Layer: (10–14m, FPC 10%) *Eucalyptus camaldulensis*.

Shrub Layer: (0.5–2m, FPC +) *Sesbania javanica*, (*Acacia chisholmii*) (crest of bank typically vegetated with RE1.3.6x1a - shrubs present are associated with that unit).

Ground Layer: (0.5–1.5m, FPC 20%) *Pennisetum ciliare**, *Heteropogon contortus*, *Dichanthium fecundum*, *Cynodon dactylon**, *Pennisetum setigerum**, *Bothriochloa pertusa**, *Sehima nervosa*, *Crotalaria medicaginea*, *Glycine canescens*, *Indigofera hirsuta*, *Cleome viscosa*, *Ipomoea plebeia*, *Chrysopogon fallax*, *Pluchea dentex*, *Vigna lanceolata*, *Chamaesyce hirta**, *Phyllanthus maderaspatensis*, *Eragrostis* sp., *Waltheria indica*, *Themeda avenacea*, *Themeda triandra*, *Aristida pruinosa*, *Indigofera linifolia*, *Cyperus exaltatus*.

Soil, Landform and Geology: Creek beds including small bars and benches, as well as lower slopes of banks. Sandy to loamy soils.

Representative Sites and Photos: Tertiary Site MTD025; Quaternary Sites ;Photos P3200662– P3200665.

Integrity Rating: 2; Structurally and floristically substantially intact, weeds at low levels, Woody layer intact, herbaceous layer 70–90% native, no physical disturbance.

Plant Community 3: Whitewood (*Atalaya hemiglauca*) scattered low trees with annual grass dominated ground layer on Cainozoic plain. RE 1.5.6.

Upper Tree Layer: ((2) 4–8m, FPC +) *Atalaya hemiglauca*, (*Acacia cambagei*, *Eucalyptus leucophylla*).

Shrub Layer: (1–1.5m, FPC +) *Senna artemisioides* supsp. *oligophylla*, *Senna artemisioides* ssp. *sturtii*, *Atalaya hemiglauca*, *Gossypium australe*.

Ground Layer: (0–0.5m, FPC 20%) *Aristida holathera*, *Triodia molesta*, *Enneapogon polyphyllus*, *Heliotropium* sp., *Sporobolus actinocladus*, *Sclerolaena cornishiana*, *Boerhavia paludosa*, *Oxychloris scariosa*, *Pterocaulon serrulatum*, *Ptilotus obovatus*, *Cleome viscosa*, *Aristida latifolia*, *Portulaca filifolia*, *Sida fibulifera*, *Abutilon andrewsianum*, *Portulaca oleracea*, *Enteropogon acicularis*, *Sclerolaena eriacantha*, *Cucumis argenteus*, *Chamaesyce drummondii*, *Indigofera linnaei*, *Dactyloctenium radulans*, *Solanum ellipticum*, *Evolvulus alsinoides*.

Soil, Landform and Geology: Cainozoic plain with clayey sand soil and a surface scatter of haematite, quartz and other pebbles; occasional outcrop of country rock.

Representative Sites and Photos: Tertiary Site MTD003, MTD005; Quaternary sites 98, 59; Photos P3160055– P3160058, P3190354–P3190357.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Mapped areas typically contains small areas of RE 1.5.8.

Plant Community 4: Gidgee (*Acacia cambagei*) low open woodland with annual grass dominated ground layer on Cainozoic plain. RE 1.5.8.

Upper Tree Layer: (4–8m, FPC 3–5%) *Acacia cambagei*, *Atalaya hemiglauca*, (*Corymbia aparrrerinja*, *Ventilago viminalis*, *Corymbia aparrrerinja*, *Grevillea striata*).

Shrub Layer: (0.5–1.5m, FPC 0–4%) *Eremophila latrobei*, *Atalaya hemiglauca*, *Senna artemisioides* ssp. *oligophylla*, *Senna artemisioides* ssp. *sturtii*, *Acacia excelsa* spp. *angusta*, *Carissa lanceolata*, *Eremophila longifolia*, *Apophyllum anomalum*, *Sarcostemma brevipedunculatum*, (*Santalum lanceolatum*).

Ground Layer: (0–0.5m, FPC 33%) *Aristida holathera*, *Tripogon loliiformis*, *Triodia molesta*, *Oxychloris scariosa*, *Enneapogon polyphyllus*, *Portulaca filifolia*, *Aristida latifolia*, *Digitaria brownii*, *Enteropogon acicularis*, *Cymbopogon oblectus*, *Pterocaulon serrulatum*, *Cassytha filiformis*, *Digitaria brownii*, *Maireana villosa*, *Gossypium australe*, *Solanum ellipticum*, *Chrysopogon fallax*, *Sida platycalyx*, *Heliotropium tenuifolium*, *Boerhavia paludosa*, *Digitaria divaricatissima*, *Sclerolaena cornishiana*, *Sida fibulifera*, *Evolvulus alsinoides*, *Enneapogon lindleyanus*, *Indigofera linifolia*, (*Sehima nervosa*, *Pennisetum ciliare**, *Themeda triandra*, *Bothriochloa ewartiana*, *Sehima nervosa*, *Eulalia aurea*).

Soil, Landform and Geology: Cainozoic plain with clayey sand soil and a surface scatter of haematite, quartz and other pebbles; occasional outcrop of country rock.

Representative Sites and Photos: Tertiary Site MTD001, MTD009, MTD013; Quaternary sites 60, 67; Photos P3160001– P3160006, P3170118– P3170122, P3170168– P3170171.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Mapped areas typically contains small areas of RE 1.5.6. Broad drains or valley floors within this community support a dense perennial tussock grass ground layer (these species in brackets above).

PLANT COMMUNITIES ON METAMORPHIC ROCKS

Plant Community 5: Snappy gum (*Eucalyptus leucophloia*) scattered low trees or low open woodland with wattle (*Acacia acradenia*) open shrub layer and spinifex (*Triodia molesta*) ground layer on hills and footslopes of coarse-grained meta-sediments. RE 1.11.2a.

Upper Tree Layer: (2–6m, FPC 0–4%), *Eucalyptus leucophloia*, *Eucalyptus normantonensis*, *Hakea chordophylla*, *Atalaya hemiglaucula*, *Grevillea striata*, (*Diplatia grandibractea*, *Corymbia aspera*).

Shrub Layer: (0.5–1.5m, FPC 0–2%) *Acacia acradenia*, *Eucalyptus leucophloia*, *Acacia retivenea*, *Eremophila latrobei*, *Grevillea wickhamii*, *Santalum lanceolatum*, (*Indigofera brevicens*, *Acacia chippendalei*, *Distichostemon barklyanus*, *Capparis lasiantha*, *Senna artemisioides* ssp. *helmsii*).

Ground Layer: (0–0.5m, FPC 30–40%) *Triodia molesta*, *Cymbopogon bombycinus*, *Aristida holathera*, *Enneapogon polyphyllus*, *Cheilanthes* ssp. *pseudovellea*, *Fimbristylis dichotoma*, *Eriachne mucronata*, *Hybanthus aurantiacus*, *Heliotropium* sp., *Abutilon leucopetalum*, *Sida fibulifera*, *Cassytha filiformis*, (*Tephrosia* sp. (Mt Isa P.L. Harris 277), *Themeda triandra*, *Cyanthillium cinereum*, *Cyperus* sp., *Ptilotus obovatus*).

Soil, Landform and Geology: Slopes and crests of meta-arkose and meta-arenite hills and foothills with skeletal sandy soil. Small areas of valley fill with deep sandy soil (these dominated by tussock grasses).

Representative Sites and Photos: Tertiary Site MTD004, MTD007, MTD010, MTD011, MTD015, MTD016, MTD019, MTD021, MTD022; Quaternary sites 13–16, 61–64, 70, 124; Photos P3200582, P3200583 and P3200585.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Treeless areas occur where soil is extremely thin. *Acacia acradenia* and other shrubs typically dominate in these circumstances. *Corymbia aspera* is sometimes associated with siliceous rocks on crests of ridges in this Plant Community as at Quaternary site 124.

Plant Community 6: Mixed low open woodland or scattered low trees including whitewood (*Atalaya hemiglaucula*) and desert bloodwood (*Corymbia terminalis*) with spinifex (*Triodia molesta*) ground layer on footslopes and hills of fine-grained meta-sediments. RE 1.11.2e.

Upper Tree Layer: (4–6m, FPC 1%) *Atalaya hemiglaucula*, *Corymbia terminalis*, (*Grevillea striata*, *Acacia cambagei*, *Eucalyptus leucophylla*).

Shrub Layer: (0.5–2.5m, FPC 2–34%) *Acacia chisholmii*, *Senna artemisioides* ssp. *oligophylla*, *Senna artemisioides* ssp. *sturtii*, *Eremophila longifolia*, *Gossypium australe*, (*Senna artemisioides* supsp. *helmsii*, *Salsola australis*, *Santalum lanceolatum*).

Ground Layer: (0–0.3m, FPC 45%) *Triodia molesta*, *Aristida contorta*, *Ptilotus obovatus*, *Digitaria divaricatissima*, *Enneapogon polyphyllus*, *Sida fibulifera*, *Enneapogon cylindricus*, *Hybanthus aurantiacus*, *Hybanthus enneaspermus*, *Aristida pruinosa*, *Cenchrus pennisetiformis**, *Bothriochloa ewartiana*, *Phyllanthus maderaspatensis*, *Enneapogon avenaceus*, *Dactyloctenium radulans*, *Cleome viscosa*, *Heliotropium* sp., *Euphorbia tannensis*, *Tripogon loliiformis*, *Evolvulus alsinoides*, (*Chamaecrista exigua* var. *minor*, *Cassytha filiformis*).

Soil, Landform and Geology: Thin, orange to red sandy to light clay on foothills and hill slopes and crests of fine-grained meta-sediments including slate.

Representative Sites and Photos: Tertiary Site MTD006, MTD014, MTD020; Quaternary sites 85, 87, 91, 125; Photos P3160086, P3160088, P3170172– P3170175, P3170490.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Small areas of loamy soil on areas of valley floor occur in this Plant Community at a scale too small to map. In these situations the ground layer is dominated by the dense perennial tussock grasses given in brackets in the Ground Layer section of Plant Community 4 description.

Plant Community 7: Gidgee (*Acacia cambagei*) low woodland with sparse ground layer on hills of fine-grained meta-sediments. RE 1.11.2x2.

Upper Tree Layer: (3–6m, FPC 3%) *Acacia cambagei*.

Ground Layer: (0–0.3m, FPC 5%) *Eriachne mucronata* f. (Alpha C.E. Hubbard 7882), *Triodia molesta*, *Abutilon leucopetalum*, *Melhania oblongifolia*, *Ptilotus obovatus*.

Soil, Landform and Geology: thin soil mantled with meta-slate chips on hill slopes of fine-grained meta-sediments.

Representative Sites and Photos: Quaternary site 89; Photos 494–497.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: This Plant Community is a conspicuous but small unit associated with Plant Community 6 (RE 1.11.2e).

Plant Community 8: Normanton box (*Eucalyptus normantonensis*) low woodland with bare ground or tussock grass ground layer fringing small drainage lines in hills and footslopes of coarse-grained meta-sedimentary material. RE 1.11.2x6.

Upper Tree Layer: (3–7m, FPC 10–15%) *Eucalyptus normantonensis*, *Eucalyptus leucophloia*, (*Acacia excelsa* ssp. *angusta*, *Grevillea striata*).

Shrub Layer: (0.5–3m, FPC 0–5%) *Acacia chisholmii*, *Eremophila longifolia*, *Senna artemisioides* ssp. *oligophylla*, *Senna artemisioides* ssp. *helmsii*, *Senna artemisioides* ssp. *sturtii*, *Capparis lasiantha*, *Gossypium australe*, *Santalum lanceolatum*.

Ground Layer: (0–0.5m, FPC 30%) *Sehima nervosa*, *Triodia molesta*, *Dichanthium fecundum*, *Themeda triandra*, *Themeda avenacea*, *Abutilon leucopetalum*, *Cymbopogon bombycinus*, *Boerhavia paludosa*, *Aristida pruinosa*, *Aristida hygrometrica*, *Ipomoea plebeia*, *Crotalaria medicaginea*, *Melhania oblongifolia*, *Cleome viscosa*, *Perotis rara*, *Chamaecrista exigua* var. *minor*.

Soil, Landform and Geology: Shallow stony to shallow sandy or loamy soils associated with small drainage lines typically in hills and foothills of coarse grained meta-sediments.

Representative Sites and Photos: Tertiary Sites MTD017, MTD018; Photos P3190388–P3190391, P3190417–P3190420.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Where alluvial features such as levees and floodplains are well developed in occurrences of this unit it would be assigned a Land Zone 3 RE code.

Plant Community 9: Desert bloodwood (*Corymbia terminalis*) low open woodland with dense Chisholm's wattle (*Acacia chisholmii*) shrub layer and sparse spinifex (*Triodia molesta*) ground layer on meta-diorite hills. RE 1.11.3b.

Upper Tree Layer: (5–7m, FPC 5%) *Corymbia terminalis*, (*Diplatia grandibractea*), (*Eucalyptus leucophloia*).

Second Tree Layer: (2–5m, FPC 0.5%) *Atalaya hemiglauca*.

Shrub Layer: (3–4m, FPC 24%) *Acacia chisholmii*, (*Santalum lanceolatum*).

Ground Layer: (0–0.5m, FPC 67%) *Triodia molesta*, *Solanum ellipticum*, *Scaevola ovalifolia*, *Hibiscus sturtii*, *Paraneurachne muelleri*, *Gossypium australe*, (*Swainsona burkei*, *Ptilotus sessiliflorus*).

Soil, Landform and Geology: Orange sandy clay on hill of meta-diorite.

Representative Sites and Photos: Tertiary Site MTD002; Quaternary sites 100,134; Photos P3160048–P3160054.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

PLANT COMMUNITIES ON IGNEOUS ROCKS (LAND ZONE 12)

Plant Community 10: Mixed softwood species including bottle tree (*Brachychiton collinus*) on granite tors. RE 1.12.1x4.

Upper Tree Layer: (2–6m, FPC 3%) *Brachychiton collinus*, *Alphitonia excelsa*, *Trema tomentosa*, *Atalaya hemiglauca*.

Shrub Layer: (1–1.5m, FPC 0.5%) *Senna artemisioides* ssp. *oligophylla*, *Capparis lasiantha*, *Dodonaea stenophylla*.

Ground Layer: (0–0.5m, FPC 10%) *Enneapogon robustissimus*, *Gossypium australe*, *Cyanthillium cinereum*, *Sida* sp., *Goodenia grandiflora*, *Corchorus sericeus* ssp. *densiflorus*.

Soil, Landform and Geology: Thin granite deco in cracks between boulders of granite tors.

Representative Sites and Photos: Quaternary sites 141,143; Photos P3210709–P3210711.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: *Brachychiton* sp. are Type A plants (*Nature Conservation (Administration) Regulation 2006*) and as such are subject to special protection under state legislation.

Plant Community 11: Snappy gum (*Eucalyptus leucophloia*) low open woodland to scattered trees OR wattle (*Acacia* spp.) shrubland with a sparse spinifex (*Triodia molesta*) ground layer on crests and slopes of granite hills and plateaus. RE 1.12.1xa.

Upper Tree Layer: (4–7m, FPC 5%) *Eucalyptus leucophloia*, (*Corymbia aspera*) OR trees absent.

Shrub Layer: (0.5–1.5m, FPC +) *Acacia tenuissima*, *A. acradenia*, *Grevillea wickhamii*, *Alphitonia excelsa*, (*A. chippendalei*, *Eremophila latrobei*).

Ground Layer: (0-0.5m, FPC 20%) *Triodia molesta*, *Tripogon loliiformis*, *Indigofera linnaei*, *Solanum ellipticum*, *Eriachne mucronata*, *Sida* sp., *Polycarpaea* sp., *Cyperus* sp.

Soil, Landform and Geology: Skeletal soil on crests and upper slopes of steep hills and plateaus of Palaeozoic biotite granite.

Representative Sites and Photos: Tertiary Site MTD024; Quaternary sites 106, 107, 113; P3200644–P3200654.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Landform (crests of steep hills and plateaus) differentiates this unit differs from Plant Community 12.

Plant Community 12: Snappy gum (*Eucalyptus leucophloia*) low open woodland to scattered trees OR wattle (*Acacia* spp.) shrubland and a sparse spinifex (*Triodia molesta*) ground layer on granite plains and rises. RE 1.12.1xb.

Upper Tree Layer: (47m, FPC 10%) *Eucalyptus leucophloia*.

Shrub Layer: (0.5-1.5m, FPC 1%) *Eremophila latrobei*, *Acacia chisholmii*, *Maytenus cunninghamii*, *Acacia dictyophleba*, *Gossypium australe*.

Ground Layer: (0-0.5m, FPC 40%) *Triodia molesta*, *Tripogon loliiformis*, Sparrmanniaceae (CK200312#1), *Tephrosia supina*, *Cheilanthes sieberi* ssp. *sieberi*, *Pluchea dentex*.

Soil, Landform and Geology: Coarse sandy soil on granite rises.

Representative Sites and Photos: Tertiary Site MTD023; Quaternary sites; Photos P3200611–P3200614.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.

Notes: Landform (rises) differentiates this unit differs from Plant Community 11.

Plant Community 13: Desert bloodwood (*Corymbia terminalis*) with or without ghost gum (*Corymbia aparrerinja*) low open woodland or scattered trees with a dense shrub layer of Chisholm's wattle (*Acacia chisholmii*) and a sparse spinifex (*Triodia molesta*) ground layer on granite plains and rises. RE 1.12.1xc.

Upper Tree Layer: (4–6m, FPC 0–3%) *Corymbia terminalis*, *Corymbia aparrerinja*, (*Eucalyptus leucophloia*, *Eucalyptus leucophylla*).

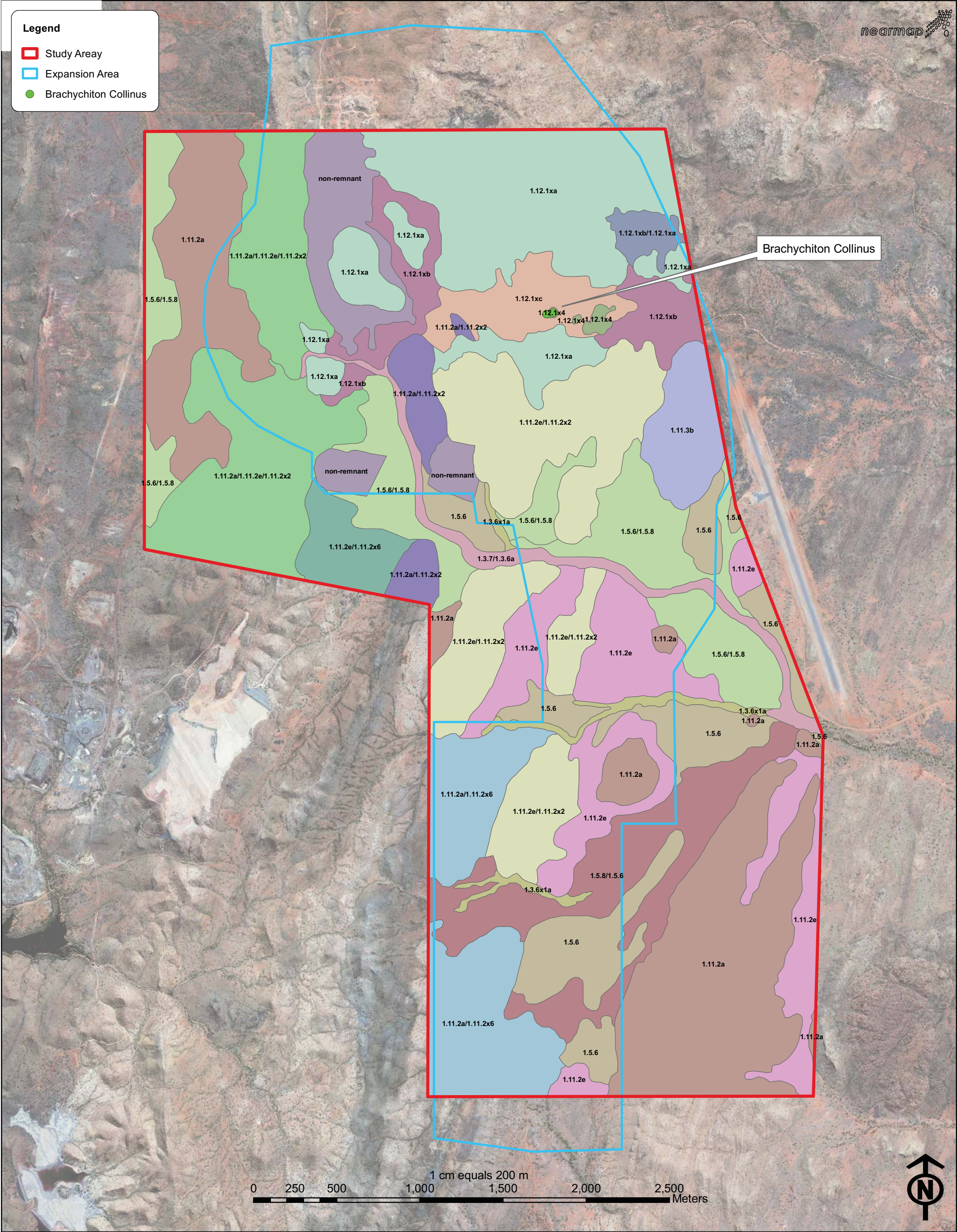
Shrub Layer: (1–1.5m, FPC 12%) *Acacia chisholmii*, *Acacia tenuissima*.

Ground Layer: (0-0.5m, FPC 40%) *Triodia molesta*, (*Corchorus sericeus* ssp. *densiflorus*).

Soil, Landform and Geology: Coarse sandy soil on granite rises.

Representative Sites and Photos: Quaternary sites 116, 140, 142; Photos P3210680–P3210683.

Integrity Rating: 1; Structurally and floristically intact, weeds minimal, Woody layer intact, herbaceous layer 80–100% native, limited physical disturbance.



This mapping document utilizes geographic information and digital data resources under agreement with the following suppliers: The State of Queensland (DERM); Google Earth pro (image dated:)

Appendix D.3.

Queensland Herbarium Identifications

Queensland Herbarium

Brisbane Botanic Gardens Mt Coot-tha • Toowong 4066 Queensland • Australia

Telephone +61 7 3896 9326 • Facsimile +61 7 3896 9624

e-mail Queensland.Herbarium@derm.qld.gov.au • www.derm.qld.gov.au/herbarium

Enquiries	Megan Thomas
Telephone	07 3896 9318
Your reference	
Our reference	MBT:DJM:mh 478/12

2 May 2012

Chris Kahler
Ecological Interpretation
21 Humphrey Street
West End
TOWNSVILLE Qld 4810

Dear Chris

The botanical specimens received by the Queensland Herbarium on 24 April 2012 have been identified as:

CK 160312-1	<i>#Ptilotus obovatus</i> . <i>P. incanus</i> has almost sessile inflorescence and very dense long hairs.
CK 170312-6	<i>Solanum ferocissimum</i>
CK 170312-6	<i>#Eremophila latrobei</i> subsp. <i>latrobei</i> confirmed
CK 170312-5	<i>#Eremophila macdonnellii</i> confirmed
CK 170312-4	<i>#Chamaecrista exigua</i> var. <i>minor</i>
CK 170312-3	<i>#Tephrosia</i> sp. (Mt Isa P.L. Harris 277)
CK 170312-2	<i>#Abutilon fraseri</i> subsp. <i>fraseri</i> confirmed
CK 170312-1	<i>#Abutilon leucopetalum</i> confirmed
CK 180312-2.1	<i>Enchylaena tomentosa</i>
CK 180312-1	<i>#Cymbopogon bombycinus</i> confirmed
CK 190312-14	<i>Solanum ferocissimum</i>
CK 190312-13	<i>#Hybanthus aurantiacus</i> confirmed
CK 190312-12	<i>#Eriachne mucronata</i> f. (Alpha C.E.Hubbard 7882)
CK 190312-11	<i>#Bothriochloa ewartiana</i>
CK 190312-10	<i>#Ptilotus sessilifolius</i> confirmed
CK 190312-10	<i>#Oxychloris scariosa</i> confirmed
CK 190312-9	<i>Fimbristylis dichotoma</i>
CK 190312-8	<i>#Aristida contorta</i> confirmed
CK 190312-6	<i>#Aristida holathera</i> var. <i>holathera</i>
CK 190312-5	<i>#Swainsona burkei</i> confirmed
CK 190312-4	<i>#Zornia muriculata</i> subsp. <i>angustata</i>
CK 190312-3	<i>#Vigna</i> sp. There are a number of undescribed taxa in the genus.
CK 190312-2	<i>#Sida platycalyx</i> confirmed

Download a full version of Census of the Queensland Flora 2010
http://www.derm.qld.gov.au/wildlife-ecosystems/plants/census_qld_flora.html

CK 190312-1 #*Sida* sp. (Musselbrook M.B. Thomas+ MRS437)
CK 200312-7 #*Ptilotus fusiformis* confirmed
CK 200312-6 #*Hybanthus enneaspermus* confirmed
CK 200312-5 #*Scaevola ovalifolia* confirmed
CK 200312-4 #*Eriachne mucronata* f. (Burnham R.W. Purdie 1370)
CK 200312-3 #*Flueggea leucopyrus*
CK 200312-2 #*Hibiscus* sp. a known but undescribed taxon
CK 200312-1 #*Corchorus sericeus* subsp. *densiflorus*

These specimens have been retained for incorporation into the Herbarium collection, with thanks.

Excellent material & data Chris, it was a pleasure to work on.

There is a charge of \$633.00 (6 hrs @ \$105.50 per hr incl GST) for these identifications and a tax invoice and receipt are enclosed.

Yours sincerely

G.P.Guymer
Director

Appendix E

Fauna Survey Results

Appendix E.1.

Bird Survey Results

Family	Scientific Name	Common Name	EPBC Act	NC Act	Notes	Trap Sites		Incident. Including search areas	Habitat	Total
						Mt Dore 1.3.7	Mt Dore 1.11.2			
BIRDS (20 families, 46 species)										
Acanthizinae - PARDALOTES, SCRUBWRENS, GERYGONES & THORNBILLS										
	Gerygone fusca	Western Gerygone						2	O.W	2
Accipitridae - RAPTORS										
	Elanus axillaris	Black-shouldered Kite					1			1
	Milvus migrans	Black Kite					1	8	Dump/L.O.W	9
	Aquila audax	Wedge-tailed Eagle					1			1
Artamidae - WOODSWALLOWS, BUTCHERBIRDS, MAGPIES & CURRAWONGS										
	Artamus cinereus	Black-faced Woodswallow				22				22
	Artamus cyanopterus	Dusky Woodswallow			Winter migrant			4	L.O.W	4
	Cracticus torquatus	Grey Butcherbird				1				1
	Cracticus nigrogularis	Pied Butcherbird						1	Camp	1
	Cracticus tibicen	Australian Magpie				15				15
Cactuidae - COCKATOOS										
	Eolophus roseicapillus	Galah				9		102	L.O.W	111
	Cacatua sanguinea	Little Corella						73	L.O.W	73
	Cacatua galerita	Sulphur-crested Cockatoo						2	L.O.W	2
Campephagidae - CUCKOO-SHRIKES & TRILLERS										
	Coracina novaehollandiae	Black-faced Cuckoo-shrike	M				2	3	Spinifex	5
Columbidae - PIGEONS & DOVES										
	Phaps chalcoptera	Common Bronzewing					2	5	L.O.W	7
	Ocyphaps lophotes	Crested Pigeon						6	L.O.W / Camp	6
	Geophaps plumifera	Spinifex Pigeon						5	Spinifex	5
	Geopelia cuneata	Diamond Dove				2		16	L.W	18
Corcoracidae - MUD-NEST BUILDERS										
	Struthidea cinerea	Apostlebird						24	Camp	24
Corvidae - RAVENS & CROWS										
	Corvus coronoides	Australian Raven				1	4			5
	Corvus orru	Torresian Crow					8	30	Dump	38
Cuculidae - CUCKOOS										
	Centropus phasianinus	Pheasant Coucal				1				1
Dicruridae - MONARCHS & FLYCATCHERS										
	Grallina cyanoleuca	Magpie-lark	M			3		3	L.O.W	6
	Rhipidura leucophrys	Willie Wagtail				2		2	Camp	4
Estrildidae - FINCHES										
	Taeniopygia guttata	Zebra Finch				52				52
	Emblema pictum	Painted Finch					8			8
Falconidae - FALCONS										
	Falco berigora	Brown Falcon						1	Riparian	1
	Falco longipennis	Australian Hobby				1				1
	Falco cenchroides	Nankeen Kestrel	M					1	Grassland	1
Maluridae - FAIRY-WRENS										
	Amytornis ballarae	Kalkadoon Grasswren					1	1	R.E	2
	Malurus lamberti	Variegated Fairy-wren					5	8	L.O.W	13
	Malurus melanocephalus	Red-backed Fairy-wren						5	L.O.W	5
	Malurus luecopterus	White-Winged Fairy-Wren						5	L.O.W	5
Meliphangidae - HONEYEATERS										
	Philemon citreogularis	Little Friarbird						12	Riparian	12
	Manorina flavigula	Yellow-throated Miner				6		5	Camp	11
	Lichenostomus virescens	Singing Honeyeater						3	L.O.W	3
	Lichenostomus penicillatus	White-plumed Honeyeater				9				9
	Conopophila rufogularis	Rufous-throated Honeyeater				1				1
	Lichenostomus keartlandi	Grey-headed Honeyeater				1		2	L.O.W	3
Meropidae - BEE-EATERS										
	Merops ornatus	Rainbow Bee-eater	T		Breeding summer migrant, some overwinter	5	6	3	Spinifex	14
Otididae - BUSTARDS										
	Ardeotis australis	Australian Bustard				2				2
Pachycephalidae - WHISTLERS & SHRIKE-THRUSHES										
	Oreoica gutturalis	Crested Bellbird					1	1	L.O.W	2
Petroicidae - ROBINS										

PLACE DESIGN GROUP

Family	Scientific Name	Common Name	EPBC Act	NC Act	Notes	Trap Sites		Incident. Including search areas	Habitat	Total
						Mt Dore 1.3.7	Mt Dore 1.11.2			
	<i>Microeca fascinans</i>	Jacky Winter				1		4	O.W	5
Phasianidae - TRUE QUAILS										
	<i>Coturnix ypsilophora</i>	Brown Quail				2		4	Grassland	6
Psittacidae - PARROTS										
	<i>Aprosmictus erythropterus</i>	Red-winged Parrot				5				5
	<i>Barnardius zonarius</i>	Australian Ringneck						6	Riparian	6
	<i>Melopsittacus undulatus</i>	Budgerigar				1		96	L.O.W	97
SPECIES RICHNESS										46
TOTAL										625

KEY

- EPBC Act

Threatened Status: E = Endangered; V = Vulnerable

Migratory Species: T = Terrestrial; W = Wetland; M = Marine
- NC Act

Status: NT = Near Threatened; V = Vulnerable; R = Rare; E = Endangered
- Habitat

O.W. = Open woodland

L.O.W. = Low open woodland

Total for each site equals greatest number of that species seen at anyone time

Appendix E.2.

Herptiles and Mammals Survey Results

PLACE DESIGN GROUP

Scientific Name	Common Name	EPBC Act	NC Act	Status	Notes	Capture Status	Trap Sites		Search Sites				Incident.	Habitat	Total
							Mt Dore 1.3.7	Mt Dore 1.11.2	Mt Dore 1	Mt Dore 2	Mt Dore 3	Mt Dore 4			
AMPHIBIANS (3 families, 5 species)															
Bufonidae															
Rhinella marina (Bufo marinus)	Cane toad			*		F	8						6	Camp	14
Hylidae															
Cyclorana alboguttata	Striped Burrowing Frog					F	1								1
Litoria caerulea	Green Tree Frog					C,F	3								3
Litoria rubella	Desert Tree Frog					C	1								1
Limnodynastidae															
Platyplectrum ornatum	Ornate Burrowing Frog				Museum	C	2								2
REPTILES (6 families, 7 species)															
Gekkonidae															
Sandplain Gecko	Diplodactylus stenodactylus					C		1							1
Scincidae															
Cryptoblepharus plagiocephalus						F	1								1
Ctenotus lateralis	A Striped Skink					C,F	2	1		1					4
Agamidae															
Two-lined Dragon	Diporiphora bilineata					F					1				1
Varanidae															
Varanus acanthurus	Spiny-tailed Monitor					F				2					2
Pythonidae															
Aspidites melanocephalus	Black-headed Python					F	1								1
Elapidae															
Furina ornata	Orange-naped Snake					C		1							1
MAMMALS (7 families, 18 species)															
Dasyuridae															
Sminthopsis macroura	Stripe-faced Dunnart					C		1							1
Emballonuridae															
Saccolaimus flaviventris	Yellow-bellied Sheath-tail Bat					AN		1							1
Taphozous georgianus	Common Sheath-tail Bat					AN		1							1
Taphozous troughtoni	Troughton's Sheath-tail Bat					AN		1							1
Macropodidae															
Macropus giganteus	Eastern Grey Kangaroo				all scats except at Mt Dore 1.11.2	F	1	1	1		1	1	4	L.O.W	9
Molossidae															
Chaerephon jobensis	Northern Freetail Bat					AN		1							1
Mormopterus beccarii	Beccari's Freetail Bat					AN		1							1
Mormopterus sp.5	Eastern Little Freetail Bat					AN		1							1
Murinae															
Mus musculus	House Mouse			*		C	6	2							8
Pseudomys desertor	Desert Mouse				scat		1								1
Zyzomys argurus	Common Rock Rat					C		3							3
Tachyglossidae															
Tachyglossus aculeatus	Echidna					T		2	1						3
Vespertilionidae															
Chalinolobus gouldii	Gould's Wattled Bat					AN	1	1							2
Vespadelus baverstocki	Inland Forest Bat					AN	1	1							2
Vespadelus finlaysoni	Finlayson's Cave Bat					AN	1	1							2
Scotorepens balstoni	Inland Broad-nosed Bat					AN	1	1							2
Scotorepens greyii	Little Broad-nosed Bat					AN	1	1							2
Nyctophilus sp.	Long-eared Bat					AN	1								1
													SPECIES RICHNESS		30
													TOTAL		74

PLACE DESIGN GROUP

KEY

EPBC Act

Threatened Status: E = Endangered; V = Vulnerable

Migratory Species: T = Terrestrial; W = Wetland; M = Marine

NC Act

Status: NT = Near Threatened; V = Vulnerable; R = Rare; E = Endangered

Status

* = exotic

Habitat

O.W. = Open woodland

L.O.W. = Low open woodland

Total for each site equals greatest number of that species seen at anyone time

Capture Status

T - trace only and abundance uncertain

C - specimen captured, positively identified and released

F - specimen positively identified in field

Sc - specimen positively identified from animal traces (scats, hairs contained in predator scats or other sources, tracks, diggings, burrows, scratch marks on trees)

AN - Anabat identification

Appendix E.3.

Anabat Identification Results

Anabat echolocation data interpretation summary

Client: Central Queensland University (Bundaberg)

Balance Job no.: CQU-1203

Project name/location: Ivanhoe Mine, Cloncurry, 3-5 April 2012

Comments on data received

The data set received for analysis included 115 Anabat call sequence files, sorted by date into three folders, plus the Anabat data file (CF 01384 20120419 1441-46.dat) from which those files were sourced.

The original sequence files were viewed in AnalookW, but appeared to have been downloaded at the incorrect division ratio and were displayed at half the expected frequency. Furthermore, all files contained only very weak call signals with most pulses poorly defined.

The data file was re-processed with CFCRead to download a new batch of sequence files at Division Ratio 16. Whilst the new set of sequence files displayed at expected frequencies, the data quality remained very low, with weak signal strength and poorly-defined pulse structures.

The low data quality meant that none of the recorded calls could be reliably identified to species level. Consequently, calls were only identified to species groups based on similar pulse shapes and characteristic frequencies. These groups are discussed in the Notes section below Table 1.

Species nomenclature

Species names used in this summary follow Churchill (2008).

Call identification & reporting standard

Call identification was based on published call descriptions (e.g. Reinhold *et al* 2001, Milne 2002; Pennay *et al*. 2004) and on reference calls collected from various locations in Queensland and the Northern Territory.

Determination of species' identification was further refined by considering probability of occurrence based on distributional information presented in Churchill (2008) and van Dyck & Strahan (2008).

The format and content of this report complies with nationally accepted standards for the interpretation and reporting of Anabat data (Reardon 2003); latest version available from the Australasian Bat Society on-line at <http://www.ausbats.org.au/>.

Table 1 Microbat species recorded at Ivanhoe Mine, Cloncurry, April 2012.

◆ Denotes species positively identified from call data.

□ Denotes species possibly present, but not reliably identified.

Date:	3-Apr	4-Apr	5-Apr
	No. Anabat files	28	29
<i>Chalinolobus gouldii</i>	☐	☐	☐
<i>Nyctophilus species</i>			☐
<i>Scotorepens balstoni</i>	☐	☐	☐
<i>Scotorepens greyii</i>	☐	☐	☐
<i>Vespadelus baverstocki</i>	☐	☐	☐
<i>Vespadelus finlaysoni</i>	☐	☐	☐
<i>Chaerephon jobensis</i>	☐	☐	
<i>Mormopterus beccarii</i>		☐	
<i>Mormopterus species 5</i>	☐	☐	
<i>Saccolaimus flaviventris</i>	☐	☐	
<i>Taphozous georgianus</i>		☐	
<i>Taphozous troughtoni</i>		☐	

Anabat echolocation data interpretation summary

Client: Central Queensland University (Bundaberg)

Balance Job no.: CQU-1203

Project name/location: Ivanhoe Mine, Cloncurry, 3-5 April 2012

Notes - species recorded and reliability of call identification

Chalinolobus gouldii, *Scotorepens balstoni* and *Mormopterus* 'species 5'

C. gouldii calls (27-33kHz) generally have steep, high band-width, curved pulses with almost flat base, which alternate in frequency. *S. balstoni* (30-35kHz) has similar pulse shapes but lacks the frequency alternation typical of *C. gouldii*. *M. species 5* calls overlap with both of these species (30-33kHz) but usually have flat to gently-curved, low band-width pulses at uniform frequency. In some circumstances, however, all three species produce calls with intermediate features (i.e. no alternation and uniform or variable curves of varying band-width).

Most calls in the $F_c=30-33$ kHz range had steep pulses and only weak, if any, evidence of alternation, so could have been either *C. gouldii* or *S. balstoni*. A couple of calls had a mix of very brief flattish pulses and a few steeper pulses; these could have been from either *C. gouldii* or *M. species 5*.

Scotorepens greyii & *Vespadelus baverstocki*

These species produce steep, broad-band calls with significant frequency overlap - *S. greyii* 36-40kHz $\leq$ *V. baverstocki* 39-45kHz. The few calls recorded in this frequency range had variable frequencies and no clearly discernible pulse shape characteristics, so all were assumed to possibly represent both of these species.

Nyctophilus species

The long-eared bats produce low intensity calls with more-or-less linear pulse shape, which is generally easy to distinguish from other bat calls. The species within the genus cannot, however, be differentiated on call characteristics. The species most likely to occur in the study area is *N. geoffroyi*.

Vespadelus finlaysoni

This is probably the only species likely to occur in the area that would produce calls with steep, broad-band pulses and characteristic frequency of 52-55kHz.

Chaerephon jobensis & *Saccolaimus flaviventris*

Frequency overlaps around 16-20kHz, but *S. flaviventris* generally has uniform sequences of flat to gently-curved pulses, whereas *C. jobensis* usually has irregular sequences of flat to steep pulses. The few calls in this frequency range were very weak and poorly defined so could have been from either species.

Mormopterus beccarii and *Taphozous* species

These bats all produce calls with flat to gently curved pulses at around 22-24kHz. A couple of calls were recorded in this frequency range, but the weak pulses precluded reliable attribution to a single species. All are likely to be present in the study area.

References:

Churchill, S. (2008). *Australian Bats*. Jacana Books, Allen & Unwin; Sydney.

Milne, D.J. (2002). *Key to the Bat Calls of the Top End of the Northern Territory*. Technical Report No. 71, Parks and Wildlife Commission of the Northern Territory, Darwin.

Pennay, M., Law, B. and Reinhold, L. (2004). *Bat Calls of New South Wales*. Department of Environment and Conservation, Hurstville.

Reinhold, L., Law, B., Ford, G. and Pennay, M. (2001). *Key to the bat calls of south-east Queensland and north-east New South Wales*. Department of Natural Resources and Mines, Brisbane.

van Dyck, S. and Strahan, R. (ed.) (2008). *The Mammals of Australia* (Third Edition); New Holland; Sydney.

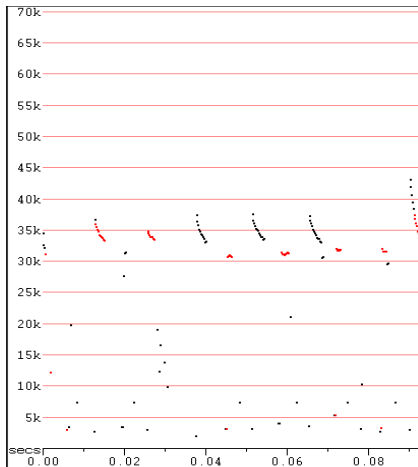
Anabat echolocation data interpretation summary

Client: Central Queensland University (Bundaberg)

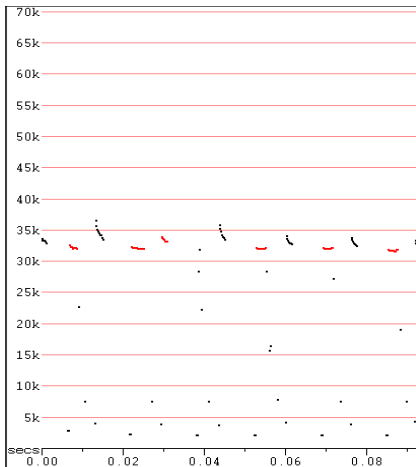
Project name/location: Ivanhoe Mine, Cloncurry, 3-5 April 2012

Sample calls from this survey:

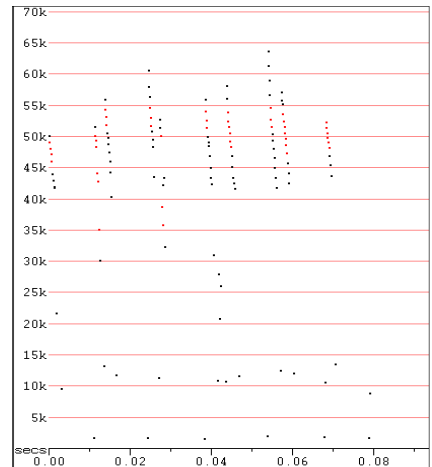
Scale: 10 msec per tick; time between pulses removed (AnalogW F7 compressed mode)



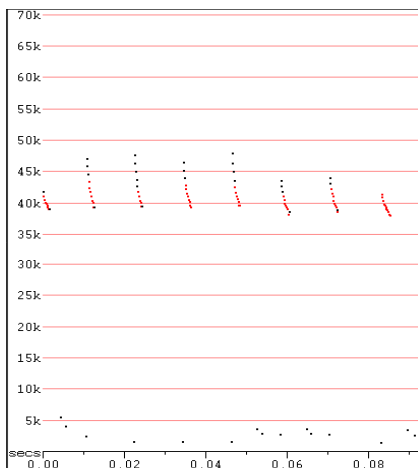
Probably *Chalinolobus gouldii* or *Scotorepens balstoni*



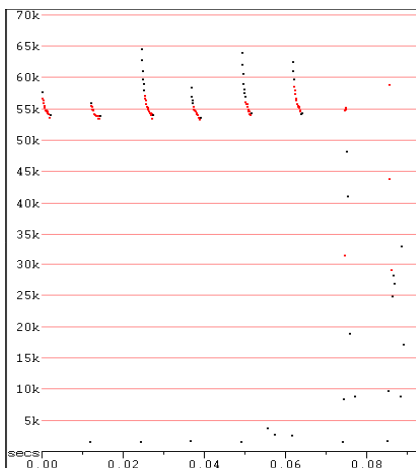
Possibly *Mormopterus* species 5 or *Chalinolobus gouldii*



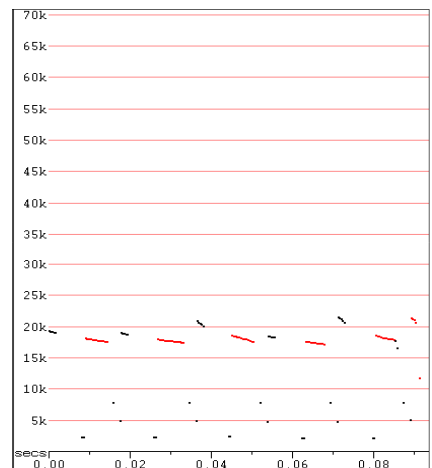
Probably *Nyctophilus* species



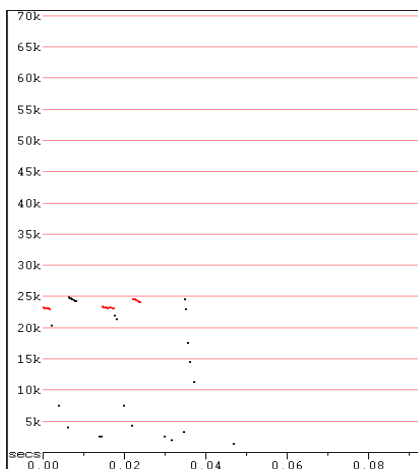
Probably *Scotorepens greyii* or *Vespadelus baverstocki*



Probably *Vespadelus finlaysoni*



Probably *Saccolaimus flaviventris* or *Chaerephon jobensis*



Probably *Mormopterus beccarii* or *Taphozous* species

Appendix E.4.

Fauna Species List Collated from Regional Assessments

Species Name	Common Name	Source							Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C'with	Cld
Amphibians (3 families, 6 species)										
Hylidae										
Cyclorana alboguttata	Striped burrowing Frog	X								
Cyclorana australis	Water holding frog / giant frog			X	X	X	X			
Litoria caerulea	Green tree frog	X	X				X			
Litoria rubella	Desert tree frog	X	X		X		X			
Myobatrachidae										
Opisthodon ornatus	Ornate burrowing frog	X		X	X					
Bufonidae										
Rhinella marina	Cane toad	X			X					
Reptiles (6 families, 31 species)										
Agamidae										
Amphiloburus gilberti [#]	Gilbert's dragon		X			X				
Ctenophorus caudicinctus	Ring-tailed dragon		X	X	X		X			
Ctenophorus isolepis	Central military dragon		X	X	X					
Diporiphora bilineata	Two-lined dragon	X		X	X					
Diporiphora magna	Yellow-sided two-lined dragon			X	X					
Diporiphora winneckei	Canegrass two-lined dragon		X	X	X					
Pogona vitticeps	Central bearded dragon		X	X	X		X			
Pogona henrylawsoni	Downs bearded dragon			X	X					
Elapidae										
Acanthopis antarcticus	Common death adder						X	X		
Furina ornata	Orange-snaped snake	X					X			
Oxyuranus microlepidotus	Fierce snake						X			
Pseudonaja textilis	Eastern brown snake		X		X					
Vermicella annulata	Eastern bandy bandy							X		
Gekkonidae										
Diplodactylus immaculatus	Unknown						X			
Diplodactylus stenodactylus	Sandplain gecko	X					X			
Gehyra dubia	Dubious gecko						X			
Heteronotia binoei [#]	Bynoe's gecko		X			X				
Rhynchoedura ornata	Beaked gecko						X			
Strophurus taeniatus [#]	Phasmid striped gecko									
Pythonidae										
Antaresia childreni	Children's python			X			X			
Aspidites melanocephalus	Black-headed python	X						X		
Morelia spilota	Diamond python						X			
Scincidae										
Cryptoblepharus plagiocephalus	Péron's Snake-eyed Skink	X								
Ctenotus lateralis [#]	Gravelly-soil ctenotus	X	X	X	X					
Ctenotus leonhardii	Leonhardi's ctenitis						X			
Ctenotus pantherinus	Leopard skink		X	X						
Ctenotus pulchellus	Pretty ctenotus						X			
Tiliqua multifasciata	Centralian blue-tongue		X							
Varanidae										
Varanus acanthurus	Spiny-tailed monitor	X		X			X			
Varanus panoptes	Yellow-spotted monitor		X	X				X		
Varanus perentie	Perentie		X							
Birds (46 families, 116 species)										
Acanthizinae										
Gerygone fusca	Western Gerygone	X								
Smicromis brevirostris	Weebill				X					
Accipitridae										
Aquila audax	Wedgetail eagle	X	X	X	X	X	X			
Circus approximans	Swamp harrier			X	X					
Elanus axillaris	Black-shouldered Kite	X								

PLACE DESIGN GROUP

Species Name	Common Name	Source							Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C-with	Qld
<i>Haliastur sphenurus</i>	Whistling kite				X	X	X	X		
<i>Milvus migrans</i>	Black kite	X	X	X	X	X	X			
<i>Lophoictinia isura</i>	Square-tailed kite		X		X					NT
Aegothelidae										
<i>Aegotheles cristatus</i>	Australian owl-nightjar		X				X			
Alcedinidae										
<i>Halcyon pyrrhopygia</i>	Red-backed kingfisher		X	X			X			
<i>Halcyon sancta</i>	Sacred kingfisher						X			
Anatidae										
<i>Anas gibberifrons</i>	Grey teal					X	X			
<i>Chenonetta jubata</i>	Maned duck						X			
<i>Malacorhynchus membranaceus</i>	Pink-eared duck					X				
Apodidae										
<i>Apus pacificus</i>	Fork-tailed swift					X			M	
Ardeidae										
<i>Ardea ibis</i>	Cattle egret				X				M	
<i>Ardea pacifica</i>	White-necked heron				X	X				
<i>Egretta alba</i>	Great egret						X		M	
<i>Egretta novaehollandiae</i>	White-faced heron		X		X		X			
<i>Nycticorax caledonicus</i>	Rufous night-heron					X				
Artamidae										
<i>Artamus cinereus</i>	Black-faced woodswallow	X	X	X	X	X				
<i>Artamus minor</i>	Little woodswallow		X	X	X	X	X			
<i>Artamus cyanopterus</i>	Dusky woodswallow	X					X			
<i>Artamus leucorhynchus</i>	White-breasted woodswallow					X	X			
<i>Artamus personatus</i>	Masked woodswallow		X				X			
<i>Cracticus tibicen</i>	Australian magpie	X	X	X	X	X	X			
<i>Cracticus nigrogularis</i>	Pied butcherbird	X	X	X	X	X				
<i>Cracticus torquatus</i>	Grey butcherbird	X			X					
Burhinidae										
<i>Burhinus grallarius</i>	Bush stone-curlew							X		
Cacatuidae										
<i>Cacatua galerita</i>	Sulphur-crested cockatoo	X			X					
<i>Cacatua sanguinea</i>	Little corella	X			X		X	X		
<i>Eolophus roseicapilla</i>	Galah	X	X	X	X	X	X			
<i>Nymphicus hollandicus</i>	Cockatiel			X	X	X	X			
Campephagidae										
<i>Lalage tricolor</i>	White-winged triller		X		X	X				
<i>Coracina maxima</i>	Ground cuckoo-shrike				X	X				
<i>Coracina novaehollandiae</i>	Black-faced cuckoo-shrike	X	X	X	X	X	X			
Caprimulgidae										
<i>Eurostopodus argus</i>	Spotted nightjar		X	X	X	X				
Charadriidae										
<i>Charadrius melanops</i>	Black-fronted dotterel		X			X				
<i>Erythrogonys cinctus</i>	Red-kneed dotterel			X	X		X			
<i>Vanellus miles</i>	Masked lapwing					X	X			
Climacteridae										
<i>Climacteris melanurus</i>	Black-tailed treecreeper					X				
Columbidae										
<i>Geopelia cuneata</i>	Diamond dove	X	X	X	X		X			
<i>Geopelia striata</i>	Peaceful dove			X	X	X	X			
<i>Geophaps plumifera</i>	Spinifex pigeon	X	X	X	X		X			
<i>Ocyphaps lophotes</i>	Crested pigeon	X	X	X	X		X			
<i>Phaps chalcoptera</i>	Common bronzewing pigeon	X	X	X	X		X			
Corcoracidae										
<i>Struthidea cinerea</i>	Apostlebird	X			X					

PLACE DESIGN GROUP

Species Name	Common Name	Source								Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C'with	Old	
Corvidae											
Corvus coronoides	Australia raven	X	X	X	X	X	X				
Corvus orru	Torresian crow	X	X	X	X						
Cuculidae											
Centropus phasianinus	Pheasant Coucal	X									
Cuclulus pallidus	Pallid cuckoo						X				
Dicaeidae											
Dicaeum hirundinaceum	Mistletoebird						X				
Dicruridae											
Grallina cyanoleuca	Magpie-lark	X	X	X	X	X	X				
Myiagra inquieta	Restless flycatcher						X				
Rhipidura leucophrys	Willie wagtail	X	X	X	X	X	X				
Rhipidura rufifrons	Rufous fantail						X				
Estrildidae											
Emblema pictum	Painted finch	X	X	X	X		X				
Heteromunia pectoralis	Pictorella mannikin				X					NT	
Taeniopygia guttata	Zebra finch	X	X	X	X	X	X				
Falconidae											
Falco berigora	Brown falcon	X	X	X	X	X					
Falco cenchroides	Nankeen kestrel	X	X	X	X	X	X				
Falco longipennis	Australian hobby	X	X	X	X						
Falco peregrinus	Peregrine falcon			X			X				
Falcon hypoleucos	Grey falcon			X			X			NT	
Glareolidae											
Stiltia isabella	Australian pratincole			X		X					
Gruidae											
Grus rubicunda	Brolga				X		X				
Hirundinidae											
Hirundo neoxena	Welcome swallow				X						
Maluridae											
Amytornis ballarae	Kalkadoon Grasswren	X									
Amytonis striatus	Striated grasswren		X	X						NT	
Malurus lamberti	Variegated fairy-wren	X	X	X	X	X					
Malurus leucopterus	White-winged fairy-wren	X				X					
Malurus melanocephalus	Red-backed Fairy-wren	X									
Stipiturus ruficeps	Rufous-crowned emu-wren		X								
Meliphagidae											
Acanthagenys rufogularis	Spiny-cheeked honeyeater		X				X				
Conopophila rufogularis	Rufous-throated Honeyeater		X								
Ephthianura tricolor	Crimson chat		X			X					
Lichmera indistincta	Brown honeyeater		X	X							
Lichenostomus keartlandi	Grey-headed honeyeater	X	X	X	X	X	X				
Lichenostomus penicillatus	White-plumed honeyeater	X	X		X	X	X				
Lichenostomus virescens	Singing honeyeater	X	X								
Melithreptus gularis	black-chinned honeyeater		X							NT	
Manorina flavigula	Yellow-throated miner	X	X	X		X	X				
Philemon citreogularis	Little friarbird	X	X	X	X						
Philemon corniculatus	Noisy friarbird				X						
Meropidae											
Merops ornatus	Rainbow bee-eater	X	X	X	X	X	X		M		
Motacillidae											
Anthus novaeseelandiae	Richard's pipit			X	X	X	X				
Otididae											
Ardeotis australis	Australian bustard	X		X	X						
Pachycephalidae											
Colluricincla harmonica	Grey shrike-thrush		X								

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Species Name	Common Name	Source							Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C-with	Qld
<i>Oreocia gutturalis</i>	Crested bellbird	X	X	X	X	X				
<i>Pachycephala rufiventris</i>	Rufous whistler				X	X				
<i>Pachycephala pectoralis</i>	Golden whistler						X			
Pardalotidae										
<i>Acanthiza apicalis</i>	Inland thornbill		X							
<i>Pardalotus rubricatus</i>	Red-browed pardalote		X							
Petroicidae										
<i>Melanodryas cucullata</i>	Hooded robin		X		X		X			
<i>Microeca fascians</i>	Jacky winter	X	X		X	X	X			
<i>Petroica goodenovii</i>	Red-capped robin		X							
Phalacrocoracidae										
<i>Phalacrocorax varius</i>	Pied cormorant						X			
Phasianidae										
<i>Coturnix ypsilophora</i>	Brown quail	X	X	X	X					
<i>Coturnix novaezealandiae</i>	Stubble quail		X				X			
Plataleidae										
<i>Plegadis falcinellus</i>	Glossy ibis						X			
<i>Threskiornis spinicollis</i>	Straw-necked ibis						X			
Podargidae										
<i>Podargus strigoides</i>	Tawny frogmouth				X		X			
Podicipedidae										
<i>Tachybaptus novaehollandiae</i>	Australasian grebe						X			
Pomatostomidae										
<i>Pomatostomus temporalis</i>	Grey-crowned babbler		X	X	X	X	X			
Psittacidae										
<i>Aprosmictus erythropterus</i>	Red-winged parrot	X	X				X			
<i>Barnardiua zonarius (Macgillivrayi)</i>	Australian ringneck parrot	X	X	X	X	X	X			
<i>Melopsittacus undulatus</i>	Budgerigar	X	X	X	X		X			
Ptilonorhynchidae										
<i>Ptilonorhynchus maculatus</i>	Spotted bowerbird						X			
Strigidae										
<i>Ninox novaeseelandiae</i>	Southern boobook			X	X					
<i>Ninox connivens</i>	Barking owl						X			
Struthionidae										
<i>Dromaius novaehollandiae</i>	Emu				X					
Sylviidae										
<i>Cincloramphus cruralis</i>	Brown songlark				X					
<i>Cincloramphus mathewsi</i>	Rufous songlark				X		X			
<i>Eremiornis carteri</i>	Spinifexbird		X	X	X					
Turnicidae										
<i>Turnix velox</i>	Little button quail		X		X					
Tytonidae										
<i>Tyto alba</i>	Barn owl				X					
Mammals (14 families, 38 species)										
Bovinae										
<i>bos taurus</i>	Cattle			X				X		
Camelidae										
<i>Camelus dromedarius</i>	Camel			X	X					
Canidae										
<i>Canis familiaris dingo</i>	Dingo						X			
Dasyuridae										
<i>Planigale tenuirostris</i> [#]	Narrow-nose planigale		X							
<i>Sminthopsis macroura</i> [#]	Stripe-faced dunnart	X		X						
<i>Sminthopsis</i> sp.	Stripe-faced or fat-tailed dunnart?				X					
Emballonuridae										
<i>Saccolaimus flaviventris</i>	Yellow-bellied sheath-tail bat	X	X	X	X					

PLACE DESIGN GROUP

Species Name	Common Name	Source							Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C with	Qld
<i>Taphozous georgianus</i>	Common sheath-tail bat	X								
<i>Taphozous troughtoni</i>	Troughton's sheath-tail bat	X			X					
<i>Taphozous</i> sp.	Unidentified sheath-tail bat				X					
Equidae										
<i>Equus ferus caballus</i>	Horse				X					
Felidae										
<i>Felis catus</i>	Feral cat			X			X			
Lagomorpha										
<i>Oryctolagus cuniculus</i>	Rabbit			X			X			
Macropodidae										
<i>Lagorchestes conspicillatus</i>	Spectacled hare-wallaby		X							
<i>Macropus rufus</i>	Red kangaroo		X	X	X	X	X			
<i>Macropus robustus</i>	Common wallaroo		X	X	X	X	X			
<i>Macropus giganteus</i>	Eastern grey kangaroo	X	X	X	X		X			
<i>Petrogale purpureicollis</i> ¹	Purple-necked rock-wallaby					X	X			V
Molossidae										
<i>Austronomus australis</i>	White-striped freetail bat		X							
<i>Chaerephon jobensis</i>	Northern freetail bat	X	X		X					
<i>Mormopterus beccarii</i>	Beccari's freetail bat	X	X	X	X					
<i>Mormopterus species 3</i>	Inland freetail bat			X						
<i>Mormopterus species 5</i>	Eastern little freetail bat	X								
Murinae										
<i>Mus musculus</i>	House mouse	X	X				X			
<i>Notomys alexis</i>	Spinifex hopping mouse			X	X					
<i>Pseudomys desertor</i> [#]	Desert mouse	X		X						
<i>Rattus rattus</i>	Black rat			X						
<i>Zyzomys argurus</i>	Common rock rat	X		X						
Suidae										
<i>Sus scrofa</i>	Feral pig				X					
Tachyglossus										
<i>Tachyglossus aculeatus</i>	Short-beaked echidna	X	X	X	X		X			
Vespertilionidae										
<i>Chalinolobus nigrogriseus</i>	Hoary wattled bat		X		X					
<i>Chalinolobus gouldii</i>	Gould's wattled bat	X	X	X	X					
<i>Nyctophilus geoffroyi</i>	Lesser long-eared bat		X	X						
<i>Nyctophilus sp</i>	Unidentified long-eared bat	X	X		X					
<i>Scotorepens balstoni</i>	Inland broad-nosed bat	X	X	X	X					
<i>Scotorepens greyii</i>	Little broad-nosed bat	X	X	X	X					
<i>Vespadelus baverstocki</i>	Inland forest bat	X								
<i>Vespadelus finlaysoni</i>	Inland cave bat	X	X		X					

Key

General Note:

⁹

Species captured and keyed out in the field using Cogger (1996) and Strahan (1995)

#

Species collected and identified by the Queensland Museum

X

Species recorded

Source:

Mount Dore

Species detected during current Mount Dore survey

PDG (2011a)

Species detected in nearby environments (Osborne ML & surrounds) by PLACE (2011)

PDG (2011b)

Species detected in nearby environments (Houdini ML & surrounds) by PLACE (2011)

PDG (2010)

Species detected in nearby environments (Lucky Luke ML & surrounds) by PLACE (2010)

PDG (2006)

Species detected by incidental sightings from PLACE (2006) in nearby environments

Fanning (1993)

Species detected in nearby environments by Fanning (1993)

Incidental

Incidental detection of species in the Osborne ML & surrounds by others

Species Name	Common Name	Source							Status	
		Mount Dore	PDG (2011a)	PDG (2011b)	PDG (2010)	PDG (2006)	Fanning (1993)	Incidental	C'with	Qld

Status:

Commonwealth	Endangered (E), Vulnerable (V) and migratory (M), according to the <i>Environment Protection and Biodiversity Conservation Act 1999</i> .
State (Queensland)	Endangered (E), Vulnerable (V) and Near Threatened (NT), according to the <i>Nature Conservation (Wildlife) Regulation 2006</i> .

Note: ¹ Fanning (1993) documented the presence of *Petrogale lateralis* (black-footed rock wallaby) in surrounding environments. This species has recently been identified as *Petrogale purpureicollis* (purple-necked rock-wallaby) in this region.

References

Fanning, D. (1993). 'Proposed Copper/Gold Mine Project - Fauna Survey of the Osborne Project'. Prepared by D. Fanning (Guninah Consultants) for Placer Pacific Pty Ltd.

PDG (2006). 'Flora and Fauna Study between the Trekelano Leases and the Duchess to Phosphate Hill Road'. Prepared by PLACE Design Group for Placer Dome Australia.

PDG (2008). 'Lucky Luke Satellite Operation – Flora and Fauna Assessment'. Prepared by PLACE Design Group for Barrick (Osborne) Pty Ltd.

PDG (2010a). 'Lucky Luke Satellite Operation – Ecological Assessment'. Prepared by PLACE Design Group for Barrick (Osborne) Pty Ltd.

PDG (2010b). 'Ivanhoe Ecological Report Review and Gaps Analysis'. Prepared by PLACE Design Group for Ivanhoe Cloncurry Mines Pty Ltd.

PDG (2010c). 'Ivanhoe Cloncurry Mine Leases and Associated Infrastructure, Baseline Ecological Report'. Prepared by PLACE Design Group for Ivanhoe Cloncurry Mines Pty Ltd.

PDG (2011a). 'Osborne Mine Lease, Baseline Ecological Assessment'. Prepared by PLACE Design Group for Ivanhoe Cloncurry Mines Pty Ltd.

PDG (2011b). 'Houdini ML Baseline Ecological Assessment'. Prepared by PLACE Design Group for Ivanhoe Cloncurry Mines Pty Ltd.