

FINAL REPORT

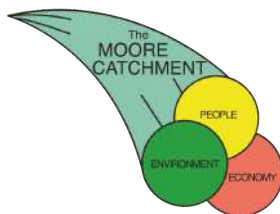
Bi Blitz

Bunjil Rocks

23 - 24 September 2017



This project was supported by Northern Agricultural Catchments Council, Yarra Yarra Catchment Management Group and Moore Catchment Council, through funding from the Australian Government's National Landcare Programme and Gunduwa Regional Conservation Association



Bunjil Rocks BioBlitz

A weekend of flora, fauna and fun!

The weather may have been wet and windy, but that didn't stop everyone having fun and learning more about the rich biodiversity and conservation value of Bunjil Rocks during the highly successful BioBlitz weekend.

During 23 - 24 September 2017, the Northern Agricultural Catchments Council (NACC) together with partners Yarra Yarra Catchment Management Group (YYCMG) and Moore Catchment Council (MCC), hosted the inaugural Midwest BioBlitz at Bunjil Rocks

More than 50 professional biologists and capable amateurs attended the event with people travelling from Geraldton, Northampton, Perth, Northam and Dowerin.

After an introduction from organisers Jessica Stingemore, Lizzie King and Rachel Walmsley, the BioBlitz was kicked off by local Badimaya man Ashley Bell who, accompanied by his nephew Angus on didgeridoo, performed a fitting Welcome to Country – encouraging everyone to explore the local area, while also caring for the Country that has provided us with so much.

MCC's Community Landcare Coordinator Rachel Walmsley said participants were then split into groups with an 'eco-guru' team leader and spent the afternoon exploring and surveying the bush.

"Gurus on-hand were Midwest flora expert Jenny Borger, bird enthusiast Phil Lewis, local landcare lover Paulina Wittwer, bat crazy and nest cam specialist Joe Tonga and all-round eco guru and fauna trapping expert Nic Dunlop," she said.

Team leaders exploring flora on the granite outcrops only had to walk about 50 metres before being able to identify over 120 species of plants, indicating the incredible diversity found on granite outcrops. Other highlights included the young (and young at heart) BioBlitzers catching tadpoles in the water holes, spotting a Barn Owl accidentally flushed from its day roosts, spying a Western Spiny-tailed Skink having a doze in a fallen tree trunk and trapping (and releasing) not one, not two, but 10 birds in the mist nests.

Also spotted: Gunther's Toadlet, Rainbow Darkling Beetle, Tiger Centipede, Mulga Parrot, White-browed Babbler, Red-capped Robin, Western Yellow Robin, Nightjar, Gwarder, Little Eagle, Bobtail Lizard, Mulga Ant, Malleefowl mound, Wreath Flower, Fringe Lily and many more!

After the pack up and yet another delicious meal it was time to sadly say goodbye to friends both old and new. With talk of a 2018 Midwest BioBlitz in the works, we hope to see everyone all again soon.

NACC's Biodiversity Coordinator Jessica Stingemore said the BioBlitz was a fantastic way to connect people with nature, and also a brilliant way to showcase the region and the local community.

“One of my highlights from the event was increasing the local and broader community's interest in and awareness of the area's biological richness, while enhancing the community's skills and capacity for engaging in biodiversity conservation activities.”

Some participants asked why Bunjil Rocks? The site features a number of large granite outcrops surrounded by native bushland – all protected as a nature reserve. The granite outcrops contain several natural water holes and pools which retain water for much of the year. In spring, the surrounding bushland comes alive with wildflowers – including a number of spectacular orchid species. As a result of this BioBlitz, NACC will provide the Shire of Perenjori (and local community) with a report summarising results from the survey, including prioritised management recommendations for the community to consider. In addition, the nearby town of Latham has outstanding facilities that provided a great headquarters for the event (including hot showers).

This event was proudly supported by National Landcare Programme, Gunduwa Regional Conservation Association, Shire of Perenjori, Conservation Council WA, Moora Citrus, Westways Wildflowers, Kochii Oil, Moore Park Olive Oil, Manavi Eggs, Spineless Wonder, Scinapse and Earth Stewardship.



List of Participants

The success of these BioBlitz events is partly due to the enormous efforts made by volunteers in both leading teams and assisting with the organization of the event on the day to travelling large distance from surrounding areas to participate in the activities.

Over 50 people participated in the 2017 Bunjil Rocks BioBlitz, there were many new faces alongside the core group of volunteers who regularly attend BioBlitzes in Western Australia.

David Aitken
Glenda Blyth
Murray Blyth
Rob Boase
Beth Boase
Jenny Borger
Terina Campbell
Stephanie Cremin
Mikayla Cremin
Aiden Cremin
Jennifer Donegan
Avon Donegan
Nic Dunlop
Brian Foley
Kiera Foster
Nesaea Foster
Lysander Foster
Joshua Foster
Brendan Haeusler
Nash Haeusler
Heath Haeusler
Elaine Hall
Mark Hanlon
Heath Headlam
Nigel Headlam
Max Howard
Andrew Hunter
Frank Ingham
Graham Johnson

Lizzie King
David Knowles
Sharon Lewis
Phil Lewis
Phil Logue
John Masters
Jeanette Masters
David Moore
Janet Newell
Heidi Nore
Leif Ollivier
Timothy Osborn
Kylie Payne
Michael Powell
Jacqui Raynes
Dannielle Reed
Michalie Ruoss
Finn Ruoss
Adele Scarfone
Phoenix Scarfone
Ebonie Scarfone
Tina Schroeder
Jessica Stingemore
Kat Todd
Joe Tonga
Rachel Walmsley
Paulina Wittwer
Peter Wittwer

The Site

Bunjil Rocks is located about 30 kilometres south of Perenjori – just a few kilometres west of the Mullewa-Wubin Highway. The site features a number of large granite outcrops surrounded by native bushland – all protected as a nature reserve. It is a popular spot for local visitors and tourists alike.

The granite outcrops contain several natural water holes and pools (“gnammas”) which retain water for much of the year. In spring, the surrounding bushland comes alive with wildflowers – including a number of spectacular orchid species.

Bunjil Rocks is a beautiful spot for a picnic and a great place to bring the kids who can look for tadpoles and other water creatures in the pools. There is plenty of other wildlife around too, including lizards and numerous bird species.

Camping is permitted at Bunjil Rocks, but there are no facilities so visitors need to bring everything that they might require.

As with all of our beautiful natural landscape, visitors are reminded to please remember to “take only photos and leave only footprints”.



Survey Method and Species Counts

Flora and fauna habitat zones were identified within the reserve and split between eight groups of volunteers led by an 'eco-guru', with volunteers swapping between sessions and locations according to their skills or interests during the weekend. Sometimes teams from different areas of interest joined forces and undertook field work alongside each other to improve survey efficiency.

In addition to these teams, two motion sensing cameras were placed in strategic locations on Bunjil Rocks for one week prior to and during the BioBlitz to capture species that might be difficult to identify over the 24 hour period of the BioBlitz. No animals were trapped – although a few unsuspecting people were photographed.

Twenty-two Elliott traps were set for the one night using cat food as bait and were set on Saturday night and checked and pulled in on Sunday morning. Unfortunately due to the inclement weather conditions no animals were trapped.

Two sites each with six funnel traps (12 in total) and associated drift fences were set for a single night, also with no captures.

One site of mist nets were unfurled during peak bird activity. Six Western Yellow Robins, three White-fronted Honeyeaters and one Singing Honeyeater were captured and released. The mist nets were opened during dusk to detect if any bats were present, but unfortunately no captures.

The 2017 Bunjil Rocks BioBlitz recorded 234 plant and animal species:

- 39 Insects
- 2 Amphibians
- 2 Centipedes
- 1 Crustacean
- 5 Reptiles
- 40 Birds
- 131 Plants

A full species list can be found below.

Species List

Insects

Acanthomima ripheus (d)

Agrotis infusa

*Apis mellifera**

Assara sp.

Astraeus aberrans (a)

Athetis tenuis

Austroicetes pusilla

Camponotus gibbinotus

Chalcopteroides sp.

Chlorocoma assimilis

Coryphistes ruricola

Cryptes sp.

Delias aganippe (c)

Ditropidus sp.

Endacusta sp.

Ephutomorpha sp.

Exorista sp.

Goniaeoidea sp.

Helicoverpa punctigera

Heliopsis punctifera

Hellula hydralis

Hypobapta diffundens

Idaea costaria

Iridomyrmex purpureus

Isopteron nr. *breve*

Leucania diatrecta

Liparetrus sp.

Lipogya exprimataria

Melanozostria sp.

Metallarcha chrysitis

Musca vetustissima

Nomophila corticalis

Odontomachus ruficeps

Paramelora sp.

Pernattia chlorophragma (b)

Podomyrma adelaidae

Proteuxoa hypochalchis

Rhytidoponera metallica

Thallarcha lechrioleuca



(a)



(b)



(c)

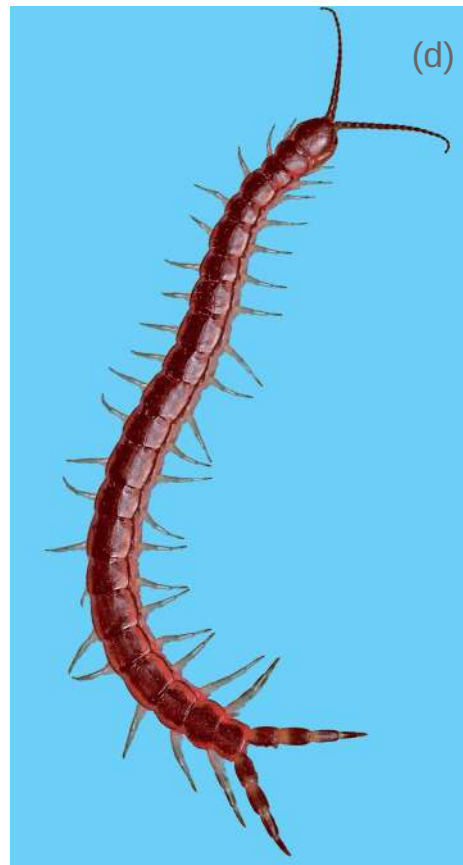


(d)

Species List

Amphibians, Centipedes and Crustaceans

- Humming Frog - *Neobatrachus pelobatoides*
Günther's Toadlet - *Pseudophryne guentheri* (a)
Centipede - *Scolopendra laeta* (d)
Red-headed Centipede - *Scolopendra morsitans* (c)
Crustacean - *Buddelundia* sp. (b)



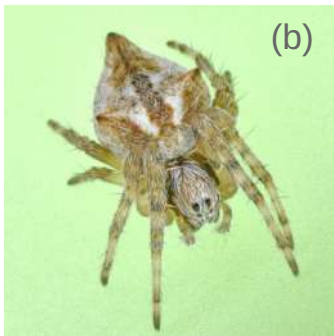
Species List

Spiders

- Australomesidia* sp. (f)
- Backobourkia heroine* (b)
- Backobourkia* sp
- Cryptachaea* sp. (i)
- Dolophones* sp. (e)
- Eriophora* sp.
- Euryopsis* sp. (c)
- Gnaphosidae Gen. sp.
- Latrodectus mactans* (h)
- Lycosa australicola* (g)
- Lycosa* sp.
- Miturga agelenina* (a)
- Oxyopes* sp.
- Tmarus* sp. (d)



(a)



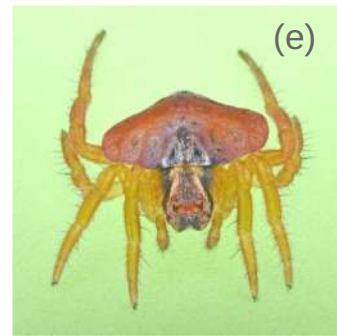
(b)



(c)



(d)



(e)



(f)



(g)



(h)

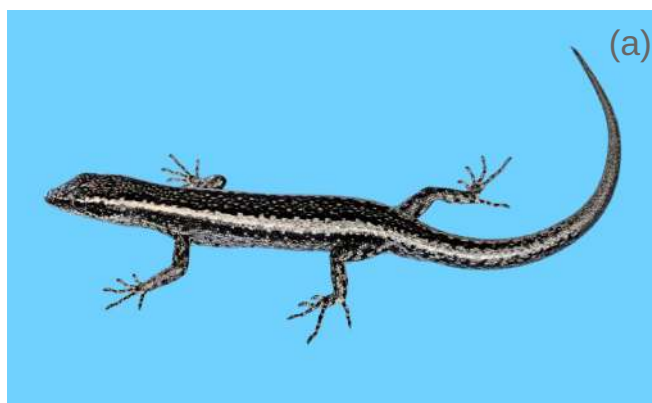


(i)

Species List

Reptiles

- Buchanan's Snake-eyed Skink - *Cryptoblepharus buchanani* (a)
Western Spiny-tailed Skink - *Egernia stokesii. badia* (d)
Variegated Tree Dtella - *Gehyra variegata* (c)
Gwarder - *Pseudonaja mengdeni* (b)



Species List

Birds

Spiny-cheeked Honeyeater
Inland Thornbill
Yellow Rumped Thornbill
Chestnut-rumped Thornbill
Brown Goshawk
Owlet-nightjar
Black-faced Woodswallow
Australian Ringneck
Western Shrike-thrush
Black-faced Cuckoo Shrike
Australian Raven
Pied Butcherbird
Grey Butcherbird
Emu^
Galah
Western Yellow Robin (a)
Nankeen Kestrel
Western Gerygone
Australian Magpie
Little Eagle
Welcome Swallow
Malleefowl^
Singing Honeyeater (c)
Variegated Fairy Wren
Yellow Throated Minor
Brown-headed Honeyeater
Crested Pigeon
Crested Bellbird
Rufous Whistler
Tree Martin
Red-capped Robin
Common Bronzewing
White-browed Babbler
Mulga Parrot
White-fronted Honeyeater (b)
Grey Fantail
Willy Wagtail
Weebill
Zebra Finch
Barn Owl

Acanthagenys rufogularis
Acanthiza apicalis
Acanthiza chrysorrhoa
Acanthiza uropygialis
Accipiter fasciatus
Aegotheles chrisoptus
Artamus cinereus
Barnardius zonarius
Colluricincla harmonica
Coracina novaehollandiae
Corvus coronoides
Cracticus nigrogularis
Cracticus torquatus
Eolophus roseicapilla
Dromaius novaehollandiae
Eopsaltria griseogularis
Falco cenchroides
Gerygone fusca
Gymnorhina tibicen
Hieraaetus morphnoides
Hirundo neoxena
Leipoa ocellata
Lichenostomus virescens
Malurus lamberti
Manorina flavigula
Melithreptus brevirostris
Ocyphaps lophotes
Oreoica gutturalis
Pachycephala rufiventris
Petrochelidon nigricans
Petroica goodenovii
Phaps chalcoptera
Pomatostomus superciliosus
Psephotellus varius
Purnella albifrons
Rhipidura albiscapa
Rhipidura leucophrys
Smicrornis brevirostris
Taeniopygia guttata
Tyto alba



Species List

Plants

Amaranthaceae	Cotton Bush	<i>Ptilotus obovatus</i>
Amaranthaceae	Prince of Wales Feather	<i>Ptilotus polystachyus</i>
Amaranthaceae	-	<i>Ptilotus gaudichaudii</i>
Araliaceae	Sponge Fruit	<i>Trachymene ornata</i>
Araliaceae	Native Parsnip	<i>Trachymene pilosa</i>
Asparagaceae	-	<i>Arthropodium dyeri</i>
Asparagaceae	Fringe Lily	<i>Thysanotus patersonii</i>
Asparagaceae	-	<i>Thysanotus pyramidalis</i>
Asteraceae	Flannel Cudweed	<i>Actinobole uliginosum</i>
Asteraceae	Cape Weed	<i>Arctotheca calendula*</i>
Asteraceae	Pompom heads	<i>Cephalopterum drummondii</i>
Asteraceae	-	<i>Gilberta tenuifolia</i>
Asteraceae	-	<i>Hyalosperma glutinosum</i>
Asteraceae	Smooth Cats-ear	<i>Hypochaeris glabra*</i>
Asteraceae	-	<i>Lawrencella rosea</i>
Asteraceae	Stinking Roger	<i>Monoculus monstrosus*</i>
Asteraceae	Goldfields Daisy	<i>Olearia muelleri</i>
Asteraceae	-	<i>Olearia sp. Eremicola</i>
Asteraceae	-	<i>Podolepis aristata</i>
Asteraceae	-	<i>Podolepis lessonii</i>
Asteraceae	-	<i>Rhodanthe charsleyae</i>
Asteraceae	Pink Everlasting	<i>Rhodanthe chlorocephala</i> subsp. <i>rosea</i>
Asteraceae	-	<i>Rhodanthe laevis</i>
Asteraceae	-	<i>Rhodanthe polycephala</i>
Asteraceae	-	<i>Rhodanthe spicata</i>
Asteraceae	-	<i>Siloxerus multiflorus</i>
Asteraceae	Ursinia	<i>Ursinia anthemoides*</i>
Asteraceae	Orange Immortelle	<i>Waitzia acuminata</i>
Boryaceae	Pincushions	<i>Borya sphaerocephala</i>
Brassicaceae	Ward's Weed	<i>Carrichtera annua*</i>
Brassicaceae	Wild Radish	<i>Raphanus raphanistrum*</i>

Species List

Plants

Caryophyllaceae	-	<i>Petrorhagia dubia*</i>
Casuarinaceae	-	<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>
Casuarinaceae	Tammar	<i>Allocasuarina campestris</i>
Casuarinaceae	-	<i>Allocasuarina corniculata</i>
Chenopodiaceae	Black Crumbweed	<i>Dysphania melanocarpa</i>
Chenopodiaceae	Barrier Saltbush	<i>Enchylaena tomentosa</i>
Chenopodiaceae	Cottony Bluebush	<i>Maireana carnososa</i>
Chenopodiaceae	Satiny Bluebush	<i>Maireana georgei</i>
Chenopodiaceae	-	<i>Rhagodia preissii</i>
Chenopodiaceae	Grey Copperburr	<i>Sclerolaena diacantha</i>
Convolvulaceae	-	<i>Cuscuta planiflora*</i>
Crassulaceae	-	<i>Crassula colorata</i> var. <i>acuminata</i>
Cyperaceae	Nodding Club Rush	<i>Isolepis ?cernua</i>
Cyperaceae	-	<i>Lepidosperma ?sp.</i> Blue Hills
Cyperaceae	-	<i>Schoenus</i> sp.
Dilleniaceae	Guinea-flower	<i>Hibbertia glomerosa</i>
Dilleniaceae	-	<i>Hibbertia stenophylla</i>
Ericaceae	Kondrung	<i>Astroloma serratifolium</i>
Euphorbiaceae	Caustic Weed	<i>Euphorbia drummondii</i>
Euphorbiaceae	Wedding Bush	<i>Ricinocarpus velutinus</i>
Fabaceae	Jam	<i>Acacia acuminata</i>
Fabaceae	-	<i>Acacia assimilis</i> subsp. <i>assimilis</i>
Fabaceae	Wait-a-while	<i>Acacia colletioides</i>
Fabaceae	Spinifex Wattle	<i>Acacia coolgardiensis</i>
Fabaceae	-	<i>Acacia longispinea</i>
Fabaceae	-	<i>Acacia neurophylla</i> subsp. <i>erugata</i>
Fabaceae	-	<i>Acacia stereophylla</i>
Fabaceae	Kurara	<i>Acacia tetragonophylla</i>
Fabaceae	Silky Glycine	<i>Glycine canescens</i>
Fabaceae	-	<i>Senna artemisioides</i> subsp. <i>filifolia</i>
Fabaceae	-Rose Cover	<i>Trifolium hirtum*</i>

Species List

Plants

Geraniaceae	Blue Heronsbill	<i>Erodium cygnorum</i>
Goodeniaceae	Wreath Flower	<i>Lechenaultia macrantha</i>
Goodeniaceae	Pink Velleia	<i>Velleia rosea</i>
Hemerocallidaceae	Blueberry Lily	<i>Dianella revoluta</i>
Hemerocallidaceae	Yellow Autumn Lily	<i>Tricoryne elatior</i>
Malvaceae	Yellow -flowered Rulingia	<i>Androcalva luteiflora</i>
Malvaceae	Tall Sida	<i>Sida calyxhymenia</i>
Marsileaceae	Nardoo	<i>Marsilea hirsuta</i>
Montiaceae	Twining Purslane	<i>Calandrinia eremaea</i>
Montiaceae	Pygmy Purslane	<i>Calandrinia granulifera</i>
Myrtaceae	-	<i>Aluta aspera</i> subsp. <i>hesperia</i>
Myrtaceae	-	<i>Baeckea</i> sp.
Myrtaceae	-	<i>Baeckea</i> sp. Wanarra
Myrtaceae	Malallie	<i>Eucalyptus eudesmioides</i>
Myrtaceae	Tammin Mallee	<i>Eucalyptus leptopoda</i>
Myrtaceae	York Gum	<i>Eucalyptus loxophleba</i> subsp. <i>supralaevis</i>
Myrtaceae	-	<i>Melaleuca barlowii</i>
Myrtaceae	-	<i>Melaleuca concreta</i>
Myrtaceae	-	<i>Melaleuca cordata</i>
Myrtaceae	-	<i>Melaleuca eleuterostachya</i>
Myrtaceae	Broombush	<i>Melaleuca hamata</i>
Myrtaceae	Wiry Honey-myrtle	<i>Melaleuca nematophylla</i>
Myrtaceae	Graceful Honey-myrtle	<i>Melaleuca radula</i>
Myrtaceae	-	<i>Micromyrtus racemosa</i>
Myrtaceae	-	<i>Thryptomene costata</i>
Orchidaceae	-	<i>Diuris</i> sp.
Orchidaceae	-	<i>Microtis graniticola</i>
Phrymaceae	Mudmat	<i>Glossostigma drummondii</i>
Poaceae	Long Greybeard Grass	<i>Amphipogon caricinus</i>
Poaceae	Kerosene Grass	<i>Aristida contorta</i>
Poaceae	Elegant Grass	<i>Austrostipa elegantissima</i>
Poaceae	-	<i>Austrostipa</i> sp.
Poaceae	Wild Oats	<i>Avena fatua</i> *
Poaceae	Blowfly grass	<i>Briza maxima</i> *
Poaceae	Great Brome	<i>Bromus diandrus</i> *

Species List

Plants

Poaceae	Annual Veldt Grass	<i>Ehrharta longifolia</i> *
Poaceae	-	<i>Eriachne ovata</i>
Poaceae	Goldentop	<i>Lamarckia aurea</i> *
Poaceae	Wimmera Ryegrass	<i>Lolium rigidum</i> *
Poaceae	Bandicoot Grass	<i>Monachather paradoxus</i>
Poaceae	False Hair Grass	<i>Pentameris airoides</i> *
Poaceae	-	<i>Rytidosperma sp.</i>
Poaceae	Soft Wanderrie Grass	<i>Thyridolepis multiculmis</i>
Poaceae	Wheat	<i>Triticum aestivum</i> *
Polygalaceae	-	<i>Comesperma integerrimum</i>
Polygonaceae	Double Gee	<i>Rumex hypogaeus</i> *
Proteaceae	Bottlebrush Grevillea	<i>Grevillea paradoxa</i>
Proteaceae	-	<i>Grevillea sp.</i>
Proteaceae	Emu Tree	<i>Hakea francisiana</i>
Proteaceae	-	<i>Hakea invaginata</i>
Proteaceae	Djarnokmurd	<i>Hakea recurva</i>
Proteaceae	-	<i>Hakea scoparia</i>
Proteaceae	-	<i>Petrophile incurvata</i>
Pteridaceae	Fern	<i>Cheilanthes austrotenuifolia</i>
Pteridaceae	Mulga Fern	<i>Cheilanthes sieberi</i>
Rutaceae	-	<i>Phebalium lepidotum</i>
Rutaceae	-	<i>Philotheca brucei subsp. brucei</i>
Santalaceae	Quandong	<i>Santalum acuminatum</i>
Sapindaceae	Hop bBsh	<i>Dodonaea inaequifolia</i>
Scrophulariaceae	Turpentine Bush	<i>Eremophila clarkei</i>
Scrophulariaceae	-	<i>Eremophila decipiens subsp. decipiens</i>
Solanaceae	Round-leaved Tobacco	<i>Nicotiana rotundifolia</i>
Solanaceae	Wild Tomato	<i>Solanum lasiophyllum</i>
Solanaceae	-	<i>Solanum orbiculatum</i>
Stylidiaceae	Trumpet Stylewort	<i>Levenhookia leptantha</i>
Stylidiaceae	-	<i>Stylidium confluens</i>
Stylidiaceae	Posy Triggerplant	<i>Stylidium crossocephalum</i>
Stylidiaceae	-	<i>Stylidium sp.</i>
Thymeleaceae	-	<i>Pimelea avonensis</i>



Photographs courtesy of David Knowles from Spineless Wonders, Jenny Borger from Jenny Borger Botanical Consultant, NACC, YYCMG and MCC.

Common names are listed first followed by scientific. family names are also included for plants.

^ Scats, tracks or mound sighting

* Non-native species