

# **King Island Bush Blitz**

## ***Spiders***

*October 22 to 31, 2023*

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*John Douglas*

Nomenclature and taxonomy used in this report is consistent with:

[The Australian Faunal Directory \(AFD\)](#)

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## List of contributors

List of contributors to this report.			
Name	Institution/affiliation	Qualifications/area of expertise	Level/form of contribution
<i>John Douglas, principal author</i>	<i>TMAG</i>	<i>Honorary Research Associate, QVMAG - spiders</i>	<i>Collecting, identification &amp; processing</i>
<i>Dr Simon Grove</i>	<i>TMAG</i>	<i>Senior Curator, Invertebrate Zoology, Collections and Research Facility</i>	<i>Collecting by-product of insects</i>
<i>Dr Cathy Byrne</i>	<i>TMAG</i>	<i>Senior Curator of Zoology</i>	<i>Collecting by-product of moths</i>
<i>Dr Karen Richards</i>	<i>Department of Natural Resources and Environment Tasmania</i>	<i>Senior Zoologist Threatened Species Section .</i>	<i>Collecting</i>
<i>Dr Volker Framenau</i>	<i>Murdoch University</i>	<i>Senior Research Fellow</i>	<i>Identification of specimens</i>
<i>Dr Pedro Castanheira</i>	<i>Monash University</i>	<i>Research Fellow</i>	<i>Identification of specimens</i>
<i>Dr Robert Raven</i>	<i>Queensland Museum</i>	<i>Retired spider expert</i>	<i>Identification of specimens</i>
<i>Dr Mark Harvey</i>	<i>WA Museum</i>	<i>Curator of Arachnids &amp; Myriapods</i>	<i>Identification of specimens</i>
<i>Dr Jeremy Wilson</i>	<i>Queensland Museum</i>	<i>Research Associate</i>	<i>Identification of specimens</i>
<i>Greg Anderson</i>	<i>Queensland Museum</i>	<i>Head, Iron Metabolism Laboratory</i>	<i>Identification of specimens</i>
<i>André Wanderley do Prado</i>	<i>Monash University</i>	<i>Research Associate (Arachnology)</i>	<i>Identification of specimens</i>

## **Abstract**

King Island arachnids have largely been neglected over the years, due to the remoteness of the Island from mainland Australia and Tasmania. Thus the fauna collected has not given a full indication of what is present on the island. This Bush Blitz survey has shown that there are a number of species which also occur on Tasmania, but also some that are unknown. One species of wolf spider has only been found before on another Bass Strait Island. A new species of trapdoor spider was found which is different to ones from Tasmania or Flinders Island. This survey provided a much better picture of the diversity and knowledge of the spiders that inhabit King Island.

## **1. Introduction**

The group that was targeted in this Bush Blitz were the arachnids of King Island, and specifically the spiders. The island has not been surveyed extensively previously, except for a field trip conducted by David Maynard and Simon Fearn in January 2019 when 76 specimens were collected on the Island. This gave me some indication of the range of species which might be found on the island, but inspired me to do a more thorough search for specimens which had not been collected previously.

## **2. Methods**

### **2.1 Site selection**

The sites that were selected for collection largely were dictated by other members of the team who were specifically looking for insects or other faunal material. Several of the sites were Standard Survey Sites.

### **2.2 Survey techniques**

The most common method of collection used was beating, using a large tray and beating bushes and tree branches to make spiders drop onto the tray. Some spiders were collected by peeling bark off trees, ground spiders generally were found either running on open ground or under fallen logs or rocks. Several specimens were caught in pitfall traps or in collected leaf litter as a by-product of seeking snails or beetles by other collectors.

#### **2.2.1 Methods used at standard survey sites**

Collection methods at the Standard Survey Sites were as described above. Apart from SSS1, where 20 specimens were collected, the other two sites only yielded 5 specimens. The area these two sites were in were in dry bushland. The wind was strong when collecting which may have caused the spiders to take shelter, or specimens beaten from bushes were blown off the tray. The SSS1 site was in a damp location in a melaleuca forest in still conditions.

As this Blitz was conducted in October, a number of specimens were still juveniles, having not matured as they would later in the year or into January/ February.

### **2.3 Identifying the collections**

Identification of the specimens collected was primarily done by myself, at least to family level. Further identification was carried out by reference to descriptive papers, books and the internet. Any specimens that I couldn't readily identify, I sent images to a number of arachnologists specialising in various spider families. These are listed below. I also used multiple articles from the World Spider Catalogue in the process of identifying specimens.

Dr Volker Framenau, Senior Research Fellow, Murdoch University

Dr Pedro Castanheira, Research Fellow, Murdoch University

Dr Robert Raven, Queensland Museum

Dr Jeremy Wilson, Research Associate, Queensland Museum

Dr Mark Harvey, Curator of Arachnids & Myriapods, WA Museum

André Prado

Greg Anderson, Queensland Museum

Framenau, VW, Baehr, BC, Sborowski, P, 2014, A Guide to the Spiders of Australia,

Whyte, R, Anderson, G, 2017, A Field Guide to the Spiders of Australia

World Spider Catalog (2024). Version 25.0. Natural History Museum Bern, online at <http://wsc.nmbe.ch>,

Atlas of Living Australia, <https://www.ala.org.au/>

Fauna Portal Australia, <https://faunaportal.org/home/>

Arachne.org.au, <https://www.arachne.org.au/>

### 3. Results and Discussion

Appendix 1 lists all spiders recorded during the Bush Blitz. Collections made during this Bush Blitz will result in 264 specimens being added to public collections and 167 records being added to publicly accessible databases.

#### 3.1 Un-named or not formalised taxa

There were 31 known, but undescribed spider species collected on King Island

<b>Table 1. Putatively un-named or not formalised taxa</b>	
<b>Taxon</b>	<b>Comment</b>
Mite TMAG sp. 1	
Mite TMAG sp. 2	
Araneidae Cyclosa TMAG sp .1	
Cheretidae Conicochernes TMAG sp. 1	
Clubionidae Clubiona TMAG sp. 1	
Clubionidae Clubiona TMAG sp. 2	
Clubionidae Clubiona TMAG sp. 3	
Clubionidae Clubiona TMAG sp. 4	
Clubionidae Clubiona TMAG sp. 5	
Clubionidae Clubiona TMAG sp. 6	
Desidae TMAG sp. 2	
Garypinidae Aldabrinus TMAG sp. 1	
Miturgida Argoctenus TMAG sp.1	
Miturgidae Hestemodena TMAG sp.1	
Salticidae Opisthoncus TMAG sp. 1	
Salticidae Opisthoncus TMAG sp. 2	
Salticidae Opisthoncus TMAG sp. 3	

**Table 1. Putatively un-named or not formalised taxa**

Salticidae Prostheclina TMAG sp. 1	
Salticidae Simaethula TMAG sp. 1	
Tetragnathidae Tetragnatha TMAG sp. 1	
Theridiidae Cryptachaea TMAG sp. 1	
Theridiidae Moneta TMAG sp.1	
Theridiidae Euryopis TMAG sp. 1	
Theridiidae Theridion TMAG sp. 1	
Theridiidae Hadrotarsus TMAG sp. 1	
Thomisidae Sidymella TMAG sp. 1	
Thomisidae Austalomisidia TMAG sp. 1	
Thomisidae Austalomisidia TMAG sp. 2	
Harvestman TMAG sp. 1	
Zodariidae Habronestes TMAG sp. 1	
Zodariidae Neostorena TMAG sp. 1	

### 3.2 Putative new species (new to science)

In this report, 'putative new species' means an unnamed species that, as far as can be ascertained, was identified as a new species as a direct result of this Bush Blitz.

On King Island, 38 species of the 264 arachnids collected fitted into the category of unnamed species.

**Table 2. Putative new species (new to science)**

Species	Comment
Araneidae TMAG sp. 1	
Desidae TMAG sp. 1	
Lamponidae Lampona TMAG sp.1	
Linyphiidae TMAG sp. 1	
Linyphiidae TMAG sp. 2	
Linyphiidae TMAG sp. 3	
Linyphiidae TMAG sp. 4	
Linyphiidae TMAG sp. 5	
Linyphiidae TMAG sp. 6	
Lycosidae Artoria TMAG sp.1	
Lycosidae Artoria TMAG sp. 2	
Lycosidae Artoria TMAG sp. 3	
Lycosidae Artoria TMAG sp. 4	
Lycosidae Artoria TMAG sp. 5	
Lycosidae TMAG sp. 1	

<b>Table 2. Putative new species (new to science)</b>	
Pycnothelide Stanwellia TMAG sp. 1	
Salticidae Simaethula TMAG sp.2	
Salticidae TMAG sp. 1	
Salticidae TMAG sp. 2	
Salticidae TMAG sp. 3	
Salticidae TMAG sp. 4	
Salticidae TMAG sp. 5	
Salticidae TMAG sp. 6	
Salticidae TMAG sp. 7	
Salticidae TMAG sp. 8	
Salticidae Jotus TMAG sp. 1	
Theridiidae may be Achaearanea TMAG sp.1	
Theridiidae Cryptachaea TMAG sp. 2	
Theridiidae Phoroncidia TMAG sp. 1	
Theridiidae TMAG sp. 1	
Theridiidae TMAG sp. 2	
Theridiidae TMAG sp. 3	
Theridiidae TMAG sp. 4	
Thomisidae Australomisidia TMAG sp.3	Under investigation
Unknown spider TMAG sp. 1	
Unknown spider TMAG sp. 2	
Unknown spider TMAG sp. 2	
Harvestman TMAG sp. 2	

### 3.3 Exotic and pest species

No exotic species of arachnids were collected.

<b>Table 3. Exotic and pest species recorded</b>			
<b>Exotic/pest species</b>	<b>Location sighted/observed</b>	<b>Indication of abundance</b>	<b>Comments</b>

### 3.4 Threatened species

No threatened species of arachnids were collected.

<b>Species</b>	<b>Listing status and level (EBPC, State/Territory)</b>	<b>Location sighted/observed</b>	<b>Indication of abundance</b>

### 3.5 Range extensions

<b>Species</b>	<b>Location sighted/observed</b>	<b>Distance from nearest known record (km)</b>	<b>Comments</b>
Araneidae Backbourkia brouni	-40.10311, 143.95482	80 km	
Araneidae Dolophones conifera	-39.65767, 144.05142	114 km	
Clubionidae Clubiona australiaca	-39.94389, 143.99046	875 km	Previously only known from NSW.
Lycosidae Artoria impedita	-40.10311, 143.95482	814 km	
Lycosidae Artoria victoriensis	-40.00283, 144.08952	219 km	
Lycosidae Venator judyrainbirdae	-39.65767, 144.05142	291 km	
Lycosidae Venatrix murphyi	-39.69773, 143.89169	295 km	Previously only other specimen found on Deal Island in Bass Strait
Sparassidae Delena spenceri	-39.94389, 143.99046	88 km	
Thomisidae Australomisidia inornata	-39.69773, 143.89169	267 km	
Tetragnathidae Tetragnatha caudifera	-40.03223, 143.88546	437 km	
Tetragnathidae Tetragnatha demissa	-39.8595, 144.09141	191 km	
Tetragnathidae Tetragnatha valida	-39.91658, 144.08348	165 km	

### 3.6 Genetic information

No genetic samples were collected.

## **4. Information on species lists**

TMAG collected 264 arachnid specimens of which 136 could be identified to formalised species. Of the remaining specimens, 38 species represented putatively new species and 31 species were known, but not described. These last two figures can include multiple specimens of the same species. A number of the spiders collected are still being investigated to determine their identity and hopefully some will be described in the future.

## **5. Information for land managers**

Appropriate land management practices, including controlled burning and the restriction of vehicle and pedestrian traffic to formed tracks, and the minimal use of agrichemicals in/near natural habitats is recommended. Also, it is important that coarse woody debris in the form of fallen limbs and trees be left in situ to support arachnids which favour the ecosystems which occur under decaying logs.

## **6. Other significant findings**

A species of trapdoor spider (Pycnothelidae *Stanwellia* sp) was collected which differed from others found in north-west Tasmania and on Flinders Island.

## **7. Conclusions**

The opportunity provided by the King Island Bush Blitz to sample the arachnids inhabiting the island, was invaluable to both consolidate the knowledge of the fauna, but to extend the knowledge of what arachnids inhabit the island. The diversity of spider families was important to see the relationship between the spiders found on the Tasmanian mainland and other islands and also the Australian mainland. Several species were also common to both Tasmania and the mainland.

## **Acknowledgements**

TMAG and John Douglas would like to thank the following people for providing identifications.

Robert Raven, Queensland Museum

Volker Framenau, Monash University

Pedro Castanheira, Monash University

André Prado, Monash University

Greg Anderson, Queensland Museum

Jeremy Wilson, Queensland Museum

Mark Harvey, WA Museum

## References

Framenau, VW, Baehr, BC, Sborowski, P, 2014, A Guide to the Spiders of Australia,

Whyte, R, Anderson, G, 2017, A Field Guide to the Spiders of Australia

World Spider Catalog (2024). Version 25.0. Natural History Museum Bern, online at <http://wsc.nmbe.ch>,

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Arachne.org.au, <https://www.arachne.org.au/>

Appendix 1. List of arachnids recorded during the King Island Bush Blitz							
Family	Species	Common name	Putative new species	Known but undescribed	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
<b>Spiders</b>							
Amaurobiidae	Tasmabrochus montanus	forest hunter			No	No	No
Araneidae	Acroaspis eugeni	orb-weaving spider			No	No	No
Araneidae	Acroaspis valentinae	orb-weaving spider			No	No	No
Araneidae	Araneus circulissparsus	orb-weaving spider			No	No	No
Araneidae	Austracantha minax	orb-weaving spider			No	No	No
Araneidae	Backobourkia brounii	orb-weaving spider			No	No	No
Araneidae	Cyclosa	orb-weaving spider		yes	No	No	No
Araneidae	Dolophones conifera	orb-weaving spider			No	No	No
Araneidae	Kangaraneus farhani	wolf spider			No	No	No
Araneidae	Plebs bradleyi	orb-weaving spider			No	No	No
Araneidae	Plebs eburnus	orb-weaving spider			No	No	No
Araneidae	Salsa fuliginata	orb-weaving spider			No	No	No
Araneidae	Salsa rueda	orb-weaving spider			No	No	No
Araneidae		orb-weaving spider	yes		No	No	No
Arkiidae	Arkys walckenaeri	ambush spider			No	No	No
Clubionidae	Clubiona	sac spider sp. 1		yes	No	No	No
Clubionidae	Clubiona	sac spider sp. 2		yes	No	No	No
Clubionidae	Clubiona	sac spider sp. 3		yes	No	No	No
Clubionidae	Clubiona	sac spider sp. 4		yes	No	No	No
Clubionidae	Clubiona	sac spider sp. 5		yes	No	No	No
Clubionidae	Clubiona	sac spider sp. 6		yes	No	No	No
Clubionidae	Clubiona australiaca	sac spider			No	No	No
Corinnidae	Nyssus coloripes	ground spider			No	No	No
Desidae	Badumna longinqua	lace web spider			No	No	No
Desidae	Paramatachia tubicola	lace-web spider			No	No	No
Desidae		lace web spider sp. 1	yes		No	No	No
Desidae		lace-web spider sp.2		yes	No	No	No

Family	Species	Common name	Putative new species	Known but undescribed	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Gnaphosidae	Intruda signata	ground spider			No	No	No
Hahniidae	Scotospilus ampullarius	dwarf sheet spider			No	No	No
Lamponidae	Lampona	white-tailed spider	yes		No	No	No
Lamponidae	Lampona cylindrata	white-tailed spider			No	No	No
Linyphiidae	Laperousea blattifera	dwarf spider			No	No	No
Linyphiidae	Laperousea quindecimpunctata	dwarf spider			No	No	No
Linyphiidae		dwarf spider sp. 1	yes		No	No	No
Linyphiidae		dwarf spider sp. 2	yes		No	No	No
Linyphiidae		dwarf spider sp. 3	yes		No	No	No
Linyphiidae		dwarf spider sp. 4	yes		No	No	No
Linyphiidae		dwarf spider sp. 5	yes		No	No	No
Linyphiidae		dwarf spider sp. 6	yes		No	No	No
Lycosidae	Artoria	wolf spider sp. 1	yes		No	No	No
Lycosidae	Artoria	wolf spider sp. 2	yes		No	No	No
Lycosidae	Artoria	wolf spider sp. 3	yes		No	No	No
Lycosidae	Artoria	wolf spider sp. 4	yes		No	No	No
Lycosidae	Artoria	wolf spider sp. 5	yes		No	No	No
Lycosidae	Artoria aculeata (ms name)	wolf spider			No	No	No
Lycosidae	Artoria albopilata	wolf spider			No	No	No
Lycosidae	Artoria impedita	wolf spider			No	No	No
Lycosidae	Artoria munmorah	wolf spider			No	No	No
Lycosidae	Artoria victoriensis	wolf spider			No	No	No
Lycosidae	Artoria wilkiei	wolf spider			No	No	No
Lycosidae	Artoriopsis murphyi	wolf spider			No	No	No
Lycosidae	Kangarousa tasmaniensis	wolf spider			No	No	No
Lycosidae	Tetrallycosa oraria	wolf spider			No	No	No
Lycosidae	Venator judyrainbirdae	wolf spider			No	No	No
Lycosidae	Venatrix pseudospeciosa	wolf spider			No	No	No
Lycosidae		wolf spider	yes		No	No	No
Miturgidae	Argoctenus	prowling spider		yes	No	No	No

Family	Species	Common name	Putative new species	Known but undescribed	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Miturgidae	Hestimodema	prowling spider		yes	No	No	No
Miturgidae	Miturga agelenina	prowling spider			No	No	No
Nicodamidae	Ambicodamus sororius	red and black spider			No	No	No
Pycnothelidae	Stanwellia	trapdoor spider	yes		No	No	No
Salticidae	Helpis minitabunda	jumping spider			No	No	No
Salticidae	Jotus	jumping spider	yes		No	No	No
Salticidae	Maratus pavonis	jumping spider			No	No	No
Salticidae	Maratus prozyskii	jumping spider			No	No	No
Salticidae	Maratus tasmaniensis	jumping spider			No	No	No
Salticidae	Opisthonus	jumping spider sp. 1		yes	No	No	No
Salticidae	Opisthonus	jumping spider sp. 2		yes	No	No	No
Salticidae	Opisthonus	jumping spider sp. 3		yes	No	No	No
Salticidae	Prostheclina	jumping spider		yes	No	No	No
Salticidae	Prostheclina amplior	jumping spider			No	No	No
Salticidae	Prostheclina basilonesa	jumping spider			No	No	No
Salticidae	Simaethula	jumping spider sp. 1		yes	No	No	No
Salticidae	Simaethula	jumping spider sp. 2	yes		No	No	No
Salticidae		jumping spider sp. 1	yes		No	No	No
Salticidae		jumping spider sp. 2	yes		No	No	No
Salticidae		jumping spider sp. 3	yes		No	No	No
Salticidae		jumping spider sp. 4	yes		No	No	No
Salticidae		jumping spider sp. 5	yes		No	No	No
Salticidae		jumping spider sp. 6	yes		No	No	No
Salticidae		jumping spider sp. 7	yes		No	No	No
Salticidae		jumping spider sp. 8	yes		No	No	No
Sparassidae	Delena spenceri	hunterman spider			No	No	No
Sparassidae	Neosparassus patellatus	hunterman spider			No	No	No
Stiphidiidae	Staphidion facetum	platform spider			No	No	No
Tetragnathidae	Tetragnatha	long-jawed spider		yes	No	No	No
Tetragnathidae	Tetragnatha caudifera	long-jawed spider			No	No	No

Family	Species	Common name	Putative new species	Known but undescribed	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Tetragnathidae	Tetragnatha demissa	long-jawed spider			No	No	No
Tetragnathidae	Tetragnatha valida	long-jawed spider			No	No	No
Theridiidae	may be Achaearanea	comb-footed spider	yes		No	No	No
Theridiidae	Cryptachaea	comb-footed spider sp. 1		yes	No	No	No
Theridiidae	Cryptachaea	comb-footed spider sp. 2	yes		No	No	No
Theridiidae	Cryptachaea veruculata	comb-footed spider			No	No	No
Theridiidae	Euryopsis	comb-footed spider		yes	No	No	No
Theridiidae	Hadrotarsus	comb-footed spider		yes	No	No	No
Theridiidae	Moneta	comb-footed spider		yes	No	No	No
Theridiidae	Phoroncidia	comb-footed spider	yes		No	No	No
Theridiidae	Steatoda nitens	comb-footed spider			No	No	No
Theridiidae	Theridion	comb-footed spider		yes	No	No	No
Theridiidae		comb-footed spider sp. 1	yes		No	No	No
Theridiidae		comb-footed spider sp. 2	yes		No	No	No
Theridiidae		comb-footed spider sp. 3	yes		No	No	No
Theridiidae		comb-footed spider sp. 4	yes		No	No	No
Thomisidae	Australomisidia	crab spider sp. 1		yes	No	No	No
Thomisidae	Australomisidia	crab spider sp. 2		yes	No	No	No
Thomisidae	Australomisidia	crab spider sp. 3	yes		No	No	No
Thomisidae	Australomisidia inornata	crab spider			No	No	No
Thomisidae	Australomisidia pilula	crab spider			No	No	No
Thomisidae	Australomisidia rosea	crab spider			No	No	No
Thomisidae	Cetratus rubropunctatus	crab spider			No	No	No
Thomisidae	Hedana valida	crab spider			No	No	No
Thomisidae	Isala cambridgei	crab spider			No	No	No
Thomisidae	Sidymella	crab spider		yes	No	No	No
Unknown		spider sp. 1	yes		No	No	No
Unknown		spider sp. 2	yes		No	No	No
Unknown		spider sp. 3	yes		No	No	No
Zodariidae	Habronestes	ground-hunting spider		yes	No	No	No

Family	Species	Common name	Putative new species	Known but undescribed	Threatened (EPBC Act)	Threatened (State Act)	Exotic/ pest
Zodariidae	Neostorena	ground-hunting spider		yes	No	No	No
<b>Harvestmen</b>							
Unknown		harvestman sp. 1		yes	No	No	No
Unknown		harvestman sp. 2	yes		No	No	No
<b>Mites</b>							
Unknown		mite sp. 1		yes	No	No	No
Unknown		mite sp. 2		yes	No	No	No
<b>Scorpions</b>							
Bothriuridae	Cercophonius squama	scorpion			No	No	No
<b>Pseudoscorpions</b>							
Cheretidae	Conicochernes	pseudoscorpion		yes	No	No	No
Garypidae	Synsphyronus hansenii	pseudoscorpion			No	No	No
Garypinidae	Aldabrinus	pseudoscorpion		yes	No	No	No