

MARATUS HARRISI (ARANEAE: SALTICIDAE), A NEWLY RECORDED PEACOCK JUMPING SPIDER FOR TASMANIA

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The jumping spider genus *Maratus* contains some of the most colourful spiders in Australia. These are commonly called peacock spiders from the iridescent hairs covering a decorative flap on the abdomen of the male and the elaborate display dance they perform while wooing the plainly coloured females (Otto & Hill 2011). The flap is raised to a vertical position during courtship and shimmied as the male performs for the female. The third pair of legs is elongated and usually darkly coloured with a white tip. These legs are also raised to the vertical position during the courtship display.

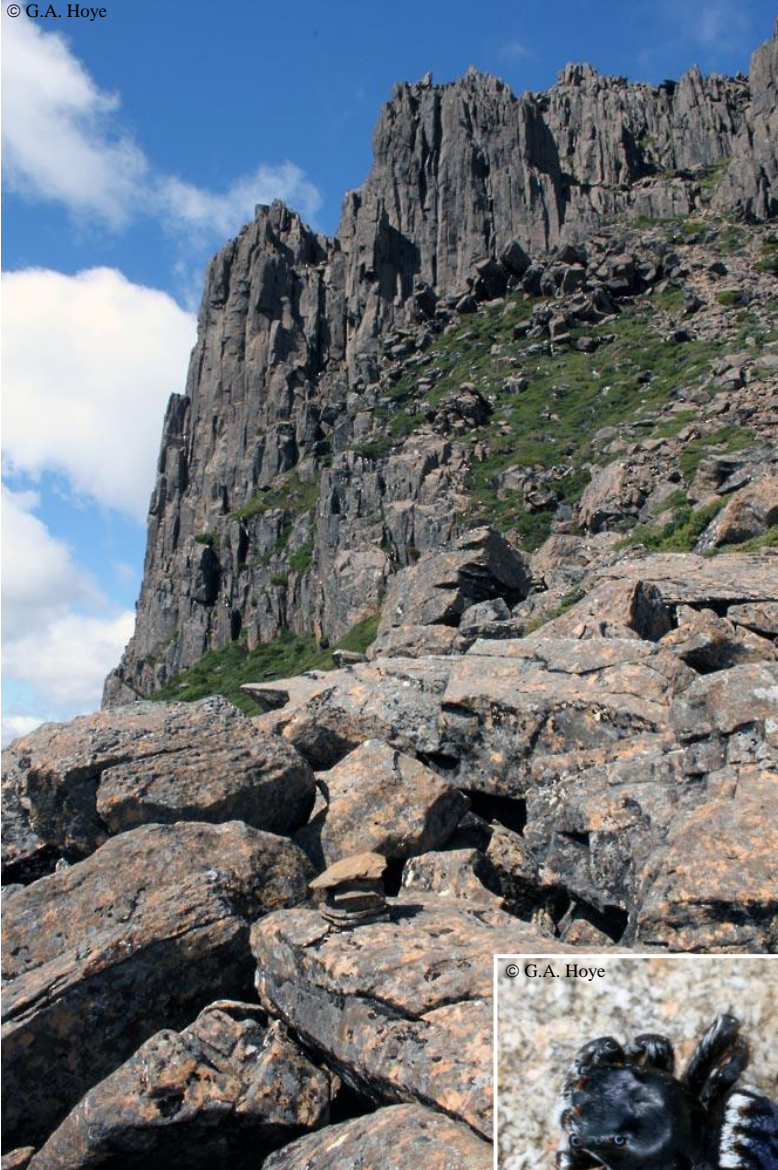
A total of 45 species of *Maratus* are currently recognised in Australia (Otto & Hill 2014). Of these, 28 species are considered to be validly attributable to this genus while the remaining 17 species await reclassification to other genera. Most peacock spiders are distributed in coastal heaths and forests in southeastern Australia and the southwest of Western Australia. A distinctive new species, *Maratus harrisi* was recently described from a single male from Booroomba Rocks in Namadgi National Park, New South Wales 35°33'43.8"S 148°59'35.0"E (Otto & Hill 2011). It was found at an altitude of 1,248 metres on 22 October 2011 by Stuart Harris.

While undertaking the Overland Track between Cradle Mountain and Lake St Clair in March 2013, GH photographed a jumping spider (Salticidae) on the lower flanks of Barn Bluff 41°43'23.21"S 145°55'24.01"E). The spider (Plate 1) was on boulders where low heath grades to vertical rock faces (Plate 2). The exposed rock cap of Barn Bluff is composed of Jurassic dolerite that overlies Permian sedimentary strata (Banks 1973). The site at Barn Bluff is at an elevation of approximately 1,450 metres.

Maratus harrisi is readily distinguished from the other *Maratus* species by the presence of two ivory patches on the dorsal opisthosoma (Plate 1) as well as other features of this flap that is attached to the abdomen (Otto & Hill 2011). The Barn Bluff specimen does vary somewhat from the type specimen in colouration. It is generally more sombre with reduced areas of reddish scales on either end of the opisthosoma as well as behind the eyes. The white band behind the eyes on the ocular quadrangle is also less pronounced. The green flaps at the side of the opisthosoma were substantially darker than those in the type specimen. While these differences relate to only a single individual from both localities, it is possible the Tasmanian populations represent a distinctive insular form to that present on the mainland.

The record of *Maratus harrisi* at Barn Bluff lies c. 735 kilometres to the southwest of the type locality at Booroomba Rocks. While the geology is different with dolerite predominating at Barn Bluff and granitics at Booroomba Rocks, they both offer alpine or subalpine environments. The two other species of *Maratus* previously recorded from Tasmania are *Maratus pavonis* and *Maratus tasmanicus* (Otto & Hill 2011; Otto & Hill 2013; Otto J. Flickr site). The

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Plate 1. (right) *Maratus harrisi* male from below the summit of Barn Bluff

Plate 2. (above) Barn Bluff with the location of *Maratus harrisi* (c. 4 mm) below the vertical cliffs to the left of the image

known sites for both species are within coastal lowlands in contrast to the site at Barn Bluff. A similar proportion of Tasmanian to mainland species is also apparent in the zodariid spider genus *Habronestes* L.Koch, which are diurnal hunters of ants (Baehr & Raven 2009).

On 27 January 2014, PM came across an adult male *Maratus harrisi* approximately 350 m southwest of the summit of Mount Wellington, near Hobart at 1,245 metres elevation (42°53'54.31"S 147°14'04.64"E) (Plates 3 & 4). The male was foraging on flowers of a prostate mountain teatree *Leptospermum rupestre* (Plate 3), which is locally common on the summit plateau. The dorsal markings on the abdomen of this spider resemble the stamens and anthers of the teatree blossom and it is possible that

this is camouflage to facilitate hunting. The nectar-rich flowers were visited by a range of small flies and beetles as well as introduced honeybees and bumblebees. Several *Maratus* juveniles were present within 20 m of the adult male on low *Ozothamnus ledifolius* daisy shrubs, which were in the late flowering stage. The musky smelling flowers of these shrubs were attracting a variety of small flies of a suitable size to serve as prey for the immature spiders. Mild days can persist until early April at these elevations in Tasmania so it is likely that these late instar juveniles will go through to adulthood before the onset of winter (Jürgen Otto, pers. comm.). These were foraging in the company of a larger salticid spider (*Opisthoncus* sp.).

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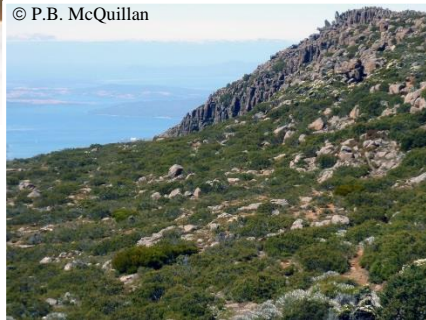


Plate 3. (above) Male *Maratus harrisi* (c. 4 mm) from near the summit of Mount Wellington

Plate 4. (right) Habitat of *Maratus harrisi* near the summit of Mount Wellington, looking southeast from pinnacle

Figure 1 shows the three known localities for *Maratus harrisi* as well as the boundary of the Tasmanian Wilderness World Heritage Area (TWWHA) and areas in Tasmania above 1,000 metres elevation. Prior to sighting at Barn Bluff, no spiders of the genus *Maratus* had been recorded from this large area (15,800 km²) of reserved land. This record highlights the potential for currently unrecorded spiders and other invertebrates to be present within the TWWHA. Mallick & Driessen (2005a,b) list 97 spiders within the TWWHA, only eight of which are jumping spiders (Salticidae). Substantial areas of potential habitat lie both within and outside the TWWHA. Based on the two sites detailed here, heath within proximity to dolerite extrusions above 1,000 metres elevation would be the most suitable habitat to search for further localities for this species.

ACKNOWLEDGEMENTS

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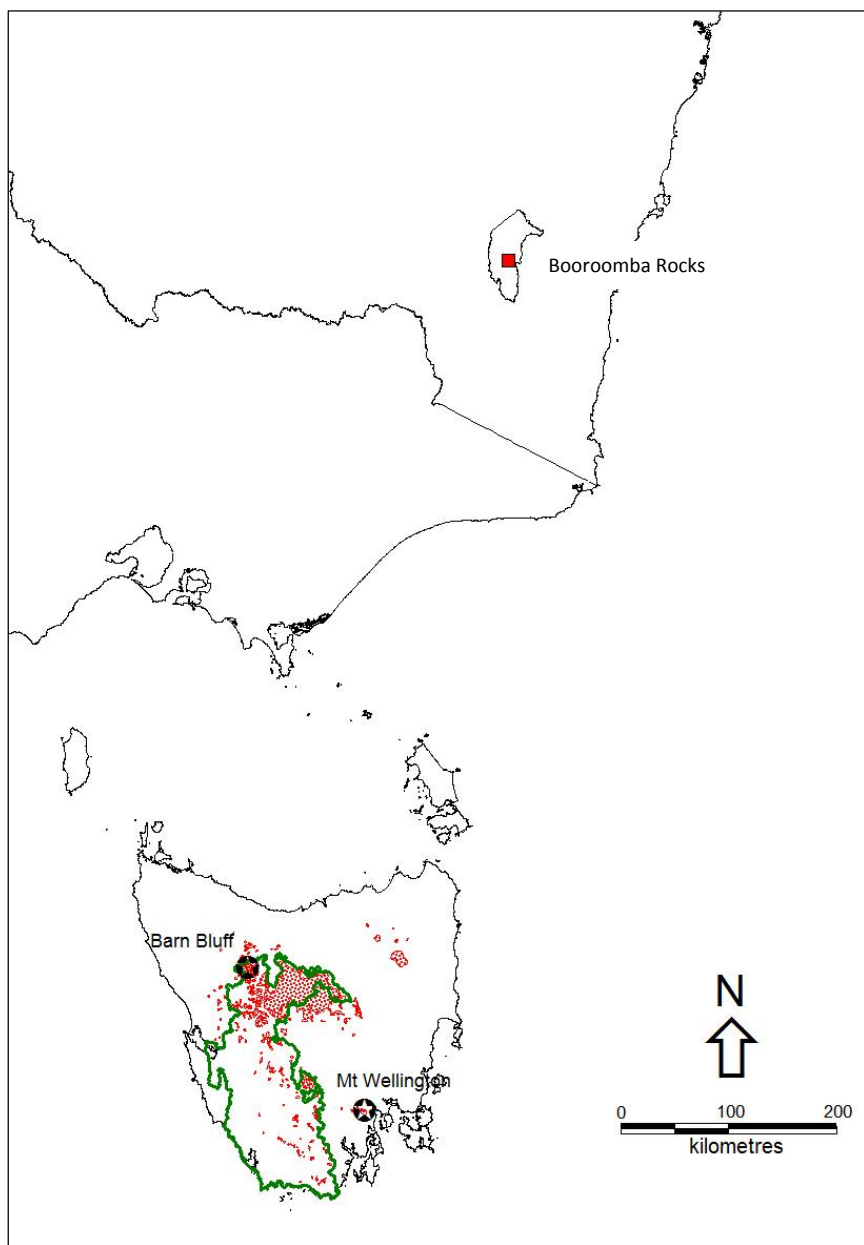


Figure 1. Location of the Barn Bluff, Mount Wellington and Booroomba Rock sites, with the Tasmanian World Heritage Area shown in green and areas above 1,000 m a.s.l. shown in red