



ANCIENT TRAPDOOR SPIDERS AT RISK IN THE PORONGURUP

Walbungkara Bidi - Trapdoor Spider Path

When **Cass Lynch** became aware of DBCA's plans to seal the Tree in the Rock path in the Porongurup Range National Park where a number of burrows of the endemic trapdoor spider *Cataxia bolganupensis* may be impacted she was concerned.

Cass, a Noongar descendant of south west Australia, is a post-doctoral fellow taking part in Kim Scott's Curtin University Australian Research Council (ARC) Future Fellowship programme, She is a member of the Wirlomin Noongar Language and Stories Project Group committed to preserve and promote songs, language and culture of the south west Noongar people. As part of her research, Cass has highlighted the significance of trapdoor spiders (*Walbungkara*) in Noongar dreaming and song lines.

The **Porongurup Range**, is known for its richness in spider species particularly ancient trapdoor spiders. While fragile and vulnerable, the same exact species, not descendants, exist today. The spiders were carried along during the break up of Gondwanaland 180 million years ago. This short range endemic primitive Mygalamorph species is found with an occurrence of less than 10m². in specific Porongurup Range locations.



Courtesy: Mark Harvey W A Museum

Cataxia bolganupensis seek damp, shaded conditions or deep thinly littered ground to create shallow, sparsely lined burrows—without lids!



Courtesy Loxley Fedec



Motivated to act, Cass contacted colleague and conservation ecologist, **Noongar woman Dr Leanda Mason**. Together they share a passion for spiders. Leanda completed her PhD in the ecology of trapdoor spiders and their kin to understand how to conserve them for future generations. In a tour de force, Cass and Leanda feel culturally compelled to draw a line in the sand with *Cataxia* determined to relocate the spiders prior to the Tree in the Rock upgrades.

When we became aware of the plans for an upgrade, I contacted Deon Utber, Regional Leader for Conservation, Parks and Wildlife Service at DBCA to suggest the construction of a boardwalk rather than widening and sealing the path. Deon replied that it could be a possibility but went on to say that the upgrade has been carefully planned so that the existing car park can be used. While we understand the need to upgrade the Tree in Rock carpark and path, there is no doubt that widening will affect some of the known spider burrows.

Tree in Rock carpark, July 2nd: Lucia Quearry, Bo Janmaat and I met with Cass to discuss strategies to protect the spiders at risk. As we examined their burrows, Cass introduced us as friends to the spiders. She spoke to the spiders and to her Elders in language as she looked to the sky to let them know we were there to help the spiders as part of their song line.



Cass suggested the Tree in Rock path be called
'Walbungkara Bidi - Trapdoor Spider Path'

Leanda and Cass noting a
burrow location

Cass & Leanda met with me on August 11 to discuss a trial relocation and to evaluate the obstacles we may encounter. We are determined to relocate as many *Cataxia* as possible with reasonable success in a challenging situation. Deon has been supportive of our proposed relocation plans and is doing what he can to assist.

We aim to create awareness and appreciation for these ancient, extraordinary creatures and to learn relocation techniques for similar future challenges.



Mon 30 Apr 2018

Leanda Mason, Barbara Main and Grant Wardell-Johnson co-published a paper in [Pacific Conservation Biology](#), announcing the death of **Spider 16** at age 43. T

https://www.washingtonpost.com/news/science/wp/2018/05/01/the-extraordinary-life-and-death-of-the-worlds-oldest-known-spider/?utm_term=.ab0ec74c66cc



Leanda Mason/AFP/Getty Images

World's oldest known spider dies at 43 after a quiet life underground

***Female trapdoor spider
known as Number 16
was sedentary
and stayed close to her burrow***

The world's oldest known spider has died at the ripe old age of 43 after being monitored for years during a long-term population study in Australia, researchers say.

The spider did not die of old age but was killed by a wasp sting, researchers said. Named Number 16, the spider helped scientists to unlock important information about the behaviour of an arachnid that can be found across Australia, including in domestic gardens.

“To our knowledge this is the oldest spider ever recorded, and her significant life has allowed us to further investigate the trapdoor spider’s behaviour and population dynamics,” said the lead author, Leanda Mason from Curtin University in Perth. A research project to study trapdoor spiders in the central wheatbelt region of Western Australia was launched in 1974 by Barbara York Main, during which Number 16 was found and monitored.

“Through Barbara’s detailed research, we were able to determine that the extensive life span of the trapdoor spider is due to their life-history traits, including how they live in uncleared, native bushland, their sedentary nature and low metabolisms,” Mason said.

Number 16 was monitored in the wild. Female trapdoor spiders stay in and around the same burrow virtually all their lives, so researchers marked her burrow and went back to check on it regularly. They are not a major threat to humans, although a bite can cause pain and swelling.

The study also gave a better understanding of how the future stresses of climate change and deforestation could affect the species. Trapdoor spiders traditionally have a life span between five to 20 years. While females stay in or near their burrows, males leave once mature and go in search of a mate.