

**ANDYSEZ 12<sup>1</sup>**  
**WHO are KAKARRATUL and ITJARITJARI?**  
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Do we have more than two vertebrate troglobites in Australia?

For many years it has been stated by many people, including me, that Australia has only two vertebrate troglobites. Strictly speaking these two are stygobites – aquatic species fully adapted to underground life. The two species are the Blind Gudgeon, *Milyeringa veritas*, and the Blind Cave Eel, *Ophisternon candidum*. These two are only known from Cape Range and in the case of *O. candidum* in a slightly larger region.

My wife Kirsty and I accompanied a University of Tasmania third year zoology field trip to Narawntapu National Park on the north coast of Tasmania. The park has an astonishing density of Australian marsupials – surprisingly many are around in daylight hours. Well worth a visit but may be very busy at holiday times. It is one of the release sites for Tasmanian Devils specially bred as resistant to the facial tumour disease – sadly many ended up as road kill over the first weekend after the first release.

But – lying awake on the recent marsupian field trip, I had a St Paul-like moment of epiphany. I am sure that St Paul spent a lot of his time thinking about cave fauna ...

But it seems that there are two more vertebrate troglobites in Australia - Kakarratul and Itjaritjari – marsupial moles that live underground. They occasionally are seen on the surface

after heavy rain but given given that my first view of the stygobite *Milyeringa veritas* was in a tidal pool in full sunlight I think that the two moles can be well accepted as two new Australian vertebrate troglobites.

The marsupial mole family (Notoryctidae) has only two species. These are the Southern Marsupial Mole (Itjaritjari, *Notoryctes typhlops*) and the Northern Marsupial Mole (Kakarratul, *Notoryctes caurinus*). Marsupial moles spend most of their time underground and very rarely come to the surface – only after rain. They are completely blind and have no external visible ears, just small holes under their thick white coats. Sound like troglobites to me! I welcome discussion.

If it can be agreed that these two animals are troglobites then they would seem to be the only two mammals world-wide that are troglobites! Other moles and burrowing mammals are not as well adapted to life underground.

Kakarratul are only found only in Western Australia in the Great and Little Sandy Deserts. Itjaritjari is found in SA, WA and NT centred across their boundaries.

Both species live 20-60 cm below the surface in dune crests and slopes and on sand plains and swales. Their diet seems to be largely insects and small reptiles.

They are both listed as Endangered under the Federal EFBC Act 1999.



<sup>1</sup>Please note that there are ANDYSEZs with higher numbers and gaps below the higher numbers – confusion arising from miscommunications between Kent and me years ago. I will try and fill the gaps to avoid more confusion in the future. The ANDYSEZs are not time-dependant so this should not be an issue.