



New species of frog discovered in the Kalbarri National Park

Western Australian Museum herpetologist Paul Doughty and University of Western Australia PhD student Danielle Edwards have discovered an ancient frog species that is new to science, living quietly in its Mid-West sand hill habitat.

The portly Southern Sandhill Frog, scientific name – *Arenophryne xiphorhyncha* made its public debut at the Western Australian Museum – Geraldton in June.

The species was described by Dr Doughty and Ms Edwards in the *Records of the Western Australian Museum* journal following Ms Edwards's PhD work on the genetic history of South Western Australian frog species.

Dr Doughty said the Northern Sandhill Frog (*Arenophryne rotunda*) was discovered in the 1970s in the white coastal dunes of Shark Bay.

"Survey work to the south revealed more sand hill frog populations that were classified with the Shark Bay populations," Dr Doughty said.

"However, Ms Edwards's genetic tests showed that the two populations had diverged from each other some five to seven million years ago, about the same length of time that human beings and chimpanzees diverged from each other."

Further work at the WA Museum confirmed that the two species had consistent differences in colour, shape and other features, and led to the naming of the species.

Sandhill frogs, along with the related Turtle Frog, are unusual in the frog world in that they burrow head-first through the sand - unlike most Australian species which burrow backwards with their legs. The Sandhill Frogs have massive hands and front arms and have no tadpole stage – when the eggs hatch in the sand, miniatures of the adult form emerge.

Dr Doughty said the work of talented students like Ms. Edwards was a great help to documenting the biodiversity of the unique southwest region.

"Genetics is a powerful tool when working with such ancient Gondwanan species such as sand hill frogs which have been in Australia for such a long time," he said.

"The result of such work is better conservation planning and management as we now know there are two, not just one, species to protect."

Dr. Doughty said although the species range was small by Australian standards, it was abundant and safe in Kalbarri National Park, 150 km north of Geraldton.

After its fifteen minutes of fame, the frog was released back into its habitat.