

WORLD-CLASS WILDERNESS – EXPLORING THE UNKNOWN PLANT DIVERSITY OF THE KIMBERLEY REGION

On 1 August 2012, the Kimberley Society heard from Dr Russell Barrett who works as a Research Scientist (Plant Taxonomy) with Kings Park & Botanic Garden. His brother Matt Russell is also a Research Scientist (Conservation Genetics) there. They grew up on Beverley Springs Station (now known as Charnley River and recently purchased by the Australian Wildlife Conservancy), developing an interest in the local flora and fauna at a young age. They have been exploring the region and making new discoveries of plants (and occasionally animals) for more than 20 years. Both completed PhD's in plant systematics at the University of Western Australia. They have published numerous articles on the flora of the Kimberley region, with many more in preparation.

Despite an increase in exploration of the Kimberley region in recent decades, the plant diversity is still considered to be poorly known. *Flora of the Kimberley Region*, published in 1992, recorded just over 2,000 plant species in the region. Since then, that number has climbed to 3,000 species, with new species and new records being found regularly. Even in regions considered well known and close to towns such as Broome and Kununurra, new species continue to come to light.

The largest number of new species are being found on the sandstone plateaux of the north west Kimberley, in the high rainfall zone (1,000–1,400 mm p/a). Many of these species are wet season ephemerals, and are completely missed by dry season visitors.

The Barrett brothers have used helicopters, remote bush camps and station homesteads to survey many remote parts of the Kimberley in search of unknown plants. Not all of the new discoveries are small or annuals, with new Acacias and the occasional new Eucalypt still coming to light. They suggest hundreds of new species are still awaiting discovery in the region, most of which are likely to be endemic and deserve protection through conservation measures.

In Russell's talk, his PowerPoint presentation took the audience well beyond the Gibb River Road to present highlights of their discoveries and the astonishing landscapes of the region. The unique Kimberley flora he displayed ranged from the world's only non-carnivorous carnivorous plant to dead horse lilies and a mock orange that was "lost" for 180 years. Russell showed how this flora compares to the remainder of Australia, and he discussed the threats currently facing the region.

Further reading

Barrett M.D., Craven L.A. & Barrett R.L. 2009. [Calytrix gomphrenoides \(Myrtaceae\), a new species from the Kimberley Region of Western Australia](#). *Nuytsia* 19(1): 1-8.

Barrett, R.L., Barrett, M.D., Start, A.N. and Dixon, K.W. 2001. [Flora survey of the Yampi Sound Defence Training Area, Derby, Western Australia](#). Report to the Australian Heritage Commission.

Barrett R.L., Barrett M.D. 2011. [Two new species of Triodia \(Poaceae: Triodieae\) from the Kimberley region of Western Australia](#). *Telopea* 13: 57-67.

Considine, M-L 2010. ['Hundreds' of Kimberley plant species await discovery](#), ECOS.

Hay, A., Barrett, M.D. and Barrett, R.L. 1999. [A new species of Typhonium \(Araceae: Araceae\) from the West Kimberley, Western Australia](#). *Nuytsia* 13(1): 243–245.

Wheeler, J.R. (ed.) 1992. [Flora of the Kimberley Region](#). Western Australian Herbarium, Como, W.A.