

PERSPECTIVES. A tale about two cockatoos, a French Explorer, an English artist and poet famous for his book of nonsense, an English Lord and a WA Museum ornithologist.

There are two species of white-tailed black cockatoo that are endemic to the south-west of Western Australia – Baudin's Cockatoo (a long billed species) and Carnaby's Cockatoo (a short billed species). The two were only recognised as separate species in 1979 and both are listed as 'Endangered' and have very high profiles in Western Australia.

First discovered in 1801 by the Baudin Expedition in the vicinity of Cape Naturaliste where a landing party under Henri de Freycinet took a dingy ashore and noted white-tailed black cockatoos. By March 1804 specimens from the expedition were back in France.

Baudin's Cockatoo *Zanda c* was named in 1832 by the famous English artist and poet Edward Lear in his book *Illustrations of the family Psittacidae, or Parrots* published in 1832. The bird figured as the type specimen by Lear was a female and he attached a note at the base of the plate "In the possession of Mr Benjamin Leadbeater". Leadbeater ran a natural history business in London and with Lear was a member of the Linnean Society. Unfortunately Lear gave no description, measurements or locality data to accompany the illustration and the whereabouts of the type was a mystery.

The bird illustrated was assumed by cockatoo researchers, to be the long-billed form and looking at the drawing it appears that way. The other white-tail, Carnaby's Cockatoo *Zanda latirostris*, was described by Ivan Carnaby, a farmer and oologist from WA, in 1948 and it differed from Baudin's in its short heavy bill and call.

A few years ago I was studying Lear's plates and noticed that his style was to over emphasise the length of the upper bill in many of his paintings. He used both living and preserved specimens including museum study skins and I wondered if he had done the same with the Baudin's Cockatoo and was the holotype (reference specimen) still in a collection somewhere?

The detective work began. Some of the Baudin Expedition specimens were mounted for the Paris Museum and some found their way to Benjamin Leadbeater. Lear worked at the British Museum, but in the 1830s he spent much of his time at Knowsley Hall, near Liverpool, the home of the President of the Linnean Society, Lord Stanley, who became the 13th Earl of Derby in 1834. Lord Derby amassed a huge collection of natural history specimens that was donated after his death in 1851 to the people of Liverpool, thus founding what is now National Museums Liverpool.

Realising all these connections, I contacted Clemency Fisher, Curator of Vertebrate Zoology at the Liverpool Museum to search their collection. In their vault Clemency found a female black cockatoo specimen from the 13th Earl of Derby's collection purchased in 1840. It had an old parchment label with *Zanda baudinii* (Lear) written in Lear's large black handwriting. The handwriting was confirmed by Robert McCracken Peck, a Lear expert, at the Academy of Natural Sciences Philadelphia.

The specimen was photographed and to my amazement it was the short-billed Carnaby's Cockatoo. This proved a huge dilemma as to how we could conserve the long established names of *baudinii* for the distinct long-billed Baudin's Cockatoo and maintain *latirostris* Carnaby as the valid name for Carnaby's Cockatoo. The scientific solution was to have the holotype of *baudinii* Lear, set aside and replaced with a neotype of a specimen of Baudin's Cockatoo from Mundaring Western Australia so as not to destabilise long established names. A scientific paper was prepared for the Bulletin of Zoological Nomenclature that was published in September 2014.

For me, this study highlights the value of collaborative research on an international level involving researchers in Australia, United Kingdom, France and the United States and also the value of museum specimens, both old and new, in resolving biodiversity questions. My task now is to help conserve Baudin's Cockatoo that is our most-endangered black cocky in the south-west. The female has a distinctive 'whicher-whicher' or 'bunyip-bunyip' call and judging from our work we may need the help of the mythical Bunyip to save the species.

Ron Johnstone



Lear's original painting of "Baudin's Cockatoo"



Male Baudin's Cockatoo feeding on Marri seeds [Keith Lightbody]



Ron Johnstone at WA Museum's research centre [Astrid Volzke]