

Back from extinction By Grazyna Paczkowska and Greg Keighery

Not very often in our conservation careers, if ever, do we get involved in the rediscovery of flora species that were thought to be extinct. To find something that hasn't been seen in over 170 years is incredibly exciting, even if it was accidental (that is, we did not search for it) and it started as a misidentification.

Western Australian flora is very diverse with more than 12,500 native species known from the wild. Some species are common, but others are rare and threatened, and in the worst scenario some become extinct. For a species to be listed as presumed extinct, there is no reasonable doubt that the last individual has died. This requires that the species have been adequately searched

for in known and/or expected habitat, at appropriate times over a reasonable time frame. There is some optimism in the phrase 'presumed extinct' as there is always a chance that a species listed as extinct may be found again.

Myriocephalus nudus is one of the plants listed as presumed extinct. It is a small annual daisy only known from collections made around the 1850s by James Drummond, an early Western Australian botanist. As it was in those days, with no road maps or even place names available, the collections lack precise locality details, and Drummond's collection is only noted as being from the Swan River, Western Australia. Paul

Wilson, a daisy expert, noted in his revision of *Myriocephalus* ([Nuytsia 14: 437-444, 2002](#)), that the specimens 'appeared to have been gathered from muddy situations and were presumably growing in winter wetlands'.

Some time ago, Urban Nature was involved in setting up a monitoring program to assess recovery of a clay-based wetland in the Northern Jarrah Forest that was impacted by offroad vehicle and wild pig activity. Along one of the monitored transects, we found a small daisy that was just about to flower which was tentatively identified as [M. appendiculatus](#).

No voucher specimens were collected but two plants were stuck into a field

herbarium. Subsequently, the transects were monitored for the next three years and this daisy reappeared only once along the same transect within that time frame.

I had a chance meeting with Greg Keighery, a botanist and recently retired DBCA Senior Principal Research Scientist, who is one of the many botanists who has been involved in the search for *M. nudus* for over 10 years. We had a discussion on the peculiar morphology of this plant species which consequently prompted me to revisit the Urban Nature field herbariums. There was in my mind a recollection of seeing something that could fit into Greg's description of the species in question.

There was a bit of excitement from Greg and WA Herbarium staff when I showed them the field herbarium from 2016 with these two plants. However, the specimens were immature plants and mature flowering and fruiting plants were required to confirm whether it was the presumed extinct *M. nudus*. Urgent surveys were carried out to the wetland site at appropriate times to relocate the plants and then to collect representative samples to enable confirmation of this plant identity.

We are happy to report that it is the presumed extinct *Myriocephalus nudus*. The rediscovery has generated a flurry of activity; Greg is currently working on updating and reviewing *Myriocephalus* taxonomy; a nomination will need to be prepared to list the species as threatened (and de-list it as extinct); and a detailed survey of this current population will need to be undertaken too. And of course, we are always on the lookout for new *M. nudus* populations.



Myriocephalus nudus is a small daisy with yellow spherical (rounded) flower heads. Photos – Grazyna Paczkowska.



Greg Keighery being finally able to collect the elusive daisy after almost a decade of intensive surveys.