



SAVING OUR SPECIES

Asterolasia buxifolia

Endangered

Asterolasia buxifolia is a slow-growing, spindly, woody shrub, known from only one population found close to the waters' edge along a 2 to 3 kilometre stretch of the Lett River east of Lithgow. The landscape is a steep and deeply incised gorge through rocky granite country. The general Blue Mountains area is highly fire-prone, and it is thought that the location of the population, hugging the river bank down in a narrow gorge provides protection.

It has hairy stems to 2 metres tall, with small, rounded leathery leaves, that are shiny above, but hairy below. The yellow flowers appear over a short period in spring and have 6- to 7-millimetre-long petals arranged in a five-pointed star.

The seeds are small and are forcibly dispersed when the mature fruit 'explodes', a process known as ballistic dispersal. It is likely that they are further distributed by ants. Seeds are thought to show persistence in the soil bank.

Asterolasia buxifolia was known from collections made in the 1830s by botanists Allan and Richard Cunningham, who gave the location as 'Bell's Line of Road'.

Both the specimens and the location were then lost, and the species was thought to have become extinct.

Revision of the taxonomy of some old herbarium specimens by Western Australian botanist Paul Wilson in 1998 confirmed the distinct nature of the species.

Quite independently, in 2000, Bob Makinson of the Australian National Herbarium was exploring the isolated valley floor of a stream near Hartley and found a 'really nice yellow-flowered *Asterolasia*', which was then confirmed to be *A. buxifolia*.

'That which is lost is found again'.

Read the fascinating story of the rediscovery at asbs.org.au/newsletter/pdf/02-march-110.pdf

Support local action and help save *Asterolasia buxifolia*



Asterolasia buxifolia. Photo: Barry Collier/DPIE

Asterolasia buxifolia is endangered in New South Wales mainly due to its limited distribution.

Other threats to this species include:

- weeds including Japanese honeysuckle (*Lonicera japonica*), blackberry (*Rubus sp.*), Scotch broom (*Cytisus scoparius*) and introduced grass species
- habitat clearing
- susceptibility to extinction from human-induced or random natural events, because of the small size and limited genetic base of its single population
- disturbance from nearby recreational activities
- disturbance by stock
- browsing by rabbits
- change to natural flow regimes in the Lett River
- change to natural fire regimes.

Saving our Species (SoS) is working in partnership with the Department of Planning, Industry and Environment, Lithgow-Oberon Landcare, and a wide range of other organisations and private landowners to save the *Asterolasia buxifolia*.

The recovery effort aims to:

- establish an *ex-situ* collection
- retain vegetation in riparian zones
- translocate individuals at the existing site to expand the species distribution

- weed control using bush regeneration techniques
- survey for new populations in areas of nearby potential habitat
- regularly monitor population status, demographics and appraise new threats
- establish appropriate fire regime requirements through research.

You too can help

If you want to help managers look after *Asterolasia buxifolia* or care for other threatened species, you can find out more about volunteering and research projects related to threatened species at environment.nsw.gov.au/SOS

SoS is a NSW Government flagship program targeting on-ground action to secure threatened plants and animals from extinction. The program aims to increase the number of species that can survive securely in the wild.

SoS can only succeed if we work together. We need your support to ensure that today's actions help to secure the future of NSW's threatened species.

Find out more about threatened species in New South Wales and the SoS program at environment.nsw.gov.au/SOS