

# endangered

by Andrew Brown



## Wagin banksia

The genus *Banksia* contains 75 species. Three (*B. ilicifolia*, *B. cuneata* and *B. oligantha*) are placed in the subgenus *Isostylis*, and two are confined to Western Australia's Wheatbelt region and declared as rare flora.

Wagin banksia (*B. oligantha*), the rarer of the two Wheatbelt species, was first collected by Ken Wallace in 1984. Since then, searchers have located just three other populations, the most recent in March 2004. These occur over a range of 100 kilometres, growing in areas of remnant open low woodland in deep white to yellow-brown sand. Two populations are in decline, with just a single seedling recorded since monitoring began.

Bearing a superficial resemblance to parrotbush (*Dryandra sessilis*) when not in flower, Wagin banksia is a large shrub or small tree to four metres high. It has few main stems and oval-shaped leaves two to three centimetres long. Leaves have incurved margins, with two to four sharp points along each side. There are

heads of 20 to 30 flowers, which are cream with a red base. The scientific name refers to the fact that the inflorescence has relatively few flowers (compared with other members of the genus), a feature that separates this species from the closely related matchstick banksia (*B. cuneata*), along with the creamy yellow flowers, roughened basal bark and shiny green upper surface to its leaves.

A study of the reproductive biology of Wagin banksia carried out by Curtin University staff in 1996 showed that honeyeaters were the main pollinators, although insects also played a role in pollination.

Although fire kills adult plants, seeds are released from the fruits of Wagin banksia and germinate in the ashbed. The even-aged structure of some populations provides evidence that this has occurred in the past. Fire is, however, not essential for germination, and seedlings have occasionally been found in the absence of fire.

Wagin banksia is ranked as endangered in Western Australia due to its limited geographic range, severe fragmentation

and the continuing decline in the quality of its habitat. The species is also listed as endangered under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*. The main threats, particularly to seedlings, are grazing by rabbits, drought, drift from chemical spray and weeds. Its limited habitat and poor recruitment are further concerns. Salinity may also be a future threat.

An interim recovery plan has been prepared for the species and is being implemented by the Katanning and Narrogin District Threatened Flora Recovery Teams. Recovery actions to date include rabbit control, fencing, and seed collection and storage in the Department of Environment and Conservation's Threatened Flora Seed Centre. Studies on the genetic divergence and diversity of the species have also been undertaken.

A one-year project supported by Natural Heritage Trust funding is investigating the influence of salinity and waterlogging, and aims to identify the tolerance of the species to hydrological changes.

Photo by Bert and Babs Wells/DEC

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