

SCIENTISTS BREED SUPERTREE



Western Australia has a new tree variety - a supertree bred by scientists for local conditions.

Starting with bluegums native to Tasmania and Victoria (*Eucalyptus globulus*), the Department of Conservation and Land Management has produced a 40 per cent more productive tree with the registered name, western bluegum.

Bluegums, which are grown commercially to make high-quality paper, are being planted as integrated tree crops on south-west farms under CALM's sharefarming program. The aim is to create a major new wood fibre export industry, while maintaining traditional farm production,

conserving native vegetation and restoring damaged ecosystems.

The selection of the new elite trees began in 1980 when CALM's senior tree breeder, Trevor Butcher, planted trials of native bluegum seeds from different sites in the east.

The bluegums thrived in WA's south-west, but seed from some locations grew better than others.

A second native seed collection was made by the CSIRO in 1987 and 1988 and planted extensively throughout the south-west by CALM, with help from Bunnings Treefarms and Alcoa.

The exact tree from which each seed lot was collected was noted and kept separate in each of the trials so the best seed-producing trees, or families, could be identified. This process continued until 1993.

WA has more than 1 000 different bluegum families planted in 35 trials - a total of



about 110 000 trees which have all been labelled, planted by hand in a special statistical design and measured regularly. Only the best 300 trees were used to establish the western bluegum seed orchards.

CALM has also developed a technique to induce early flowering in bluegums. While it used to take up to seven years before the seed orchard trees flowered, they can now produce seed within two years.

All CALM bluegum seedlings in 1996 will be from improved seed and by 1998, the department will make 20 million western bluegum seeds available to growers.

*Above left: Western bluegum logo - only stock from CALM's tree improvement program will carry this registered name.*

*Above: Bluegums are already being integrated with traditional farm production. Photo - Jon Green*

BLACK DAY FOR GULLS

Perth beachwalkers may be treated to an unusual sight - at least two black seagulls have been seen along metropolitan beaches.

CALM wildlife officer Doug Coughran was walking along the beach at Pinnaroo Point during his annual leave when he spotted an unusual sooty-coloured gull. It had dark legs and a white iris and was black all over. After his first sighting in early January, Doug spotted the gull every day for almost two weeks.

He photographed the bird and called on CALM researcher Phil Fuller to confirm his identification. Sure enough, it was a mutant form of the silver gull. Phil also recalled hearing

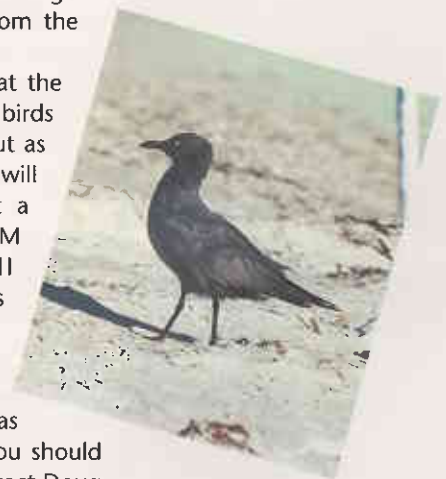
that K.C. Lim, a friend of CALM scientific adviser John Blyth, had photographed a black form of the silver gull.

The photographs, taken at Coogee Point the previous September, were of a separate individual. The gull had redder legs, a white iris and a white patch on the back of its head.

The phenomenon, known as melanism, has been recorded in other bird species. It is the excessive development of the dark pigment, melanin. Sometimes it is passed from one generation to the next, as in the panther, which is a black variety of the leopard. Melanism has not been recorded in silver gulls until now.

The two black gulls might even have come from the same clutch.

It is thought that the black form of the birds will probably die out as it is unlikely they will be able to attract a mate. However, CALM researchers will monitor sightings of black gulls and would be interested to hear from anyone who has seen the birds. If you should see a black gull contact Doug Coughran on (09) 334 0333 or Phil Fuller on (09) 405 5100.



*Photo - Doug Coughran*

# LANDSCOPE

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*The Pinnacles, in Nambung National Park, is one of the most photographed landscapes in the world. But there is another side to Nambung. See page 41.*

*The hidden caves and tunnels of Cape Range National Park harbour several animals found nowhere else. Turn to page 22 to find out about these bizarre cave dwellers.*



*The characteristics that made WA inhospitable to the first Europeans are now helping us create new industries that can also repair the environment. See page 47.*



*Perth has at least 70 species of skinks, geckoes and other reptiles. Find out how to attract these fascinating creatures to your garden on page 28.*



*Devastation caused by the recent NSW bushfires has fuelled debate on the practice of prescribed burning. How do managers fight fire with fire? See page 35.*

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## COVER

The bobtail (*Tiliqua rugosa*) is sometimes incorrectly called the 'bobtail goanna' but is actually a very large skink. They are common around Perth and often seen in gardens. During hot weather they can be seen basking on footpaths, verges or roadways. See our story 'Reptiles in the Garden' on Page 30. *The illustration is by Philippa Nikulinsky.*



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