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#### CALIM LIBRARY ARCHITE

## Bussell's Spider Orchid

Endangered Flora of Western Australia

# If you think you've seen this plant, please call CALM South West Capes District on (08) 9752 1677

Like other orchids found in the South West of Western Australia, *Caladenia busselliana* ms (commonly known as Bussell's spider orchid) is able to survive the long dry summer period by dying back to underground potatolike storage organs (called tubers). In Autumn, it reemerges above the ground as a single hairy leaf, and some five to six months later, in September and October, produces one to three pale yellow, spider-like flowers on a flowering stem that is 20-30 cm long.

Bussell's spider orchid grows in association with another critically endangered species, the Dunsborough spider orchid (*Caladenia viridescens* ms). However, it differs from this species and the closely related swamp spider orchid (C. paludosa ms), in that it is paler yellow in colour, has a broader, creamy-white labellum and longer, narrower clubs on the sepals, which are usually yellow in colour.

Caladenia busselliana ms is found growing in areas of winter-wet, sandy loam over clay soils, beneath a canopy of jarrah and marri.

Bussell's spider orchid was discovered in 1954. It then escaped detection until 1990 when Greg Bussell (after whom it is named) found plants in the Yallingup area.

The species was ranked as Critically Endangered in 1995, and CALM has set up the Central Forest Region Threatened Flora Recovery Team to co-ordinate recovery actions addressing the most threatening processes affecting its survival in the wild. (See overleaf.)

Threats include degraded habitat, weeds, accidental destruction during roadworks, poor survival of offspring and the deaths of some adult plants due to disease.

Bussell's spider orchid is known from just two localities and we are eager to know of any others.

If unable to contact the District office on the above number, please phone CALM's Wildlife Branch on (08) 9334 0422



A typical flower. Note the white tip to the labellum. Photo - Greg Bussell



CALM is committed to ensuring that Critically Endangered taxa do not become extinct in the wild. This is done through the preparation of a Recovery Plan (RP) or Interim Recovery Plan (IRP), which outlines the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa in the wild and begin the recovery process.

IRPs are prepared by CALM and implemented by Regional or District Recovery teams consisting of representatives from CALM, Kings Park and Botanic Garden, community groups, private landowners, local Shires and various government organisations.

## Bussell's Spider Orchid

## Essential recovery actions that have been implemented to protect the species include:

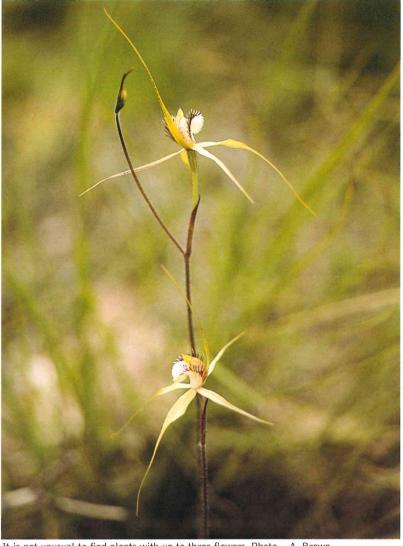
**Protection from current threats:** The erection of signs that mark the site of each population; the control of introduced weeds; the maintenance of dieback hygiene; and the regular monitoring of the health of each population.

**Protection from future threats:** The development of a fire protection plan; ensuring that relevant authorities, land owners and CALM personnel are aware of the species and the need to protect it; and that all are familiar with the threatening processes identified in the Interim Recovery Plan (IRP).

## Desirable recovery actions, which are progressively being implemented, include:

The collection of seed, the maintenance of live plants away from the wild (i.e. in botanical gardens); ensuring that land containing the largest population is set aside as a nature reserve; conducting further surveys; researching the biology and ecology of the species; and enhancing plant numbers by removal of weeds, amelioration of some other limiting factor, or by direct propagation and translocation techniques.

IRPs will be deemed a success if essential recovery actions have been implemented, and identified threatening processes have been removed within three years of their approval.



It is not unusual to find plants with up to three flowers. Photo – A. Brown



The habitat of Bussell's spider orchid is often inundated with water during winter and early spring. Photo – F. Bunny

