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Department of Biodiversity,  
Conservation and Attractions

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# Late hammer orchid

E n d a n g e r e d   F l o r a   o f   W e s t e r n   A u s t r a l i a

**If you think you have seen this plant, please call the Department of Conservation and Land Management's Blackwood District on (08) 9752-1677 or Albany District on (08) 9842-4500.**

*Drakaea* is a small genus of nine species, endemic to southwest Western Australia. Collectively, they are known as hammer orchids because of the mechanism by which they achieve pollination. All have a hinged labellum (lip) that is similar in appearance to a wingless female *Thynnid* wasp and emits a sexual pheromone that exactly matches that emitted by the wasp. Attracted by the pheromone, the male wasp latches onto the decoy and attempts to fly away with it but, because of the hinged nature of the labellum, is flicked over against the column either removing or depositing pollen.

*D. confluens* (late hammer orchid) was first recognised as being distinct by E. Chapman who discovered it growing in bushland on his farm near Boyup Brook. Further collections of the species were later made from near Mondurup Peak in the Stirling Range National Park.

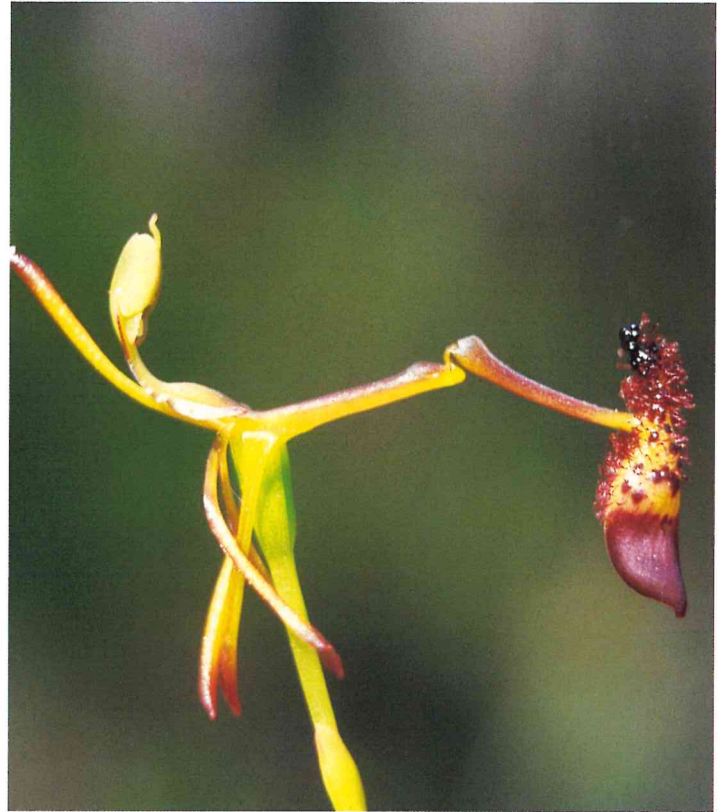
Although late hammer orchid often grows with other hammer orchids, including the more common *Drakaea livida* and *D. glyptodon*, it begins flowering as they are finishing hence its common name. The orchid is readily distinguished from both these species by its two-coloured labellum that has a straight, rather than upturned, apex.

The scientific name '*confluens*' is derived from the Latin *confluens* (confluent, running together), alluding to the labellum which has features of both *Drakaea livida* (e.g. conspicuous spots) and of *D. elastica* (e.g. straight or slightly upturned tail).

Late hammer orchid has a single 1-2cm wide, greyish-green, heart-shaped leaf that is held flat to the ground. The leaf may either be smooth or covered with short hairs. Flowering occurs in the late spring (October-November) with each plant producing a single flower 2-4cm long and 3-5mm wide on a stem 15-30cm high.

The species is endemic to Western Australia where it is found in two widely separated areas, northeast of Boyup Brook and in the Stirling Range National Park. It grows in deep sandy soil in mixed jarrah (*Eucalyptus marginata*) and *Banksia* (*Banksia attenuata*) woodland. The vegetation type at one population differs slightly from that of the others, consisting mostly of *Melaleuca* and mallee *Eucalyptus* over heath.

Late hammer orchid was declared as Rare Flora in October 1996 and ranked Critically Endangered (CR) in December 1997



Hammer orchids have a unusual flower with a hinged labellum. Photo – S.Hopper

due to the severe fragmentation of populations and a decline in the area, extent and quality of habitat. The main threats are inappropriate fire regimes, grazing, firebreak maintenance, recreational activities, weed invasion and disease.

The Department has set up the South West Region and Albany District Threatened Flora Recovery Teams to coordinate recovery actions that address the greatest threats to the survival of the species in the wild (see overleaf).

Late hammer orchid is known from eleven mostly small populations and the Department is keen to know of any others.

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

## Recovery of a Species



The Department is committed to ensuring that Critically Endangered flora does not become extinct in the wild. This is done through the preparation of a Recovery Plan 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 the Department and implemented by Regional or District Recovery Teams consisting of representatives from the Department of Conservation and Land Management, community groups, private landowners, local shires and various government organisations.



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**Recovery actions that have been, and will be, progressively implemented to protect the species include:**

**Protection from current threats:** These include the installation of Declared Rare Flora markers; fencing, exclusion from inappropriate fire; conducting further surveys; and regular monitoring of the health of populations.

**Protection from future threats:** These include the development of a fire management strategy; collection and storage of seed at Botanic Gardens and Parks Authority; maintenance of live plants away from the wild (i.e. in botanical gardens); and researching the biology and ecology of the species. Other actions include ensuring that relevant authorities, landowners and Departmental personnel are aware of the species' presence and the need to protect it, and that all are familiar with the threats identified in the Interim Recovery Plan.



Late hammer orchid (far right) with five other hammer orchid species. Photo – S.Hopper



The small heart-shaped leaves are held flat on the ground. Photo – A.Brown

IRPs will be deemed a success if the number of individuals within the population and/or the number of populations have increased.

This poster was prepared by the Department of Conservation and Land Management.



Habitat of Late hammer orchid. Photo – A.Brown