

A statement for the purposes of approved conservation advice  
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

**Approved Conservation Advice for**  
***Diuris drummondii* (Tall Donkey Orchid)**

This Conservation Advice has been developed based on the best available information at the time this conservation advice was approved.

**Description**

*Diuris drummondii*, Family Orchidaceae, commonly known as Tall Donkey Orchid, is a terrestrial orchid and is Western Australia's tallest Donkey Orchid. It grows up to 105 cm tall and produces between three and eight widely-spaced pale-yellow flowers.

**Conservation Status**

Tall Donkey Orchid is listed as **vulnerable**. This species is eligible for listing as vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). Tall Donkey Orchid is also listed as rare flora under the *Wildlife Conservation Act 1950* (Western Australia) and on the *Wildlife Conservation (Rare Flora) Notice 2006(2)* (Western Australia).

**Distribution and Habitat**

Tall Donkey Orchid is known from 12 populations between Perth and Walpole, south-west Western Australia (Hopper et al., 1990; Brown et al., 1998). Recently, two populations have been identified within the city of Bunbury, one on council-managed land, and the other on private land (South-West Catchments Council, 2007). The species occurs within the Swan, South West and South Coast (Western Australia) Natural Resource Management Regions.

Tall Donkey Orchid is found in low-lying depressions in peaty and sandy clay swamps. It is not unusual to see the plants standing in several centimetres of water, even during the summer flowering period (Brown et al., 1998; Hoffman & Brown, 1998).

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological communities.

**Threats**

The main identified threats to Tall Donkey Orchid include inappropriate fire regimes and changes in the water table. In particular, fires occurring between July and early January will damage the above-ground parts of this plant. As the species is often found with its base in water, significant changes to water tables over time could also have a detrimental impact (Brown et al., 1998).

**Research Priorities**

Research priorities that would inform future regional and local priority actions include:

- Design and implement a monitoring program.

**Regional and Local Priority Actions**

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of Tall Donkey Orchid.

**Habitat Loss, Disturbance and Modification**

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Manage threats to areas of vegetation that contain populations/occurrences/remnants of Tall Donkey Orchid.
- Manage any changes to hydrology which may result in changes to the water table levels, increased run-off, sedimentation or pollution.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.
- Minimise adverse impacts from land use at known sites, such as conducting controlled burns during the species' dormant period (February-June). Appropriate surveys should be conducted ahead of any clearing or modification of potential habitat sites.
- Manage any disruptions to water flows.
- Investigate formal conservation arrangements such as the use of covenants, conservation agreements or inclusion in reserve tenure.

#### Fire

- Develop and implement a suitable fire management strategy for Tall Donkey Orchid.
- Provide maps of known occurrences to local and state rural fire services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

#### Conservation Information

- Raise awareness of Tall Donkey Orchid within the local community, particularly land holders and managers, and local councils.

#### Enable Recovery of Additional Sites and/or Populations

- Undertake appropriate seed collection and storage, noting that the species flowers from late November to January (Brown et al., 1998).
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment, including mycorrhizal association trials.
- Investigate options for linking, enhancing or establishing additional populations.
- Implement national translocation protocols (Vallee et al, 2004) if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to Tall Donkey Orchid, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

#### **Information Sources:**

Brown, A, Thomson-Dans, C & Marchant, N eds 1998, *Western Australia's Threatened Flora*, Department of Conservation and Land Management, Perth, p. 137.

Hoffman, N & Brown, A 1998, *Orchids of South-west Australia*, revised 2nd edition. University of Western Australia Press, Nedlands, W.A.

Hopper, SD, Van Leeuwen, S, Brown, AP & Patrick, SJ 1990, *Western Australia's Endangered Flora and other plants under consideration for declaration*, Department of Conservation and Land Management, Perth.

South-West Catchments Council (SWCC) 2007, 'SWCC E-Newsletter NRMO Update 40: General News', 30th April 2007. Viewed 29th May 2007, <<http://swcatchmentscouncil.com/index.php?page=newsletters>>.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M and Rossetto, M 2004, [\*Guidelines for the Translocation of Threatened Plants in Australia - Second Edition\*](#), Australian Network for Plant Conservation, Canberra.