

Department of State Growth

Den Management Protocol

Department of State Growth and Contractors

2016

Acknowledgements

The following organisations are thanked for their input into the development of this protocol:

- Department of State Growth
- Department of Primary Industries, Parks, Water and the Environment
- Forest Practices Authority

Citation

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1. Introduction

1.1 Overview

This document defines the procedures and requirements to be undertaken by all workers who encounter both known and unanticipated dens¹ whilst operating within a Department of State Growth (the Department) works area. Dens are protected under the *Nature Conservation Act 2002* as they are considered a “product of wildlife”.

This den management protocol is to be followed on discovery of any den, and prior to disturbance of any den during works for the Department. Known dens will be marked as such on the Drawings included within the Tender Specifications. Those dens outside of the direct footprint are to be protected.

Den decommissioning and preparatory work is only to be undertaken in conjunction with a suitably qualified ecologist.

Note the protocol only applies to the mainland Tasmania, noting that *Vombatus ursinus ursinus* (wombat sub-species restricted to Flinders Island) listed under the *Environment Protection and Biodiversity Conservation Act 1999* is excluded.

1.2 Application of the Protocol

This protocol applies to all Department of State Growth and Contractors working on Department projects and is for unanticipated discovery of dens during works, not as a tool for informing design elements for known den locations.

The intent of the Den Management Protocol is to provide guidance for site workers that discover dens within a work site.

For the purposes of this protocol, a den is defined as an excavated or naturally occurring den that is noticeable.

Whilst smaller dens may provide habitat for a range of native (and possibly threatened) species these smaller sites are unlikely to be able to be readily identified, due to their small size, and are therefore excluded from this protocol. Additionally, where there is a likelihood of threatened species utilising burrows smaller than 10 cm diameter entrance (e.g. New Holland Mouse), the Department would normally undertake site-specific targeted surveys, during planning for road construction works.

This protocol **does not** replace the requirement for pre-construction surveys but rather is to address unanticipated den discovery and to provide additional information for management of known dens (noting that the ecological survey recommendations and associated permits override the contents of this protocol where they exist).

1.3 Objectives of this protocol

This protocol applies to all dens that are discovered by Department staff and/or contractors within a works area. The objectives of this protocol are:

- to minimise harm to native and threatened fauna during road construction/works projects;
- to provide a clear staged approach to be taken when a den is encountered during works; and

¹ Includes dens and burrows. Referred to as dens throughout this protocol.

- for works to be undertaken in a manner which is consistent with environmental legislation (outlined below).

1.4 Relevant Legislation and Guidelines

A number of pieces of legislation provide for the protection of dens in Tasmania including:

- *Nature Conservation Act 2002 (NCA)*
- *Threatened Species Protection Act 1995 (TSPA)*
- *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*
- *Wildlife (General) Regulations 2010*

All dens are considered a 'product of wildlife' under the *Nature Conservation Act 2002* (Section 3 (subsection (2))), and are therefore protected from damage/destruction.

The Department of Primary Industries, Parks, Water and Environment (DPIPWE) developed the Survey Guidelines and Management Advice for Development Proposals that May Impact on the Tasmanian Devil (*Sarcophilus harrisi*) 2015 (the Guidelines), which contains management and mitigation measures for dens. Information from the Guidelines have been used to develop this document.

1.5 Denning Fauna

The following native fauna species in Tasmania utilise dens as covered by this protocol:

- **Tasmanian Devil (*Sarcophilus harrisi*)**, listed as *endangered* under the TSPA and *endangered* under the EPBC Act.
- **Spotted-tailed Quoll (*Dasyurus maculatus maculatus*)** listed as *rare* under the TSPA and *vulnerable* under the EPBC Act.
- **Eastern Quoll (*Dasyurus viverrinus*)** is not currently listed under the TSPA, listed as *endangered* under the EPBC Act.
- **Common Wombat (*Vombatus ursinus ursinus*)** is not currently listed under the TSPA, or the EPBC Act
- **Short-beaked Echidna (*Tachyglossus aculeatus*)** is not currently listed under the TSPA, or the EPBC Act
- **Platypus (*Ornithorhynchus anatinus*)** is not currently listed under the TSPA, or the EPBC Act

A number of these species are known to utilise similar denning structures, with the rarer species potentially occupying dens dug by the common wombat. Taking this into account, all dens encountered should be treated as potentially housing threatened species until assessed otherwise.

Several types of dens are utilised by the species mentioned above; including small cave areas at the base of cliffs, hollow logs and abandoned wombat dens. Examples of some denning structures are shown in **Figure 1**.



Figure 1 Example denning structures

2. Den Assessment

2.1 Identification of potential den

The following steps should be followed upon discovery of a potential den:

Is the den within 50 m of the active works area? Y / N

○ **If no, undertake the following**

1. Ensure the area surrounding the den site is flagged as a no-go environmental management zone during the construction period. The area to be marked off should include a buffer zone of at least 50 m from the den location, and should be marked appropriately. Any temporary fencing must provide access to the den for animals.
2. Take photographs of the den entrance **without touching or disturbing the den**. Check the surrounding area for any other den entrances. If present, photograph and record these as well.
3. Complete a den observation form (see Appendix 1 for form and Section 0 for instructions) and contact Environment and Development Approvals (EDA) (contact details in Section 0) at the Department to notify them of the discovery.
4. Proceed with works outside the designated no-go zone.

○ **If yes, undertake the following:**

1. Immediately mark out a 'no-go' or 'environmental management zone' around the den of at least 50 m and notify all site staff of the exclusion zone. Do not disturb the den. Any temporary fencing must provide access to the den for animals.
2. Take photographs of the den entrance **without touching or disturbing the den**. Check the immediate area for any other den entrances. If present, photograph and record these as well.
3. Complete a den observation form (see Appendix 1 for form and Section 0 for instructions).

4. Contact Environment and Development Approvals (EDA) as soon as practicable (contact details in Section 0) at the Department to notify them of the discovery and provide completed den observation form.
5. EDA will then arrange for a suitably qualified ecologist to undertake a survey and confirm if the den is currently in use, and if so by which species, using the methods described in Section 0.
 - i) If the den is determined to belong to a fauna species listed under the *Wildlife (General) Regulations 2010* (refer 0) a permit will be required, regardless of use status.
 - ii) EDA will seek the necessary permits from DPIPWE for den disturbance and decommissioning if required (see below). If the den is confirmed as not being in use a permit to destroy will still be required from DPIPWE.
 - iii) If the den is determined to be used by a non-native species (e.g. rabbit) or unsuitable for native species use (e.g. due to dimensions) then a permit will not be required.
6. Once all necessary permits and approvals (or exemptions) have been obtained, decommissioning of the den can commence in line with Section 2.2, along with any advice from DPIPWE and EDA and any permit conditions (where applicable).

2.2 Survey of the Den Site

Den survey should be undertaken in accordance with the DPIPWE document *Survey Guidelines and Management Advice for Development Proposals that May Impact on the Tasmanian Devil (Sarcophilus harrisii)* (2015).

As outlined in above guidelines survey should involve two remote infrared cameras positioned at the den entrance for a minimum of seven nights. The dens should also be inspected for evidence of use. Following the camera survey period, the photographs should be reviewed. Two or more records of devils or quolls entering or leaving the den over the period of a week suggests that the den is likely maternal.

Survey of the den site will be conducted by an appropriately qualified ecologist.

2.2 Den Management and Decommissioning

Den in use by TSPA or EPBCA, or Wildlife (General) Regulation listed species

If the den is found to be in use by a species listed under the TSPA 1995 or Wildlife (General) Regulations 2010, and is unavoidable (i.e. it is not possible to alter the proposed development to allow avoidance of the confirmed active den site within a 50 m buffer zone), then closure and destruction of the den will be required.

For EPBCA-listed species, it is likely that a significant impact statement will be required. Actions required in this instance will need to be considered on a case-by-case basis.

Closure and destruction of dens will need to be undertaken in consultation with DPIPWE experts and will be subject to approval from DPIPWE. A Den Decommissioning Plan is likely to be required and should be prepared in accordance with the Guidelines.

Den decommissioning shall follow any advice from DPIPWE and EDA and be done in accordance with any additional conditions contained in the permit.

Once a permit is obtained, the preferred method is installation of one-way gates at the den entrance to stop animals from re-entering (following exit). Motion cameras should be installed for at least three days and then reviewed to ensure all animals that are seen to enter the den have exited. Once exit of animals confirmed, the den can be decommissioned.

Den confirmed as not being in use

If the den is confirmed as not being in use but suitable for fauna listed on the Wildlife Regulations, a permit to destroy will still be required from DPIPWE. The camera should remain on the den until the entrance is blocked prior to destroying the structure/obtaining the permit, to ensure an animal does not occupy the den between the camera survey being conducted and the physical decommissioning taking place.

3. Reporting

The Den Observation Reporting Form (0) should be commenced by the contractor who is responsible for the construction site. The contractor should complete the following details on the form:

- Date
- Time
- Den location
- Chainage/ easting and northing
- Any activity observed surrounding the den

The attending ecologist must then complete the remainder of the form, documenting the results of all den decommissioning works, including fauna handling, treatment and release details. The form must then be submitted to the Department within seven days of the observation/decommissioning being carried out.

4. Contacts

Department of State Growth

Manager, Environment and Development Approvals (EDA)

03 6166 3388

eda@stategrowth.tas.gov.au

Department of Primary Industries, Parks, Water and Environment

Policy & Conservation Advice Branch

9am-5pm, Monday to Friday

03 6165 4381

ConservationAssessments@dpiuwe.tas.gov.au

5. References

DPIPWE (2015). *Survey Guidelines and Management Advice for Development Proposals that May Impact on the Tasmanian Devil (Sarcophilus Harrisii)*, Department of Primary Industries, Parks, Water and Environment, April 2015

Appendix A – Den Observation Reporting Form

Appendix B – Denning Fauna Listed Under the Wildlife (General) Regulations 2010

The below list of denning fauna is a subset of fauna listed under the Wildlife (General) Regulations 2010, that may possibly be encountered during Department of State Growth works.

For a complete list of fauna listed under the regulations, refer to the Wildlife (General) Regulations 2010, available at www.thelaw.tas.gov.au

Common name	Species
Common Wombat	<i>Vombatus ursinus ursinus</i>
Eastern Quoll	<i>Dasyurus viverrinus</i>
Echidna	<i>Tachyglossus aculeatus</i>
Platypus	<i>Ornithorhynchus anatinus</i>
Spotted-tailed quoll	<i>Dasyurus maculatus maculatus</i>
Tasmanian devil	<i>Sarcophilus harrisii</i>