

## Conservation Significant Flora and Vegetation

### Threatened and priority flora

Flora species considered rare or under threat warrant special protection under Commonwealth and/or State legislation. At the Commonwealth level, flora species can be listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Flora species considered 'threatened' pursuant to Schedule 1 of the EPBC Act are assigned categories according to their conservation status, as outlined in **Table 1**.

In Western Australia, plant taxa may be classed as 'threatened' under the *Biodiversity Conservation Act 2016* (BC Act) which is enforced by Department of Biodiversity Conservation and Attractions (DBCA). Threatened flora species are listed under sections 19(1) and 26(2) of the BC Act. It is an offence to 'take' or disturb threatened flora without Ministerial approval. Section 5(1)1 of the Act defines to take as including "... to gather, pluck, cut, pull up, destroy, dig up, remove, harvest or damage flora by any means" or to cause or permit the same to be done. The definition of threatened flora under the BC Act is provided in **Table 1**.

Section 43 of the BC Act requires that an occurrence of a threatened species or threatened ecological community is reported to DBCA where the occurrence has been identified as part of field work completed:

- as part of an assessment under Part IV of the *Environmental Protection Act 1986*; or
- in relation to an application for a clearing permit under the *Environmental Protection Act 1986* section 51E(1)(d).

Penalties apply to individuals and organisations that fail to provide accurate reports of threatened species or communities.

The *Biodiversity Conservation Regulations 2018* (BC Regulations 2018) came into effect on January 1 2019. The BC Regulations include provisions for licencing, charges, penalties and other provisions associated with the BC Act.

Flora species that may be threatened or near threatened but lack sufficient information to be listed under the BC Act may be added to the DBCA's *Priority Flora List* (DBCA 2018b). Priority flora species are considered during State approval processes. Priority flora categories and definitions are listed in **Table 1**.

## Additional Background Information

Table 1: Definitions of conservation significant flora species pursuant to the EPBC Act and BC Act and on DBCA's Priority Flora List (DBCA 2018b)

| Conservation code | Description  |
|-------------------|--|
| EX <sup>†</sup>   | Threatened Flora – Presumed Extinct<br>Taxa which have not been collected, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently, and have been gazetted as such.   |
| T <sup>†</sup>    | Threatened Flora – Extant<br>Taxa which are declared to be likely to become extinct or is rare, or otherwise in need of special protection.  |
| CR <sup>^</sup>   | Threatened Flora – Critically Endangered<br>Taxa which are considered to be facing an extremely high risk of extinction in the wild.   |
| EN <sup>^</sup>   | Threatened Flora – Endangered<br>Taxa which are considered to be facing a very high risk of extinction in the wild.  |
| VU <sup>^</sup>   | Threatened Flora – Vulnerable<br>Taxa which are considered to be facing a high risk of extinction in the wild.   |
| P1 <sup>□</sup>   | Priority One – Poorly Known<br>Taxa which are known from one or a few (generally <5) populations which are under threat, either due to small population size, or being on lands under immediate threat e.g. road verges, urban areas, farmland, active mineral leases etc., or the plants are under threat, e.g. from disease, grazing by feral animals etc. May include taxa with threatened populations on protected lands. Such taxa are under consideration for declaration as 'rare flora', but are in urgent need of further survey. |
| P2 <sup>□</sup>   | Priority Two – Poorly Known<br>Taxa which are known from one or a few (generally <5) populations, at least some of which are not believed to be under immediate threat (i.e. not currently endangered). Such taxa are under consideration for declaration as 'rare flora', but urgently need further survey.   |
| P3 <sup>□</sup>   | Priority Three – Poorly Known<br>Taxa which are known from several populations, and the taxa are not believed to be under immediate threat (i.e. not currently endangered), either due to the number of known populations (generally >5), or known populations being large, and either widespread or protected. Such taxa are under consideration for declaration as 'rare flora' but needs further survey.  |
| P4 <sup>□</sup>   | Priority Four – Rare<br>Taxa which are considered to have been adequately surveyed and which, whilst being rare (in Australia), are not currently threatened by any identifiable factors. These taxa require monitoring every 5-10 years.  |

<sup>^</sup>pursuant to the EPBC Act, <sup>†</sup>pursuant to the BC Act, <sup>□</sup>on DBCA's Priority Flora List

### Threatened and priority ecological communities

'Threatened ecological communities' (TECs) are recognised as ecological communities that are rare or under threat and therefore warrant special protection. Selected TECs are afforded statutory protection at a Commonwealth level under section 181 of the EPBC Act. TECs nominated for listing under the EPBC Act are considered by the Threatened Species Scientific Committee and a final decision is made by the Commonwealth Minister for the Environment. Once listed under the EPBC Act, communities are categorised as either 'critically endangered', 'endangered' or 'vulnerable' as defined in **Table 2**. Any action likely to have a significant impact on a community listed under the EPBC Act requires approval from the Minister for the Environment.

## Additional Background Information

Within Western Australia TECs are determined by the Western Australian Threatened Ecological Communities Scientific Advisory Committee (WATECSAC) and endorsed by the State Minister for the Environment. The WATECSAC is an independent group comprised of representatives from organisations including tertiary institutions, the Western Australian Museum and DBCA. The TECs endorsed by the State Minister are published by DBCA (DBCA 2018a).

TECs are assigned to one of the categories outlined in **Table 2** according to their status (in relation to the level of threat). TECs are afforded direct statutory protection at a State level under the BC Act and BC Regulations. Ecological communities are listed under Section 27(1) and 33 of the BC Act. Their significance is also acknowledged through other state environmental approval processes such as 'environmental impact assessment' pursuant to Part IV of the *Environmental Protection Act 1986* (EP Act) and the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*.

Table 2: Categories of threatened ecological communities (English and Blyth 1997; DEC 2009)

| Conservation code | Description  |
|-------------------|--|
| PD                | Presumably Totally Destroyed<br>An ecological community that has been adequately searched for but for which no representative occurrences have been located.   |
| CE                | Critically Endangered<br>An ecological community that has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future.  |
| E                 | Endangered<br>An ecological community that has been adequately surveyed and is not critically endangered but is facing a very high risk of total destruction in the near future.   |
| V                 | Vulnerable<br>An ecological community that has been adequately surveyed and is not critically endangered or endangered but is facing a high risk of total destruction or significant modification in the medium to long-term future. |

An ecological community that is under consideration for listing as a TEC, but does not yet meet survey criteria or has not been adequately defined may be listed as a 'priority ecological community' (PEC). PECs are categorised as priority category 1, 2 or 3 as described in **Table 3**. Ecological communities that are adequately known and are rare but not threatened, or meet criteria for 'near threatened', or that have been recently removed from the threatened list, are placed in 'priority 4'. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in 'priority 5' (DEC 2013). Listed PECs are published by DBCA (DBCA 2017).

## Additional Background Information

Table 3: Categories of priority ecological communities (DEC 2013)

| Priority code | Description   |
|---------------|---|
| P1            | <p>Priority One: Poorly known ecological communities</p> <p>Ecological communities that are known from very few occurrences with a very restricted distribution (generally <math>\leq 5</math> occurrences or a total area of <math>\leq 100</math>ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.</p>  |
| P2            | <p>Priority Two: Poorly known ecological communities</p> <p>Communities that are known from few occurrences with a restricted distribution (generally <math>\leq 10</math> occurrences or a total area of <math>\leq 200</math>ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.</p>   |
| P3            | <p>Priority Three: Poorly known ecological communities</p> <p>(i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:</p> <p>(ii) communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), or;</p> <p>(iii) communities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc.</p> <p>Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.</p> |
| P4            | <p>Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.</p> <p>(i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.</p> <p>(ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category.</p> <p>(iii) Ecological communities that have been removed from the list of threatened communities during the past five years.</p>  |
| P5            | <p>Priority Five: Conservation Dependent ecological communities</p> <p>Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.</p>   |

## Weeds

A number of legislative and policy documents exist in relation to weed management at state and national levels. The *Biosecurity and Agriculture Management Act 2007* (BAM Act) is the principle legislation guiding weed management in Western Australia and lists declared pest species. At a national level, the Australian government has compiled a list of 32 Weeds of National Significance (WoNS) (DoEE 2018), of which many are also listed under the BAM Act.

### Declared Pests

Part 2.3.23 of the BAM Act requires a person must not; *“a) keep, breed or cultivate the declared pest; b) keep, breed or cultivate an animal, plant or other thing that is infected or infested with the declared pest; c) release into the environment the declared pest, or an animal, plant or other thing that is infected or infested with the declared pest; or d) intentionally infect or infest, or expose to infection or infestation, a plant, animal or other thing with a declared pest”*.

Under the BAM Act, all declared pests are assigned a legal status, as described in **Table 7**. Species assigned to the ‘declared pest, prohibited - s12’ category are placed in one of three control categories, as described in **Table 8**.

The *Biosecurity and Agriculture Management Regulations 2013* specify keeping categories for species assigned to the ‘declared pest - s22(2)’ category, which relate to the purposes of which species can be kept, as well as the entities that can keep them. The categories are described in **Table 9**.

The Western Australian Organism List (WAOL) provides the status of organisms which have been categorised under the BAM Act (DPIRD 2020).

Table 4: Legal status of declared pest species listed under the BAM Act (DPIRD 2020)

| Category                       | Description   |
|--------------------------------|---|
| Declared Pest Prohibited - s12 | May only be imported and kept subject to permits. Permit conditions applicable to some species may only be appropriate or available to research organisations or similarly secure institutions.   |
| Declared Pest s22(2)           | Must satisfy any applicable import requirements when imported, and may be subject to an import permit if they are potential carriers of high-risk organisms. They may also be subject to control and keeping requirements once within Western Australia |

## Additional Background Information

*Table 5: Control categories of declared pest species listed under the BAM Act (DPIRD 2020)*

| Category | Description  |
|----------|--|
| C1       | <p>Exclusion</p> <p>Not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.</p>   |
| C2       | <p>Eradication</p> <p>Present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.</p>   |
| C3       | <p>Management</p> <p>Established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.</p> |

*Table 6: Keeping categories of declared pest species listed under the BAM Act (DPIRD 2020)*

| Category   | Description   |
|------------|---|
| Prohibited | Can only be kept under a permit for public display and education purposes, and/or genuine scientific research, by entities approved by the state authority.                                     |
| Exempt     | No permit or conditions are required for keeping.   |
| Restricted | Organisms which, relative to other species, have a low risk of becoming a problem for the environment, primary industry or public safety and can be kept under a permit by private individuals. |

## References

### General references

Department of Biodiversity Conservation and Attractions (DBCA) 2017, *Priority Ecological Communities for Western Australia Version 27*, Species and Communities Branch, Department of Biodiversity, Conservation and Attractions.

Department of Biodiversity, Conservation and Attractions (DBCA) 2018a, *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment*, Perth.

Department of Biodiversity, Conservation and Attractions (DBCA) 2018b, *Threatened and Priority Flora List 16 January 2018*, Perth.

Department of Environment and Conservation (DEC) 2009, *Definitions, Categories and Criteria for Threatened and Priority Ecological Communities*, Perth.

Department of Conservation (DEC) 2013, *Definitions, Categories and Criteria for Threatened and Priority Ecological Communities*, Perth.

English, V. and Blyth, J. 1997, *Identifying and Conserving Threatened Ecological Communities in the South West Botanical Province*, ANCA National Reserves System Cooperative Program, Project Number N702, Perth.

### Online references

Department of Environment and Energy (DoEE) 2018, Weeds of National Significance, <<http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>>.

Department of Primary Industries and Regional Development (DPIRD) 2020, The Western Australian Organism List (WAOL), <<https://www.agric.wa.gov.au/bam/western-australian-organism-list-waol>>.