

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

POLICY STATEMENT NO. 9

CONSERVATION OF THREATENED FLORA IN THE WILD

MAY 1991

1. OPERATIONAL OBJECTIVE

To conserve threatened flora in the wild in Western Australia and to comply with Section 23F of the Wildlife Conservation Act.

2. DEFINITIONS

The term 'threatened flora' is used to mean any plant taxon which is threatened with extinction and declared under section 23F of the Wildlife Conservation Act as "rare flora" (i.e. "is likely to become extinct or is rare or otherwise in need of special protection").

"Interim Wildlife Management Guidelines" means guidelines approved by the Director of Nature Conservation for the management and protection of threatened or harvested taxa where no full Wildlife Management Program has been prepared.

"Wildlife Management Program" means a publication produced by CALM providing detailed information and guidance for the management and protection of threatened or harvested species or groups of those species. Programs for threatened taxa are sometimes referred to as "Species Recovery Plans".

3. BACKGROUND

The Department of Conservation and Land Management has statutory responsibilities for endangered flora conservation. This is a major concern because:

- i) Western Australia has a flora that is exceptionally rich in localised and rare endemic plant species. Moreover, areas where rare species are concentrated coincide predominantly with the wheatbelt and other areas where there has been extensive clearing or modification of the native flora.
- ii) Section 23F of the Wildlife Conservation Act prohibits the taking (injury or destruction) of declared threatened (rare) flora by any person on any land throughout the State without the consent in writing of the Minister. A breach of this provision may lead to a fine of up to \$10 000. The flora provisions of the Act are binding on the Crown.

Officers of the Department need to know how to identify declared threatened flora, to know where it occurs, and to know how best to manage it. Moreover, the Act prescribes that threatened flora be protected on all categories of land throughout the State. Hence, the legislation requires officers of the Department to advise and otherwise deal with a broad spectrum of land owners and users. Threatened flora conservation is thus an issue of high public profile, and one where the Department's activities are subject to intense public scrutiny.

The Schedule of Declared Rare Flora

The Schedule of Declared Rare (Threatened) Flora is reviewed annually.

Plants (not including hybrids) which are protected flora declared under the Wildlife Conservation Act may be recommended for gazettal as declared rare (threatened) flora if they satisfy the following criteria:

- i) The taxon (species, subspecies, variety) is well-defined, readily identified and represented by a voucher specimen in a State or National Herbarium. It need not necessarily be formally described under conventions in the International Code of Botanical Nomenclature, but such a description is preferred and should be undertaken as soon as possible after listing on the schedule.
- ii) Have been searched for thoroughly in the wild by competent botanists during the past five years in most likely habitats, according to guidelines approved by the Executive Director (see Appendix).
- iii) Searches have established that the plant in the wild is either:
 - a) rare;
 - OR
 - b) in danger of extinction;
 - OR
 - c) deemed to be threatened and in need of special protection.
 - OR
 - d) presumed extinct (i.e. the taxon has not been collected from the wild, or otherwise verified, over the past 50 years despite thorough searching, or of which all known wild populations have been destroyed more recently).

(Plants which occur on land reserved for nature conservation may be considered less in need of special protection than those on land designated for other purposes.)

The status of an threatened plant in cultivation has no bearing on this matter. The legislation refers only to the status of plants in the wild.

Plants may be deleted from the schedule of declared rare (threatened) flora where:

- i) recent botanical survey as defined in (ii) above has shown that the taxon is not rare, in danger of extinction or otherwise in need of special protection;
- ii) the taxon is shown to be a hybrid;
- iii) the taxon is no longer threatened because it has been adequately protected by reservation of land where it occurs, or because its population numbers have increased beyond the danger point.

"Taking" Threatened Flora

In the Wildlife Conservation Act (subsection 6 (1)) the following definition is given:

"to take" in relation to any flora includes to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means;"

Thus, taking declared threatened flora would include not only direct injury or destruction by human hand or machine but such activities as allowing stock to graze on the flora, introducing pathogens that attack it, altering water tables such that the flora is deprived of adequate soil moisture or is inundated, allowing air pollutants to harm foliage etc.

In the case of threatened plants which need fire for regeneration, burning at an appropriate time may not adversely affect the survival of the population. However, burning would injure existing plants and constitutes "taking" under the Act. Therefore, Ministerial approval is required prior to conducting a burn which involves any species of endangered flora.

4. POLICY

The Department will:

- 4.1 Identify, locate and seek to conserve threatened flora.
- 4.2 Undertake research into the taxonomy, population biology, ecology, protection and propagation of threatened flora.
- 4.3 Implement management practices to conserve threatened flora and its habitat.
- 4.4 Publicise the need for conservation of threatened flora, and encourage involvement in conservation from all sectors of the community.
- 4.5 Liaise with other land management and research agencies and private land owners to enhance the study and conservation of threatened flora.
- 4.6 Develop and manage a geographic data base for threatened flora at its headquarters and at regional and district offices.

5. STRATEGIES


To accomplish the Department objective and policies, staff will:

- 5.1 Establish a consultative committee with the Western Australian Herbarium, Kings Park Board, tertiary institutions and other relevant organisations to ensure that research and management of declared threatened flora are co-ordinated.
- 5.2 Develop Wildlife Management Programs and Interim Wildlife Management Guidelines, for threatened plant taxa, and appoint fixed term "recovery teams" for their implementation.

- 5.3 Undertake training in Departmental obligations to conserve and manage threatened flora.
- 5.4 Nominate Threatened Flora Officers (additional to District Wildlife Officers) in each region and district who shall be responsible for identifying, locating, mapping, training staff, overseeing management programs and providing liaison and advice on threatened flora.
- 5.5 Establish and maintain field herbaria, photographic collections, map records and other aids concerning threatened flora at each Ranger station and district and regional office.
- 5.6 Arrange an inspection to establish whether declared threatened flora are present before undertaking any activity on CALM land that involves permanent destruction (i.e. clearing for road-making, building, mining or other purposes) of native flora.
- 5.7 Ensure that no known declared threatened flora is destroyed, damaged, or otherwise injured by Departmental staff or their contractors without first obtaining a ministerial permit so to do.
- 5.8 Ensure that any burning program (for fire protection purposes) will not cause irreparable damage to species of threatened flora known to be susceptible to fire.
- 5.9 Observe other operational guidelines for protection of endangered flora on CALM lands as detailed in Administrative Instruction No. 24 "Protection of Endangered [Threatened] Flora in Departmental Operations".
- 5.10 Monitor known populations of threatened flora.
- 5.11 Maintain a geographic and biological data base on threatened flora.
- 5.12 Develop management programmes for species of threatened flora.
- 5.13 Collect seed and propagate threatened flora in Departmental nurseries. Replant propagated material in the wild under an approved management programmes or approved Interim Wildlife Management Guidelines.
- 5.14 Undertake research on the distribution, taxonomy, genetic systems, population biology, ecology, protection and propagation of threatened flora.
- 5.15 Assist private property owners and other land management agencies in the protection and conservation of threatened flora.
- 5.16 Acquire land through donation, exchange or purchase to protect threatened flora where land and/or funds are available.
- 5.17 Maintain a system for listing and delisting flora on the declared threatened schedule.
- 5.18 Publicise information on threatened flora (without disclosing precise locations) and encourage community involvement in the conservation of threatened flora.
- 5.19 Maintain, through the Wildlife Branch, central records of all correspondence, discoveries of threatened flora populations, basic information on susceptibility

to fire or dependence on fire for regeneration, applications for ministerial permits and other matters to do with declared threatened flora.

- 5.20 Refer enforcement matters regarding the taking of declared threatened flora to the appropriate District Wildlife Officer.



Syd Shea
EXECUTIVE DIRECTOR

May 1991

Distribution: Lists A, B, D, E and L

**GUIDELINES FOR SURVEYS OF PLANTS PROPOSED FOR
ADDITION OR DELETION TO THE SCHEDULE OF DECLARED
THREATENED FLORA**

These guidelines were developed in conjunction with new criteria for additions and deletions to the Schedule of declared flora.

Criterion (ii) for additions states:

The taxon "have been searched for thoroughly in the wild by competent botanists during the past five years in most likely habitats, according to guidelines approved by the Executive Director."

The intensity of survey necessary to understand the conservation status of a plant varies according to a number of factors. Important considerations are:

1. **Geographical range**

A taxon extending over 10 km of terrain will take less time to survey than one that occurs over 100km.

2. **Area of available habitat**

Taxa confined to specific localised habitats (e.g. granite outcrops) will require less time to survey than those more catholic in habitat preference.

3. **Plant Size**

Large conspicuous perennial plants (e.g. eucalypts) can be identified and counted more quickly than small inconspicuous annuals.

4. **Seasonality and identification**

Some plants are identifiable and conspicuous on vegetative features at any time of year. Others only stand out during flowering or fruiting, which may be confined to just a few weeks in the year, and may also be dependent on good seasonal conditions.

5. **Disturbance opportunism**

Some plants only germinate and/or flower following disturbance events such as bushfire or earthworks, and hence can only be surveyed after such events.

Based on these considerations, and the accumulated survey experience of many botanists and other CALM officers who have searched for hundreds of Western Australian plants over the past decade, the following matrix provides guidelines as to the duration of search necessary for plants to be considered for addition or deletion to the schedule of declared threatened flora.

Extremes of plant taxa in terms of ease and seasonality of identification are given.

Recommended period of full time field survey			
Geographical Range	Area of available habitat	*Taxon easily identifiable any time	#Taxon identifiable with difficulty over short flowering period in certain years
<50km	small	0.5-1 month	1-2 months over several years
	large	1-2 months	3-6 months over a decade
>50km	small	3-6 months	6-12 months over a decade
	large	6-12 months	not possible

*e.g. large perennial plants identifiable any time on vegetative characteristics - *Eucalyptus cruscis*, *Banksia tricuspis*.

#e.g. short-lived small annuals with inconspicuous flowers - *Hydrocotyle* spp., annual sedges etc.

Having completed surveys according to the above guidelines, the next phase in considering listing on the schedule is described under Criterion for additions (iii).

"Such recent botanical survey has shown that the taxon in the wild is either rare, or in danger of extinction or in need of special protection".

These four categories of threatened flora are defined below.

Rare

Less than a few thousand adult plants of the taxon exist in the wild.

In danger of extinction

The taxon is in serious risk of disappearing from the wild state within one or two decades if present land use and other causal factors continue to operate.

In need of special protection

The taxon is not presently in danger of extinction but is at risk over a longer period through continued depletion, or largely occurs on sites likely to experience changes in land use which would threaten its survival in the wild.

Presumed extinct

The taxon has not been collected in the wild, or otherwise verified, over the past 50 years (from the date of listing) despite thorough searching, or of which all the known wild populations have been destroyed more recently, and is presumed to be extinct.