

Steve
stopped

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

POLICY STATEMENT NO. 9

CONSERVATION OF ENDANGERED FLORA IN THE WILD

SEPTEMBER 1987

1. BACKGROUND

(N.B. Existing legislation uses the term "rare flora". It is necessary to continue to use this term when quoting the legislation but the term "endangered flora" is to be used generally, as it will replace the other term when the Act is amended.)

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 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 endangered flora, to know where it occurs, and to know how best to manage it. Moreover, the Act prescribes that endangered 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. Endangered flora conservation is thus an issue of high public profile, and one where the Department's activities are subject to intense public scrutiny.

Legislation

Rare flora is defined in subsection 23F(1) of the Wildlife Conservation Act as "flora for the time being declared to be rare flora for the purposes of this section." Further clarification is provided in subsection 23F(2):

"Where the Minister is of opinion that any class or description of protected flora is likely to become extinct or is rare or otherwise in need of special protection, he may, by notice published in the

Government Gazette declare that class or description of flora to be rare flora for the purposes of this section throughout the State."

The Schedule of Declared Rare Flora

The Schedule of Declared Rare (Endangered) 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 (endangered) 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.

(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 endangered 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 (endangered) 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 presumed to be extinct (has not been collected or reliably observed over the past 50 years, or all known wild populations have been destroyed more recently).

or

- iv) the taxon is no longer endangered 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" Endangered 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 endangered 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 endangered 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.

Amended
Jan
88

2. OPERATIONAL OBJECTIVE

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

3. POLICY

The Department will:

- 3.1 Identify, locate and seek to conserve endangered flora.
- 3.2 Undertake research into the taxonomy, population biology, ecology, protection and propagation of endangered flora.

- 3.3 Implement management practices to conserve endangered flora and its habitat.
- 3.4 Publicise the need for conservation of endangered flora, and encourage involvement in conservation from all sectors of the community.
- 3.5 Liaise with other land management and research agencies and private land owners to enhance the study and conservation of endangered flora.
- 3.6 Develop and manage a geographic data base for endangered flora at its headquarters and at regional and district offices.

4. STRATEGIES

To accomplish the Department objective and policies, staff will:

- 4.1 Undertake training in Departmental obligations to conserve and manage endangered flora.
- 4.2 Nominate Endangered 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 endangered flora.
- 4.3 Establish and maintain field herbaria, photographic collections, map records and other aids concerning endangered flora at each Ranger station and district and regional office.
- 4.4 Arrange an inspection to establish whether declared endangered 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.
- 4.5 Ensure that no known declared endangered flora is destroyed, damaged, or otherwise injured by Departmental staff or their contractors without first obtaining a ministerial permit so to do.
- 4.6 Ensure that any burning program (for fire protection purposes) will not cause irreparable damage to species of endangered flora known to be susceptible to fire.
- 4.7 Observe other operational guidelines for protection of endangered flora on CALM lands as detailed in Administrative Instruction No. 24 "Protection of Endangered Flora in Departmental Operations".
- 4.8 Monitor known populations of endangered flora.

- 4.9 Maintain a geographic and biological data base on endangered flora.
- 4.10 Develop management programmes for species of endangered flora.
- 4.11 Collect seed and propagate endangered flora in Departmental nurseries. Replant propagated material in the wild under approved management programmes.
- 4.12 Undertake research on the distribution, taxonomy, genetic systems, population biology, ecology, protection and propagation of endangered flora.
- 4.13 Assist private property owners and other land management agencies in the protection and conservation of endangered flora.
- 4.14 Acquire land through donation, exchange or purchase to protect endangered flora where land and/or funds are available.
- 4.15 Maintain a system for listing and delisting flora on the declared endangered schedule.
- 4.16 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 endangered flora are co-ordinated.
- 4.17 Publicise information on endangered flora (without disclosing precise locations) and encourage community involvement in the conservation of endangered flora.
- 4.18 Maintain, through the Wildlife and Land Administration Branch, central records of all correspondence, discoveries of endangered 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 endangered flora.
- 4.19 Refer enforcement matters regarding the taking of declared endangered flora to the appropriate District Wildlife Officer.



Syd Shea
EXECUTIVE DIRECTOR

Distribution: Lists A, B, C, D, E, F

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

These guidelines were developed in conjunction with new criteria for additions and deletions to the Schedule of declared endangered 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 10km 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 endangered 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 crucis, 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 three categories of endangered 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.