PROPOSED LIST OF PLANTS TO BE GAZETTED AS RARE UNDER THE WILDLIFE CONSERVATION ACT.

To facilitate consideration of plants to be gazetted as rare, I propose that the following working categories be adopted:

1. BELIEVED EXTINCT

Self explanatory

2. VERY RARE

Taxa whose known wild populations contain less than a few hundred reproducing plants.

3. RARE

Taxa whose known wild populations contain less than a few thousand but more than a few hundred reproducing plants.

4. COMMON AND WIDESPREAD BUT IN NEED OF SPECIAL PROTECTION

Taxa whose known wild populations contain more than a few thousand reproducing plants and whose maximum geographical range exceeds 150 km that are in need of special protection (e.g. due to heavy commercial exploitation).

5. VERY RESTRICTED DISTRIBUTION, LOCALLY COMMON.

Taxa whose known wild populations contain more than a few thousand reproducing plants but whose maximum geographical range is less than 50 km.

6. RESTRICTED DISTRIBUTION, LOCALLY COMMON.

Taxa whose known wild populations contain more than a few thousand reproducing plants but whose maximum geographical range is between 50 and 150 km.

#### 7. INDETERMINATE

Taxa whose abundance and distribution are uncertain but for which there is some evidence that they may be classified in one of the above categories when further information is available.

I believe that species should only be listed in categories 1-6 after thorough searches have been made for them. Otherwise, presumably rare or restricted species should be regarded as having indeterminate status.

Applying this criterion, I have been able to compile lists of rare and restricted plants in consultation with staff of the W.A. Herbarium and the W.A.Wildlife Research Centre.

For the purposes of gazetting species as rare it seems prudent, in view of the large number of presumably rare or restricted species known, to consider only those taxa that can be classified as Very Rare, Rare, or Common and Widespread but in Need of Special Protection. Attached for your consideration is a preliminary list of such species. Restricted and Indeterminate species would be those needing survey and monitoring in the future, but for which there is no need to gazette as rare at present. Some 45 species are listed as Very Rare and 56 as Rare while only 1 (Cephalotus follicularis) has been tentatively suggested for the In Need of Special Protection category. Thus, if this list were adopted, 102 species would be gazetted as rare.

If further pruning of the list is desirable, a number of options are open. Firstly, only those 45 species listed as Very Rare could be gazetted. Secondly, only those 7 Very Rare and 10 Rare species that were known to have been commercially exploited in 1977-79 (according to a forthcoming Department of Fisheries and Wildlife Report) could be gazetted.

A third option would be to delete the 6 undescribed species listed, thereby reducing the total number down to 96.

I would point out that the list provided of Very Rare and Rare species is not exhaustive. Any additions or alterations would be welcomed, bearing in mind that systematic searches need to have been undertaken for a taxon to be considered.

Now that professional botanists are being employed to search for presumably rare species, it seems probable that a few hundred species will be reliably classified as Very Rare, Rare, or In Need of Special Protection within a few years.

The decision therefore needs to be made as to whether a "few hundred" gazetted rare species is too many to handle from an administrative viewpoint. If so, the only alternative leading to drastic pruning of the list seems to be to gazette as rare only those Very Rare or Rare species that are commercially exploited.

You. comments on this matter and on the attached list would be w elcomed.

Yours sincerely,

(DR S.D. HOPPER)

February 19, 1980.

#### VERY RARE

Taxa that have been searched for and whose known populations contain less than a few hundred reproducing plants.

\*Known to have been commercially exploited in 1977-79.

Acacia anomala
Acacia aphylla
Adenanthos cunninghamii
\* Adenanthos teges
Adenanthos velutinus
Aponogeton hexatepalus
Caladenia briceana
Caladenia triangularis
Casuarina fibroca
Christella dentata

- \* Darwinia carnea
  Darwinia masoni
  Dodonaea hackettiana
  Drakea jeanensis
  Dryandra comosa
  Dryandra pulchella
  Drynaria concolor
- \* Eremophila denticulata
- \* Eucalyptus burdettiana \* Eucalyptus carnabyi Eucalyptus pendens Franklandia triaristata Grevillea scapigera Hakea aculeata
- \* Kennedia beckxiana
- \* Kennedia macrophylla Lambertia echinata Lambertia orbifolia Lambertia rariflora Lechenaultia pulvinaris Lechenaultio superba Leucopogon obtectus Neogoodenia minutiflora Ptilotus marduguru Ptychosema pusillum Rhizanthella gardneri Roycea pycnophylloides Schizea digitata Thelemitra carnea Thelemitra psammophila Verticordia helichrysantha Verticordia staminosa Verticordia aff. serrata Urocarpus aff. grandiflorus

### RARE

Taxa that have been searched for and whose known wild populations contain less than a few thousand but more than a few hundred reproducing plants.

\*Known to have been commercially exploited in 1977-79.

Acacia argutifolia Acacia depressa Acacia guinetii Acacia simulans Adenanthos detmoldii Adenanthos dobagii Adenanthos ellipticus Adenanthos eyrei Adenanthos ileticos Asplenium marinum \* Banksia goodii Banksia aff. ilicifolia Banksia aff. prostrata
Conostylis "hnatiukiana" ms
Conostylis "inretita" ms Conostylis misera Coopernookia georgei Cycas pruinosa Darwinia collina \* Darwinia macrostegia \* Darwinia meeboldii Darwinia squarrosa Drosera occidentalis Eremophila virens Eucalyptus caesia \* Eucalyptus calcicola \* Eucalyptus coronata \* Eucalyptus desmondensis Eucalyptus johnsoniana \* Eucalyptus steedmanii Gastrolobium glaucum Grevillea baxteri Grevillea cirsiifolia Grevillea drummondii Grevillea dryandroides Grevillea inconspicua Grevillea infundibularis Grevillea involucrata Grevillea prostrata Grevillea ripicola \* Hakea megalosperma \* Hakea neurophylla Hibbertia bracteosa

Lasiopetalum bracteatum

## RARE - cont'd...

Melaleuca baxteri
Nigromnia globosa
Pommaderis bilocularis
Ricinocarpus trichophorus
Schoenus centralis
Spirogardnera rubescens
Stachystemon axillaris
Stylidium expeditionis
Stylidium galioides
Synaphaea pinnata
Villarsia calthifolia

# COMMON AND WIDESPREAD BUT IN NEED OF SPECIAL PROTECTION

? Cephalotus follicularis