

*GUIDELINES FOR THE FORMULATION OF UNIFORM
FLORA LEGISLATION IN ALL STATES*

Prepared by CONCOM Ad hoc Working Group on Endangered Flora.

Edited by R.B. Good⁺ and J.H. Leigh[°]

⁺Former member representing New South Wales National Parks and Wildlife Service, C/- CSIRO Division of Plant Industry.

[°]CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra City, A.C.T. 2601, Australia.

581.
042
AUS
A



581.
042
AUS
A

Guidelines for the
formulation of
uniform flora

GOOD, R B (ed);
LEIGH, J H (ed)

RET6793

NPWS
LIBRARY



Date Borrowed	

Please Print Clearly

BORROWER	Location	Date Borrowed	

Please Print Clearly

*GUIDELINES FOR THE FORMULATION OF UNIFORM
FLORA LEGISLATION IN ALL STATES*

Prepared by CONCOM Ad hoc Working Group on Endangered Flora.

Edited by R.B. Good⁺ and J.H. Leigh[°]

⁺Former member representing New South Wales National Parks and Wildlife Service, C/- CSIRO Division of Plant Industry.

[°]CSIRO, Division of Plant Industry, G.P.O. Box 1600, Canberra City, A.C.T. 2601, Australia.

581. GOOD, R B (ed);
042 Guidelines for the
AUS formulation of
A uniform flora

R95JUN

Department of Environment,
Climate Change & Water NSW
LIBRARY - HURSTVILLE

Shelf no:

ID no: 111987

Present Members of the CONCOM Ad Hoc Working Group on Endangered

Flora

Mrs K. Bailey (SECRETARY)
CONCOM Secretariat,
Department of Home Affairs
and Environment,
P.O. Box 1252,
CANBERRA CITY, A.C.T. 2601.
(062-467435)

Mr. J. Benson,
National Parks and Wildlife Service,
189-193 Kent Street,
SYDNEY, N.S.W. 2000
(02-2376935)

Dr. M. Brown,
National Parks and Wildlife Service,
P.O. Box 210,
SANDY BAY TAS. 7005
(002-302543)

Mr. M. Forbes,
Australian National Parks and Wildlife
Service,
P.O. Box 636,
CANBERRA CITY, A.C.T. 2601.
(062-466542)

Mr. F. Ingwersen,
Conservation and Agriculture Section,
Department of Territories & Local
Government
P.O. Box 158,
CANBERRA CITY, A.C.T. 2601.
(062-462017)

Dr. P.S. Lavarack,
National Parks and Wildlife Service,
PALLAREDA, QLD., 4810.
(077-741411)

Dr. S. Barker,
National Parks and Wildlife
Service,
G.P.O. Box 1782,
ADELAIDE, S.A. 5001.
(08-2167891)

Dr. R. Boden
Director
National Botanic Garden
BLACK MOUNTAIN, A.C.T. 2601
(062-671811)

Mr. D. Cheal,
National Parks Service,
P.O. Box 41,
EAST MELBOURNE, VIC. 3002.
(03-6514445)

Dr. S. Hopper
Department of Fisheries and
Wildlife,
W.A. Wildlife Research Centre,
P.O. Box 51,
WANNEROO, W.A. 6065.
(09-4051555)

Mr P. Latz,
Conservation Commission of the
Northern Territory,
P.O. Box 1046,
ALICE SPRINGS, N.T. 5750.
(089-522344 Ext. 235)

Mr. J.H. Leigh (CHAIRMAN),
CSIRO Division of Plant Industry,
G.P.O. Box 1600,
CANBERRA A.C.T. 2601.
(062-465112)



INTRODUCTION

Australia has a unique and diverse flora and many species with primitive morphological features indicating that the continent has been a centre of evolution and radiation of many angiosperm families, genera and species. Approximately 80 per cent of the native flora is endemic to the continent. Very few associations and species have relatives or close affinities outside Australia. Even the two very large genera, *Eucalyptus* and *Acacia*, which dominate most plant communities and associations, are basically restricted to Australia. *Eucalyptus* has a limited natural occurrence on islands to the north including New Guinea and the Philippines while the *Acacia* species include a phyllodinous group which is confined to the Australian region.

The arid and semi-arid plant communities have some parallels overseas but are very much identified as Australian. These are the *Atriplex* and *Maireana* (saltbush and bluebush) dominated communities.

The rainforest flora is an important element of the native flora which is to be found in other countries. The southern temperate rainforests dominated by Antarctic beech (*Nothofagus*) occur in New Zealand and the northern tropical rainforest in south-east Asia. The rainforest flora is a remnant of the Gondwanaland flora. The autochthonous element of the flora has developed from this origin through considerable evolutionary change under long term geographical isolation.

Geographical isolation within Australia of the eastern and western temperate floras has also produced a very high level of specific endemism particularly in the south-west of Western Australia where Hopper (pers. comm. and 1979) considers 75-80 per cent of species to be local endemics.

This high degree of speciation and endemism has provided one of the most diverse and unique floral landscapes in the world, equalled only by the Cape Province in South Africa. The brilliance of the Western

Australian wildflowers has become almost universally known throughout the world and from it has developed a major wildflower industry.

Burgman and Hopper (1982)⁺ indicate that the exploitation of native plants in Western Australia for the cut flower trade, seed and nurseries was worth \$1.5 million, \$0.7 m and at least \$3.0 m respectively at the wholesale level in the 1980/81 financial year. A total of 588 species were exploited by the industry, 288 for cut flowers, 308 for seed stock and 166 for nursery cuttings and stock. *Boronia megastigma* was the most heavily exploited species while the genera *Verticordia*, *Stirlingia*, *Agonis*, *Banksia* and *Dryandra* accounted for 52 per cent of all cut flowers harvested. The genera *Banksia*, *Acacia*, *Kennedia*, *Eucalyptus* and *Helipterum* accounted for 61 per cent of total weight of seed collected.

The actual extent and impact of the exploitation of species in the wild can be gained from the returns of wildflower pickers. Almost 14 million flowering stems, 2613 kg of seed and 6054 kg of *Boronia megastigma* blossoms were harvested in 1980/81.

Hopper (pers. comm.) considers this accounted for only 66 per cent of the trade so the amount of material taken must have been considerably more. It is considered that the trade in Australian wildflowers, particularly in the export market, is increasing at a rate of 20-25 per cent a year. Thus real concern for some plant species in their wild state is felt by the CONCOM Working Group on Endangered Flora.

While the bulk of the exploitation of native plants for the cut flower trade is centred in the south-west province of W.A., other states have small wildflower industries based on the exploitation of wild populations. Fortunately to date the trade in all states has not led to the extinction of any species but this can be envisaged if uncontrolled expansion of the industry continues. In W.A. only 5 rare and endangered species are

included in the trade even though the south-west province, biogeographical regions 1-6 (Figure 1) have the greatest number of rare or threatened species (853)* for any part of Australia. The highest number of rare or threatened species in a single region occurs in north Queensland (region 33) where 236 have been recorded. The greatest number of exploited rare and threatened species are from this region with 27 species being taken from wild populations. Other Queensland regions with an appreciable number of exploited species are region 39 (9 species), region 47 (6 species) and the adjoining region in north-eastern New South Wales (region 56) with 7 species.

The rare species in the wildflower trade are mainly those of horticultural appeal or those with unique morphological features. Fifteen of these species are orchids, 11 are ferns, 4 insectivorous plants and 3 cycads. The international trade of some of these families (Cycadaceae and Orchidaceae) is controlled under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Those not currently listed on the appendices of CITES are being closely monitored.

International
Control

CITES provides a means for control and monitoring of some species in the export trade, but it only covers exported species. There remains a real need for effective States legislation to ensure the protection and conservation of wild populations of native plants as the greatest continuing threat is the destruction of native plant communities for agriculture,

⁺Burgman, M.A. and Hopper, S.D. (1982). *The Western Australian Wildflower Industry 1980-81*. Department of Fisheries and Wildlife Western Australia Report No 53, Perth pp. 217.

* Leigh, J., Briggs, J. and Hartley, W. (1981). *Rare or Threatened Australian Plants*. Australian National Parks and Wildlife Service, Special Publication No. 7, Canberra pp. 178.



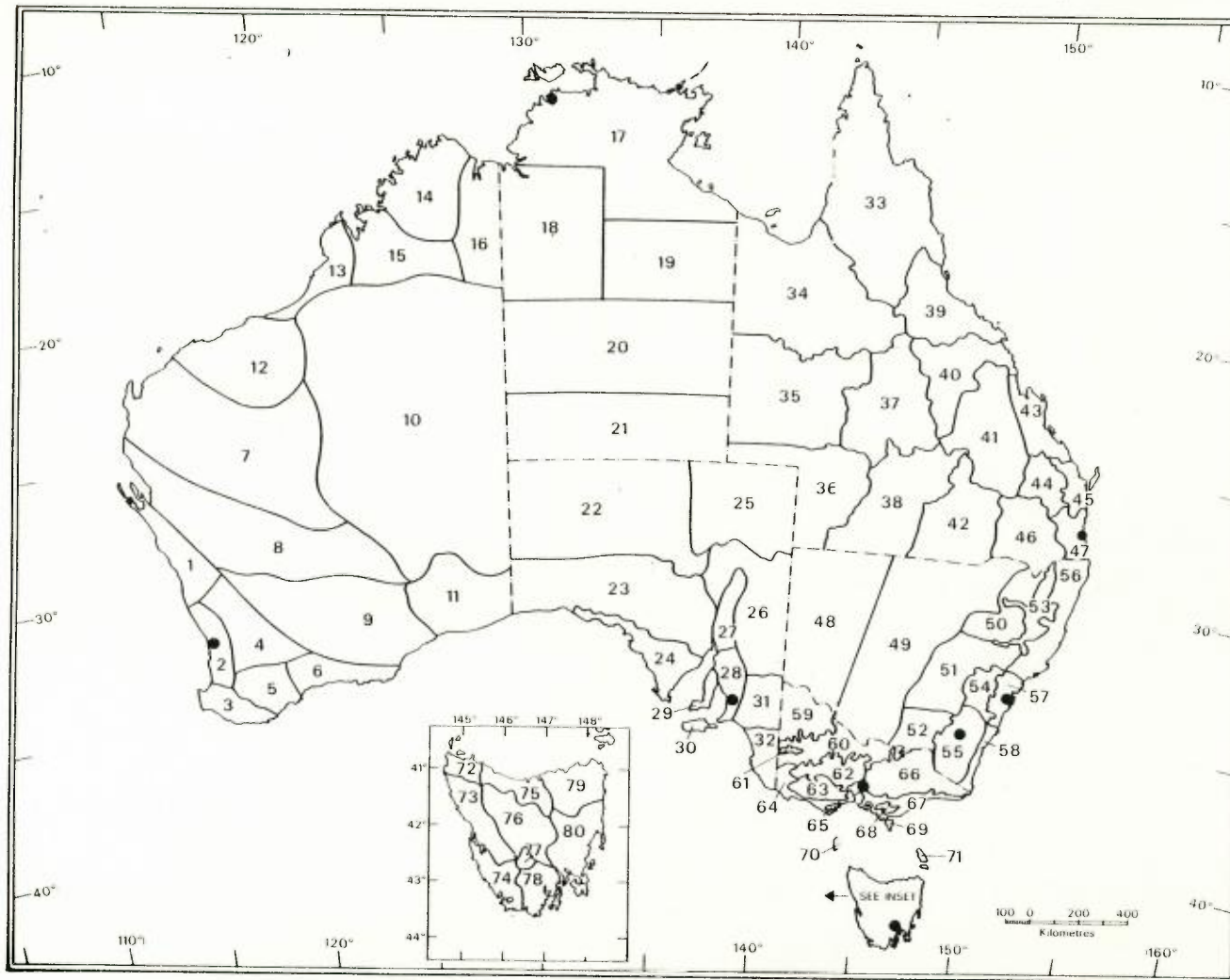


Fig. 1 REFERENCE MAP OF REGIONS

eg Nth Territories Leg -7-

extractive industries, commercial development and urbanisation. Such legislation must provide for the protection of existing plant communities on both private and public lands, control of exploitation of wild populations, adequate control of trade in native species and also must enable the declaration of rare and endangered species to alleviate threats to their existence.

eg Sth Aust Leg

SUMMARY OF EXISTING FLORA LEGISLATION

New South Wales

The protection of native flora is encompassed in the New South Wales National Parks and Wildlife Act, 1974 (Act No. 80). This Act was passed in 1974 to consolidate a number of separate Acts pertinent to wildlife conservation and including flora preservation under one Act. Prior to the 1974 Act native flora had been covered by the Wild Flowers and Native Plants Protection Act, 1927-1965.

The National Parks and Wildlife Act provides for the listing of protected plants under Schedule 13 of the Act. Plant species may be added or removed from the Schedule by gazettal of any amendment.

Under the regulations of the Act, a tagging system has been operative for a number of species on the list. A major review of the tagging system and the protected plant list has recently been undertaken and species are now listed in categories, viz., endangered species, species requiring tags for sale, species requiring tags for sale as cut flowers, species for propagation, species for general sale and native orchids, as well as species from other States (species listed at the request of other States and where the continued trade in the species in New South Wales may enhance the level of exploitation in the wild).

The New South Wales Forestry Commission may also issue licences for the removal of protected plants from State forests where these plants would otherwise be destroyed by forestry operations.

South Australia

The South Australian flora legislation contained in the *National Parks and Wildlife Act* promulgated in 1972 incorporated provisions of the *Native Plants Protection Act, 1939*. It is now well out-of-date and revision has been foreshadowed for some time. Preliminary amendments have been drafted. The proposals contained in this draft are currently being re-examined.

The South Australian Heritage Act, 1978 makes provision for the protection in perpetuity of vegetation in private land through the issue of Heritage Agreements. Incentives in the form of financial assistance for fencing and payment of Council rates are provided. The Heritage Agreement is noted on the Title Deeds.

Regulations introduced in 1983 under the Planning Act, 1982 make it mandatory for farmers wishing to remove vegetation for farming development, firewood or brush fencing to submit a Development Application. The objective of these regulations is to apply some control on clearing in this State which has very little natural vegetation left in its agricultural areas.

Victoria

The preservation and conservation of the Victorian flora is based on the *Wild Flowers and Native Plants Protection Act 1958*, and subsequent amendment in 1978, (P. Cheal, pers. comm.) administered by the Forests Commission. A series of Regulations and a Schedule of Protected Species has been published. Native plants are not protected on un-reserved crown land unless they have been listed on the Schedule of Protected Species. A permit is required to collect protected species from crown land. To acquire this permit prior application must be made to a

delegated officer (under the Act), and this is usually the relevant District Forest Officer. The application must state the species, location, quantity and intended use of the protected flora to be collected. The Forest Officer only issues permits for his own forest district.

For the tree-ferns (i.e., *Cyathea australis*, *Cyathea cunninghamii*, *Cyathea leichardtiana*, *Cyathea marcescens*, *Dicksonia antarctica* and *Todea barbara*) special regulations have been published, which protects them on all private and public land. It is illegal to trade in specimens of these species for later sale unless a permit is first acquired and all the specimens bear a tag issued by the Forest Commission. To acquire these tags application is made to the District Forest Officer stating the location and quantity of tree-fern intended to be collected and traded. The Forest Officer then issues the required (or maximum desirable, whichever is less) number of tags. Tree-ferns may be collected from private land without a permit and without requiring tags provided permission of the landholder has been first obtained and the tree-ferns are not intended for sale. It is legal to sell untagged tree-ferns if they were taken from private land by the owner and given to a seller for retail sale and not collected by the seller, from the wild. It is legal to sell untagged tree-ferns imported into the state from elsewhere. However, in all cases, the seller may be required to prove that the untagged tree-ferns were not collected from the wild in Victoria. There is no provision to protect plants not indigenous to Victoria. }

Statistics are kept only on the number of tags issued and the number of permits issued. There are no statistics kept on the particular species in demand or the extent of trade in them. Prosecutions for non-compliance with the Act or its Regulations are very rare.

Northern Territory

Native flora in the Northern Territory is only partly protected by existing law. Vegetation is protected on parks and reserves declared under the *Territory Parks and Wildlife Conservation Act*, although there is a need for more specific protection regulations. On other lands, various Acts provide some protection. For example, the *Criminal Law Consolidation Act* (Sec. 99) provides protection for plants in certain areas, including parks, plantations, orchards or private gardens. The *Summary Offences Act* provides broader cover making it an offence to 'steal' virtually any plant without a landholder's permission. Even with a landholder's permission, other legislation gives some protection, for example, the *Forestry Act* - when the plant can be said to produce timber or some other forest product.

However, there is a requirement for more specific flora legislation. It is proposed that the *Territory Parks and Wildlife Conservation Act 1977-1984* will be amended to include plants, before the end of 1984.

Once this is done the Northern Territory will then be in a position to protect Australian indigenous plants. If an Australia-wide list of protected plants was agreed upon, this would then be incorporated into the regulations.

Queensland

In Queensland trade in rare and endangered flora is controlled by the *Native Plants Protection Act 1930*. The Regulations to this Act include a list of species in which it is illegal to trade. Removal of these species from crown land without a permit is also an offence. This Act is now outdated and in need of redrafting as it is proving ineffective in controlling trade in some orchids and ferns. A redrafted Act was placed

before Parliament in 1981, but due to certain problems with some aspects of the proposed Act, it was not proceeded with and it appears likely that Queensland will continue to operate under the 1930 Act for the foreseeable future. ☆
??

Western Australia

New legislation relating to flora conservation came into effect in Western Australia in 1980 with the proclamation of the *Wildlife Conservation Act Amendment Acts* 1976 and 1979. This legislation transferred responsibilities for flora conservation from the Forests Department to the Department of Fisheries and Wildlife. It introduced a new licencing system for commercial harvesting of wildflowers and has special provisions for rare flora that require officers of the Crown and private landowners to seek the Minister's written permission prior to damaging or destroying plants gazetted as rare flora. A mechanism is provided for payment of compensation to private landowners with rare flora on their property.

All ferns and fern allies, all gymnosperms and all flowering plants are now protected flora throughout Western Australia. Two schedules of rare flora have been gazetted, one listing 132 taxa all of which are confined to the southern half of Western Australia. Surveys of these taxa are being undertaken and landowners are routinely notified about the presence of rare flora on their property. They are also provided with a description and illustrations of the taxa involved, and are shown the plants by an officer of the Department of Fisheries and Wildlife.

Tasmania

The National Parks and Wildlife Act 1970 provides that "The Wildlife Regulations (1971) may prescribe the plants that are to be

protected plants for the purposes of this Act", and that "the Wildlife Regulations may prohibit or control the taking, having in possession, buying or selling of, or other dealings in, or the exportation of, or the disposal of, any protected plant". No plants are currently protected under the Wildlife Regulations.

No plant species occurring in State Reserves, Game Reserves or Conservation Areas may be taken without authority, and a similar situation applies to Crown Lands and State Forest. There are no provisions for the protection of plants on private land, other than those included in Local Government by-laws or the *Police Offences Act*.

Australian Capital Territory

The Nature Conservation Ordinance (1980) and Regulations under the *Nature Conservation Ordinance (1979)* provide legislative powers in the field of flora protection. Activities controlled by the Regulations include damaging, picking, trading in and import and export of native plants.

An appended list of "Restricted Plant Wildlife" contains species that require specific conservation control.

Plant protection and the control of the taking and selling of native plants is achieved through a permit and licencing system. Permits provide for the picking of plant wildlife growing on unleased land (Crown land in equivalent state terms) and the picking of a plant that is restricted plant wildlife (protected species in equivalent state terms)

Licences provide for commercial activities in general, involving cultivation for sale or trade, import or export across the Australian Capital

Territory borders for commercial purposes and the import or export of "restricted" plants.

PLANT PROTECTION LEGISLATION GUIDELINES

It has been recognized by the CONCOM Working Group on Endangered Flora that current legislation covering native plants is either obsolete or largely ineffective (with the exception of Western Australia's recently proclaimed *Wildlife Conservation Act*). In all cases any potentially effective control is limited by the logistic problems of implementation. Similarly most States⁺ current legislation provides little incentive for native flora conservation on lands other than that of public tenure, reserved for conservation.

Existing flora Acts make it almost obligatory upon the flora authority to issue a licence if demanded by any person who can meet the conditions of the Act. Issue is therefore not based on conservation, control or monitoring and little protection of native flora is provided.

The objective of this paper is:

"To provide guidelines to all States in order that uniform and complementary legislation is drawn up or current legislation is amended, to achieve uniformity, thus ensuring effective native flora conservation within and between States."

(Endangered Flora Working Group 1980).

The legislation should generally provide for:

- (1) the maintenance and conservation of all native plants taxa^{*};

+ includes all States and Territories

* Taxa - A group of plants sharing a relationship (i.e. a taxonomic group) which may be assigned to one of the categories of a classification (e.g. genus, species, subspecies, variety).

- (2) control and monitoring of the exploitation of native species, to ensure their preservation in the wild state;
- (3) the minimum loss of genetic diversity of all regional floras;
- (4) the maintenance of native flora in the Australian landscapes;
- (5) authority and responsibility for the survival of rare and threatened taxa and communities;
- (6) incentives for native plant conservation by private landowners;
- (7) authority for the implementation of obligatory plant preservation where incentives and voluntary conservation endeavours are ineffective or inadequate;
- (8) a mechanism for public awareness and appreciation of the Australian flora in its natural state.



OBJECTIVES OF UNIFORM FLORA LEGISLATION

Existing flora Acts in all States, except the recent Western Australian legislation were formulated with the objective of providing some control over the taking of live plants, cut flowers or seed material from the wild, of species which had horticultural value at the time of enactment of legislation. These species were placed on a "scheduled list of protected plants" but in most cases the species were common and had a wide distribution. Only a very few species such as *Boronia megastigma*, which is still used in the perfume industry, were listed as a response to the commercial threat to the species existence. Over the last 10 years there has been an increasing appreciation of our native flora as a part of our unique heritage. This appreciation has lead to an increasing use of native plants in landscape gardening which has placed pressure on the wild populations of some species. The increasing demand of native plants is being met to an extent by commercial propagation but while supply is inadequate from nursery supplies exploitation of wild populations will continue. The interest in unique plants such as the insectivorous plants and the rare and threatened species, has initiated a specialist native plant industry. Unfortunately many of the rare and threatened species are extremely difficult to propagate and further pressure is currently being placed upon the species further threatening their existence. Many rare plant species occur in discrete and small populations hence the threats to the populations are many and varied. Cognisance must be taken of these threats in formulating uniform State legislation.

Future flora protection legislation must also be based on the conservation status of plant communities, with particular emphasis placed on rare and threatened species. To meet the requirements for the conservation and protection of rare and endangered species, the objectives of uniform flora legislation must be to ensure:-

(1) The conservation of representatives of the whole range of native plant communities and taxa, throughout their full geographical range. Few plant communities are currently conserved and protected within conservation reserves throughout their full range of occurrence due to individual State priorities for land reservation for conservation purposes and by past parochial State attitudes to the need for a continental approach to flora conservation.

Inter-State co-operation and uniform and complementary flora legislation is essential if effective conservation of adequate samples of plant communities are to be reserved in conservation areas.

(2) As no current legislation, with the exception of the recently proclaimed Act in Western Australia, makes reference to the conservation protection of rare and threatened species or control of threats to their continued existence, the protection of rare and threatened plants and their habitats must be a high priority objective of all new flora legislation. Each State must also recognise and list rare and threatened plants of all other States ensuring full control of interstate trade and preventing exploitation of wild populations.

This objective should incorporate also the protection and conservation of restricted endemic taxa and relict taxa.

To meet the objective for rare plant conservation and protection all legislation relating to such taxa should bind both the crown and private landowners.

(3) The effective conservation and preservation of viable populations of some taxa will require specific management techniques. An objective of uniform legislation must be the conservation of nominated taxa by the control and enforcement of specific management where such is deemed necessary.

(4) The wildflower industry is a large and expanding industry contributing to the home and export markets. The industry is also essential to the greater appreciation by the general public of the Australian native flora and as such should be encouraged. To ensure that the increasing trade in native plants is not detrimental to the survival of wild populations uniform legislation must have as an objective the control and regulation of exploitation, and where necessary to the extent of prohibition on the taking of native plants, to ensure utilization of the wild population at or below sustained yield level these levels must be determined by the respective floral authorities.

(5) As the wild populations of rare plants will seldom be able to be exploited on a sustained yield basis uniform legislation must encourage and cover incentive programmes for the propagation and cultivation of rare flora to remove the need for exploitation wild of populations.

(6) The above objectives are readily achieved through uniform legislation for Crown land but effective conservation, particularly of the rare and threatened flora requires active participation by private landholders. To ensure interest and participation in native plant conservation of private lands legislation should enable the provision of incentives to private landholders who preserve or withdraw lands from agricultural production for the conservation of native species. The incentives should be made by direct assistance or by mutually agreed alternatives such as rate reductions and supply of fencing.

(7) Protection of specific components of the natural vegetation contributing to an identifiable Australian or regional landscape must be ensured.

(8) The effective implementation of uniform flora legislation is dependent on acceptance by the public. This acceptance will be attained if an objective of the legislation is to provide for public awareness through

continuing education programmes of the value of Australian native plants, as part of the national heritage.

(9) Uniform legislation must ensure a means to recognise and undertake research pertinent and necessary to meet the above objectives. The legislation should also acknowledge the need for and the administrative avenues for the support and sponsorship of such research.

*RECOGNITION OF NATURAL AREAS FOR THE BIOLOGICAL
CONSERVATION OF NATIVE FLORA*

Few conservation reserves have been established for the protection and conservation of rare and threatened species although many have been proclaimed for plant communities such as rainforest. A number of rare and threatened species are adequately conserved as a consequence of the establishment of parks and reserves on a community basis but the proclamation of a national park is generally a protracted process often taking several years.

While the procedures may be protracted when considering reservation on Crown land, a standard approach is usually available. Difficulties arise where private lands are to reserved or leased for conservation.

Future uniform flora legislation must provide a mechanism for the immediate protection, particularly on private land of areas of native vegetation containing rare and plants threatened or identified as having botanical importance. Such a mechanism would be the provision of an immediate short term lease or reservation over areas where special interest taxa occur which would suspend any development threatening the native vegetation until such times as the significance of the taxa or status of the rare plants is assessed. The interim protection mechanism would be operated by the flora authority and should have precedence over all other mechanisms providing adequate control over the use of the land.

The restrictions on land use of a designated area would be operative until the area was fully surveyed by the flora authority. The restrictions on use would be such that:

(1) the floral significance of the land is protected;

(2) there is minimum interference with existing use on the designated land or adjoining land subject to (1) above;

(3) The duration of the lease or reservation to be limited and defined, whereafter the lease or reservation if not renewed reverts to the previous land tenure, unless acquisition is proceeded with, a heritage type agreement is reached, or an incentive programme is agreed upon.

The initial lease or reservation period should be of a duration sufficient only for adequate assessment of the conservation/scientific value of the designated area.

Where lands in public ownership are designated for the conservation of rare and threatened plants or for vegetation of botanical significance the flora legislation should ensure:-

(1) subject to authoritative review, flora conservation remains the prime objective of acquired lands;

(2) the conditions pertinent to flora conservation of land held in perpetuity are maintained in perpetuity under a management plan;

(3) formal plans of management are prepared by the authority in which the land is vested, if the area is not acquired by the flora authority, of the State.

For lands in private ownership the flora legislation should provide for the options of:

(1) the acquisition of rights in perpetuity or for as long as designated by the flora authority; and

(2) provision of incentives to ensure continued preservation of native flora on private lands, by co-operative agreement.

Any agreement between the crown and landowner should designate the form of incentive programme and the obligations of both parties to long-term co-operative management. The agreement on management must be made in perpetuity and is passed from owner to owner as a covenant on the land title.

Assistance where possible through an incentives programme encourages active involvement by landowners in management of the designated lands and should therefore be considered seriously. On the other hand the Western Australian amendments (1979) to the *Wildlife Conservation Act* provide for both the declaration of rare plants and the payment of compensation for loss of enjoyment etc. of the land upon which they occur.

Heritage Agreements

A "Heritage Agreement" programme has been in operation in South Australia since 1980. Heritage agreements are made between private landowners and the State for the protection and effective management of remnant areas of native vegetation. The "Vegetation Retention Scheme" is a co-operative scheme which places obligations upon both parties to the agreement, so ensuring conservation of the designated area of vegetation.

Areas of vegetation nominated for the scheme are assessed by the flora authority (National Parks and Wildlife Service) with emphasis on the conservation status of any rare and threatened plants. Other values necessary or associated with the maintenance of the remnant vegetation are also surveyed before a heritage agreement is entered into by the State. The South Australian authorities have used the heritage agreement programme for the conservation and preservation of small island-like areas of vegetation. The prohibitive cost of acquisition of such lands and the

consequent commitment to management has proven useful to a limited degree for conservation of native vegetation in private ownership in South Australia.

The programme supplements the conservation of native flora in major national parks and reserves and is not an alternative to the establishment of large conservation areas on both public and private lands.

The CONCOM Working Group on Endangered Flora recommends a Heritage Agreement programme similar to that operative in South Australia should be considered for comparable circumstances in other states.

CONTROL OF THE EXPLOITATION OF FLORA

Current flora Acts provide some mechanism for the listing of native species considered by the flora authority of each State, as requiring some degree of protection against exploitation. To date these lists have contained species predominantly of horticulture value but there is a need to revise all lists and draw up legislation which provides for the listing of species on a more scientific basis and irrespective of whether the species is indigenous to the State.

Current Acts fail to provide for effective control of the exploitation of native plants as they are inappropriate for current circumstances, obsolete or pertinent only to the flora of the State of origin and are not complementary or uniform. Future legislation must provide for the listing of species from other States as the exploitation of the species in an individual State is often a response to a trade demand in another State and not to demand within the State of origin. Similarly the export of native flora is often through a State other than that from which the flora was taken.

A special category of scheduled plants should be provided in all Acts to cover rare and threatened species and other species exploited in the wild.

The provision of licences for the taking of native flora is the only satisfactory method to ensure some control over the levels of exploitation from wild populations on Crown land and for the sale of listed flora from private lands.

Implementation of a licensing system should not be considered as a strict means of control but as one providing for the appreciation of native flora and a means of monitoring levels of exploitation such that sustained yields can be maintained.

For the taking of scheduled flora on private lands, the procurement of a licence should be the responsibility of the owner/occupier of the land and not as with some current Acts, a requirement of the picker who may not be the owner/ occupier. A requirement for the owner/occupier to obtain the licence ensures to some degree that the owner appreciates what species are to be taken from his land. Where rare plants are to be taken the owner hopefully would prefer to enter into a heritage agreement or lease with the flora authority thus ensuring preservation of the species.

A tagging system is generally a requirement of a licensing system but such a system can only be effective in operation for a very limited number of species, where easy identification of the species is possible; or where the species have a specific requirement for control e.g. tree ferns, epiphytic orchids. Two lists of species from various States threatened by trade have been compiled by the Working Group on Endangered Flora as a basis for the compilation of scheduled lists in all States (see Appendix I). Additional rare and threatened species and species requiring special protection in each State would be added to the basic list, by the individual State flora authorities.

Recognition by all States of an Australia wide list of "Scheduled Plants" should provide some control of exploitation and interstate trade and alleviate problems imposed and encountered by Section 92 of the Constitution.

The control of exploitation of native flora through legislation should be achieved by provision for the designation of categories of scheduled plants; restrictions on the trade in scheduled plants and control on the harvesting of wild populations.

Designation of native flora

The legislation should provide for:-

(1) the declaration of part of a State's flora and any other State's flora as protected flora. This provision should enable through declaration in the Government Gazette, any class or description of flora to be protected throughout a State or any part as specified in the gazettal notice.

(2) the declaration of any Australian native species, not indigenous to a State(s) to be flora of the State for the purposes of the Act. This provision is not a part of any existing flora legislation but is essential in all State Acts if control and monitoring of protected native plants throughout Australia is to be effective.

(3) the declaration of any native plant species as rare or threatened, throughout a State, for which licences for the taking of the declared species will not be issued. The taking of rare and threatened species should only be for very specific purposes and on the consent of the Minister. This section should apply to both private and public lands and be binding on all parties.

Restrictions on Trade

The legislation should provide for:-

(1) the control of the taking of native flora from all Crown land with control ranging from monitoring of exploitation and population numbers, to the total prohibition on removal of whole plants or part thereof from wild populations;

(2) the granting of licences to take native flora from areas of Crown land where native flora would otherwise be destroyed; particularly tree ferns, ground ferns, staghorns, elkhorns, bird's nest ferns and epiphytic orchids by operations of the controlling authority;

This provision would not apply to rare or threatened species for which the consent of the Minister to take or destroy would be required by all parties including the authority holding tenure over the land;

(3) the granting of licences to take for sale declared protected flora from wild populations on private lands. No licences would be granted under this provision for rare or threatened species. The form of licence(s) to be issued would be dependent on the commercial operation. A landowner or occupier who grows, propagates, cultivates, or picks protected plants on his own land for sale may be issued with a "commercial growers licence" or similar. For persons picking protected plants on land not held or occupied by the picker may be issued with a "commercial pickers licence" or similar;

(4) for the monitoring of protected plant sales by a licence tagging system or some other means of identification of the species and number of specimens taken;

(5) for the payment of royalties to the flora authority for protected flora taken under licence from Crown land;

The royalties imposed being commensurate with the cost of administering the monitoring programme but not such that illegal exploitation is encouraged.

(6) for the granting of scientific licences for the taking of protected flora from Crown land for non-commercial prescribed purposes, being generally only for scientific research.

This provision should not apply to rare and threatened protected flora for which ministerial consent would be required;

(7) for the control of interstate trade in protected plants by the inclusion of an Australia - wide list of protected species in all individual State flora Acts; and a mechanism for monitoring sales. Thirty three rare or threatened species currently are threatened by exploitation, these requiring specific listing in all Acts (Appendix 1);

(8) for the control of export of protected plants of another State origin which are exported through other States. The Act(s) should provide mandatory authorisation by the flora authority of the State of origin, as well as the State of export for all protected flora to be exported;

(9) for a mechanism for the monitoring of the type and amounts of all species of native plants presented for export, even when taken under other sections of an Act. Monitoring of all exports of native flora is essential to enable predictions on the threat to wild populations of continuing exploitation. Changes and trends in demand for different species should be possible through effective monitoring;

(10) for a mechanism for the registration of nurseries, propagating, growing or trading native flora;

(11) for a mechanism for registration of businesses trading rare or threatened species for which consent has been given by the Minister.

(12) for regular renewal of licences such that the monitoring of sales of protected species is possible through the furnishing of trade summaries;

(13) for exemption from some conditions of the permit system for growers of material produced from propagated stock from another source;

(14) for withdrawal of a licence for breaches of conditions and prescribed penalties for such breaches;

Control on Harvesting of Wild Populations

It is recognised that several native species in demand as landscaping and horticultural plants cannot be commercially propagated and supply will always be from the wild populations. This should be acceptable to flora authorities while supplies in the wild are adequate, but a control and monitoring system to enable continuous assessment is essential.

A mechanism must be established which enables non-propagable species to be taken from Crown lands particularly where other forms of land management would otherwise lead to destruction of the species, e.g. tree ferns, staghorns and elkhorns in commercial forestry lands. Where demand is met from such sources the legislation should limit the taking of the species from other non-commercial public lands. The "Flora Act" of the flora authority of the State should be the operative Act and bind the Crown. At the present time in most States several Acts are operative (Flora and Forestry Acts) such that licences have to be granted under two or more Acts. A more functional and operative system would be possible if the Flora Act of the State controlled the taking of such species.

On private lands the licensing system should provide for the taking of non-propagable species.

The legislation to provide for:-

(1) the acknowledgement that some species can not be economically propagated and that supplies of such species can only meet demand if taken from wild populations. The Acts should enable the taking of such species but under strict control. Detailed and regular harvesting returns should be a requirement of any licence issued under the Act, to enable effective monitoring;

(2) the use of designated lands under lease for commercial harvesting of species for which supplies are from the wild populations.

These provisions should only apply to 'perennial' species where a sustained yield can be maintained. Rare and threatened species are to be excluded from the provisions unless a ministerial consent for harvesting is given.

Other non-propagable species such as tree ferns should only be harvested under the control of exploitation provisions.

(3) harvesting in accordance with practices and levels prescribed by the flora authority;

(4) options for lease renewals of lands designated for harvesting;

(5) penalties for lease condition breaches;

(6) exemption from provisions of the permit system after establishment of acceptable practices.

APPENDICES

- I SPECIES REQUIRING AUSTRALIAN WIDE LISTING
- II GUIDES TO LICENCE PROCEDURES



APPENDIX I

SPECIES REQUIRING AUSTRALIA-WIDE LISTING

(A) Threatened in the wild by interstate trade

(B) Requiring co-operative control and monitoring.

A. *Species Commonly Traded*

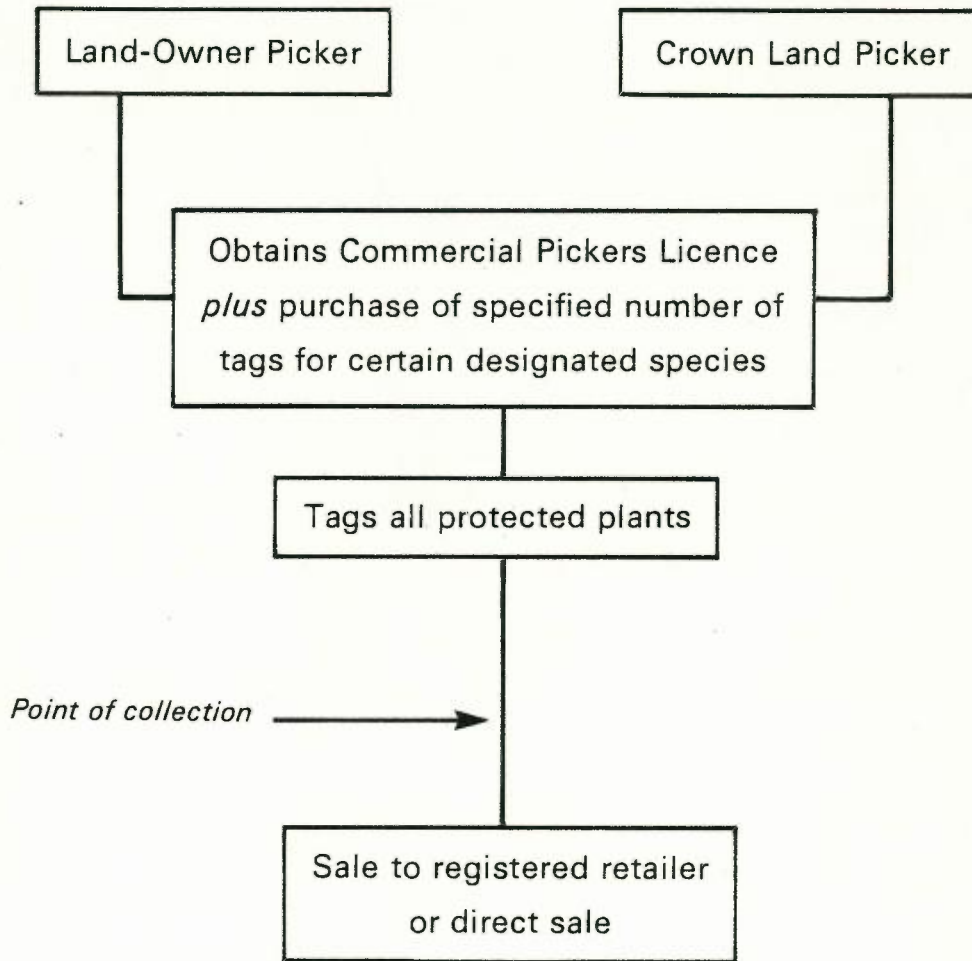
Banksia laricina	Qld.
Dendrobium bigibbum	Qld.
Dendrobium falcorostrum	Qld, N.S.W.
Dendrobium x superbiens	Qld.
Dicksonia antarctica	Qld, N.S.W., Vic, Tas.
Lycopodium phlegmaria	Qld.
L. phlegmarioides	Qld.
Macropidia fuliginosa	W.A.
Melaleuca uncinata	SA, Vic, W.A., N.S.W., Qld.
Phaius tancarvilleae	Qld, N.S.W.
Santalum spicatum	W.A, N.S.W., Qld.
Vanda hindsii	Qld.

B. *Rare Plants Threatened by Interstate Collectors*

Acacia anomala	W.A.
Banksia cuneata (nuts and seed)	W.A.
Banksia goodii (nuts and seed)	W.A.
Caladenia triangularis	W.A.
Calochilus richae	Vic.
Darwinia carnea	W.A.
Dicksonia youngiae	Qld., N.S.W.
Drummondita ericoides	W.A.
Eucalyptus bennettiae (nuts and seed)	W.A.
Eucalyptus carnabyi (nuts and seed)	W.A.
Eucalyptus coronata (nuts and seed)	W.A.
Eucalyptus rhodantha (nuts and seed)	W.A.
Hakea aculeata	W.A.
Leucopogon obtectus	W.A.
Lycopodium dalhousianum	Qld.
Phalaenopsis amabilis	Qld.
Rhizanthella gardneri	W.A.
Sarcochilus fitzgeraldii	Qld., N.S.W.
Sarcochilus hartmannii	Qld., N.S.W.
Stylidium coroniforme	W.A.
Thelymitra epipactoides	Vic.

IIa

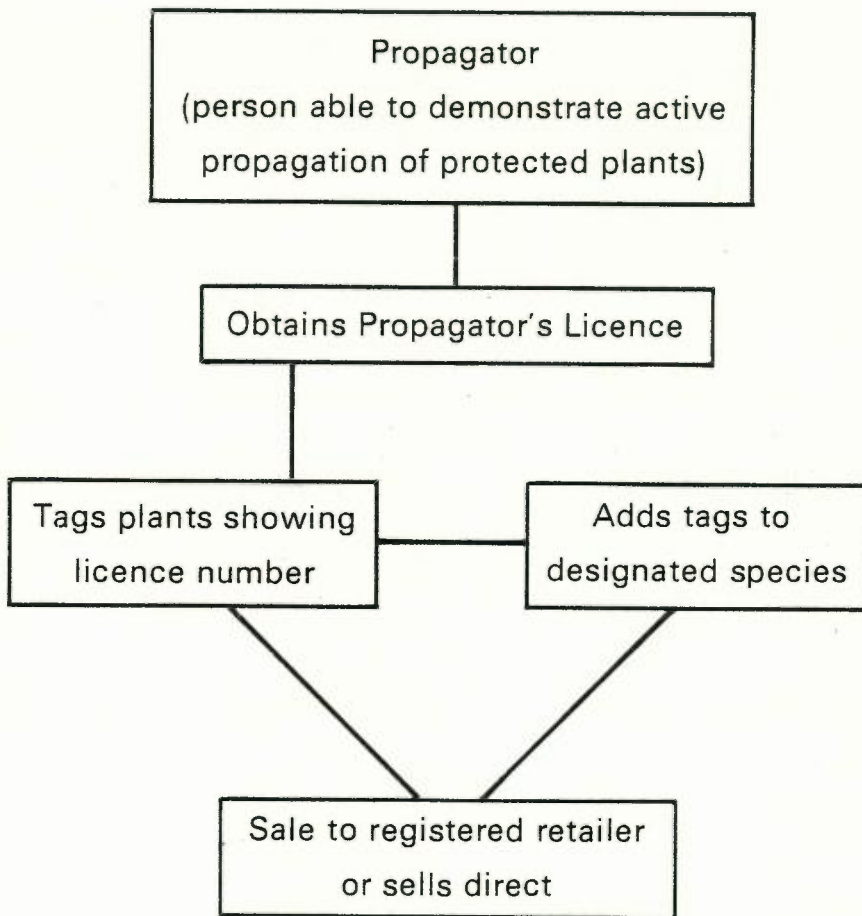
COMMERCIAL PICKERS LICENCE



All plants sold must be tagged

11b

COMMERCIAL PROPAGATOR'S LICENCE



All plants sold must be tagged

National Parks & Wildlife Service



19550