

DEVELOPMENT OF A DATA BASE FOR THE CONSERVATION OF  
W.A. NATIVE PLANTS

Abstract of a workshop delivered at the Western  
Australian Wildlife Research Centre on 24 November 1978

By S.D. Hopper

On proclamation of recent and forthcoming amendments to the Wildlife Conservation Act, major responsibilities for the conservation of Western Australian native plants will be transferred from the Forests Department to the Department of Fisheries and Wildlife. In anticipation of this transferral of responsibilities, the present author was appointed as a research officer with the Department of Fisheries and Wildlife to investigate the conservation status of commercially-exploited, rare or endangered species of native plants. Preliminary investigations have established the following significant points:

- 1) there are ca. 6000 described species of vascular plants in the W.A. flora and an estimated 1000 - 3000 undescribed species;
- 2) a survey of locality information on specimens at the Western Australian Herbarium conducted by Dr. N.G. Marchant and Mr G.J. Keighery indicated that ca. 3000 species (50% of the total described flora) are either rare, have a restricted distribution or have been so poorly collected that their true geographical distribution remains unknown.
- 3) there are ca. 1000 species exploited in the wildflower industry (the cut-flower trade involves less than 100 species, while the nursery and seed trades each involve in excess of 700 species);
- 4) there is a growing speculative literature on threats posed to native plants by sections of the wildflower industry, and by clearance for agriculture, mining, road construction etc. - rigorous documentation of the effects of such activities on the conservation status of species exists for very few species;

cont'd...

2/...

- 5) biogeographical information obtainable from herbarium specimens of even well-collected species provides only a crude guide to actual distributions, and rarely gives an indication of population sizes or occurrence in nature reserves;
- 6) the kind of detailed biogeographical information necessary for the satisfactory assessment of the conservation status of particular species can only be obtained through field surveys; at present, such detailed information exists for very few species.
- 7) the Department of Fisheries and Wildlife is receiving an increasing number of enquiries from other government departments and from the general public on the conservation status of native plants;

There is clearly a need for the development of a biogeographical data base for native plants if the Department of Fisheries and Wildlife is to effectively manage the wildflower industry and the conservation of rare or endangered native plants.

In view of the large number of species involved, and in view of the success of the R.A.O.U. "Atlas of Australian Birds" scheme, the development of a computerized data base of W.A. native plants based on herbarium records and sight observations of competent professional and amateur biologists would seem an appropriate course of action.

This workshop aims to outline the proposed workings of such a biogeographic data base, with particular emphasis on the format of information sheets to be filled in by participants, and to call for general discussion of the project.