4. VEGETATION COMPLEXES OF THE DARLING SYSTEM WESTERN AUSTRALIA

Heddle, E.M., O.W. Loneragan and J.J. Havel

Forests Department, Western Australia

The recent mapping of the vegetation complexes of the Darling System attempts to summarize the current information on the plant communities in the area. The Darling System extends from Moore River in the north to the Blackwood River in the south, and eastwards from the Indian Ocean to the wheatbelt. As such the boundaries of the Darling System are somewhat arbitrary, but in biological terms they approximate the Darling District of the South-Western Botanical Province as recognized by Diels and later developed by Gardner.

Previous workers have stressed the significance of the landforms, soils and climate in determining the distribution of plant communities in this area. The maps displayed delineate a series of vegetation complexes and relate them to the landforms, soils and climate. The vegetation, on the maps, is described in terms of its floristic composition, its structure and its underlying environmental conditions. Therefore the definition of the vegetation complexes enabled the authors to achieve a compromise between the different levels of plant classification. The approach taken has affinities with other land system classifications. The incorporation of the floristic detail improves the understanding of the variation in the distribution of the native plant species in the area. As such their distinctive patterns reflect their varying abilities to cope with the range of environmental conditions.

Several features that are particularly evident from the maps are the importance of landforms and soils as determinants of the vegetation, the marked north-south and east-west trends in both structural and floristic composition of the vegetation associated with the climatic gradients, the individuality of species distribution and the existence of the continuum. These relationships are expressed spatially on the maps and summarized in the accompanying text on display. Such detail improves the understanding of many of the native plant species and plant communities in this section of the south-west of Western Australia.

SYMPOSIUM
ON
THE BIOLOGY OF NATIVE AUSTRALIAN PLANTS

Perth, Western Australia
6-10 August, 1979

ABSTRACTS

Sponsored by
THE DEPARTMENT OF BOTANY,
UNIVERSITY OF WESTERN AUSTRALIA
and
THE WESTERN AUSTRALIAN DEPARTMENT OF
FISHERIES AND WILDLIFE