Advances in plant conservation biology:

Implications for flora management and restoration

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BIOLOGICAL SURVEY AND PRIORITIES FOR FLORA CONSERVATION

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Biological survey has been an integral component of conservation planning for over 30 years in Western Australia, particularly because of the diverse and poorly documented nature of the vascular flora. Surveys are conducted at 3 levels; regional; sub-regional and local, the first normally involving multidisciplinary teams. Regional surveys provide data on flora to allow establishment of a CAR reserve network to protect biodiversity. However, they also add greatly to knowledge of the flora, viz. the Wheatbelt survey provided detail on the distribution of 3160 taxa, found 20 previously unknown taxa, 3 presumed extinct taxa and new populations of 22 rare taxa.

Subregional surveys are normally plant based, for example the Southern Swan Coastal Plain survey (around the capital Perth) documented a series of rare communities (now listed as Threatened), provided detail on the distribution of 2000 taxa, found 15 previously unknown taxa, 3 presumed extinct taxa and new populations of 10 rare taxa.

Local area surveys, such as the Lake Muir Nature Reserves listed nearly 1,000 taxa, removed three declared rare taxa, recorded the largest known population of nationally threatened species and recorded one new taxon.

Systematic survey at any scale of a poorly known flora captures both expected and unexpected records. They document the conservation status of the vascular flora and the occurrence of weeds. They provide information to both add and remove taxa and communities from statutory protection.