Advances in plant conservation biology:

Implications for flora management and restoration

Symposium program and abstracts

Perth, Western Australia
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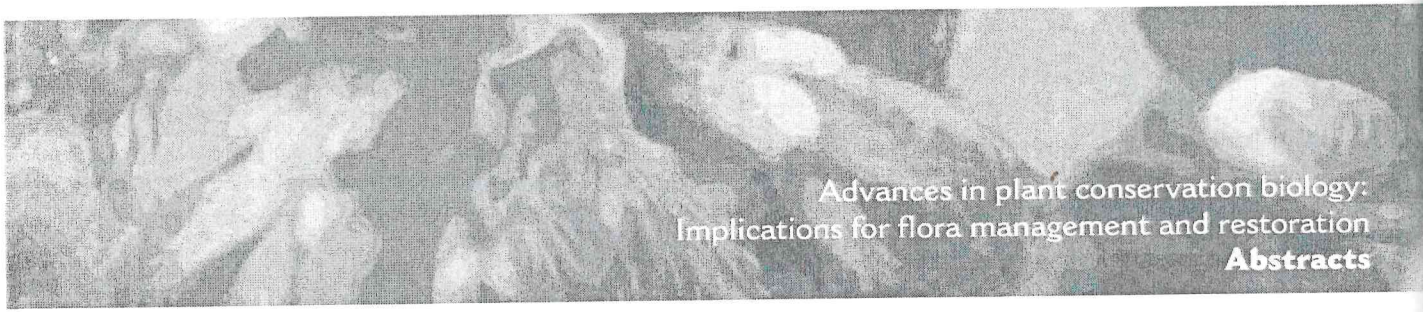

INTRODUCING PERENNIAL SPECIES TO MITIGATE SALINITY: WHAT ARE THE POTENTIAL RISKS AND BENEFITS TO BIODIVERSITY?

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CRC for Plant-Based Management of Dryland Salinity (www.crcsalinity.com.au)

CRC for Australian Weed Management (www.crc.weeds.org.au)

Dryland salinity is one of the most challenging problems faced by land managers today. Forecast to affect over 17 million hectares in Australia by 2050, the rise in groundwater tables bringing dissolved salt to the surface will result in many wetland, dampland and woodland ecological communities being lost. The extensive clearing of deep-rooted perennial native vegetation for agriculture has caused an imbalance in water use across the landscape. Introducing perennial pasture species to mitigate salinity promises to provide significant environmental and economic benefits, but there are also inherent risks which must be considered and managed appropriately. Some of these risks include the establishment of new plant species as environmental weeds, hybridisation with native species and gene flow from cultivated populations into natural populations. Presented here is an overview of potential risks and benefits to biodiversity of introducing new perennial species. Risk assessment and management options are presented, and areas where further research is required are identified.