

LESSONS IN WOODLAND MANAGEMENT FROM NORTHERN AND CENTRAL VICTORIA

Ralph Mac Nally

1. Increase native vegetation cover.
2. Use planning and optimisation tools for guiding replanting
3. Development of habitat resources is very slow.
4. Fallen wood is a critical ecological resource.

Introduction

I have worked with colleagues and students in central and northern Victoria since the middle 1980s, mostly in box and ironbark forests and River Red Gum (*Eucalyptus camaldulensis*) floodplain forests (see map on next page). These studies have been built on several major collaborations over that period. The first focused on box and ironbark forests (Figure 12.1), mainly in the 1990s, with a team of researchers from Victoria's Department of Sustainability and Environment (Arthur Rylah Research Institute led by G.W. Brown and L.F. Lumsden), Deakin (A.F. Bennett) and Monash Universities, and the Museum of Victoria (A. Yen). The work explored impacts of habitat fragmentation and degradation on many biotic elements (birds, arboreal and volant mammals, reptiles, terrestrial and airborne invertebrates), and provided baseline data (for that time) on distributions of fauna in different ecological vegetation classes (Mac Nally *et al.* 2002a). Another group of Victorian box-ironbark researchers was assembled in the mid-2000s looking more explicitly at landscape-scale biodiversity questions. That team consisted of personnel from Monash (myself, J.R. Thomson), Deakin University (A.F. Bennett and J.Q. Radford), the University of Melbourne (P.A. Vesk), and the Department of Sustainability and Environment (D. Duncan, J. Dorrrough). The other main collaboration I have had is with other Monash workers looking at stand condition (Cunningham *et al.* 2009) and factors affecting biodiversity in River Red Gum forests on the Murray floodplain and its Victorian tributaries (Ballinger *et al.* 2005; Lada and Mac Nally 2008; Mac Nally and Horrocks 2007). I list my lessons from issues relating to the largest spatial scales and strategic character through to site-based, tactical issues.