

Box Ironbark Forest

Threatened in the Goulburn Broken Catchment

60% of Box Ironbark Forests have been cleared. 18% of what remains is on private land.



Photo: Sue Berwick

Figure 1. Box Ironbark Forest in good condition without Mugga Ironbark, south of Seymour on a roadside.

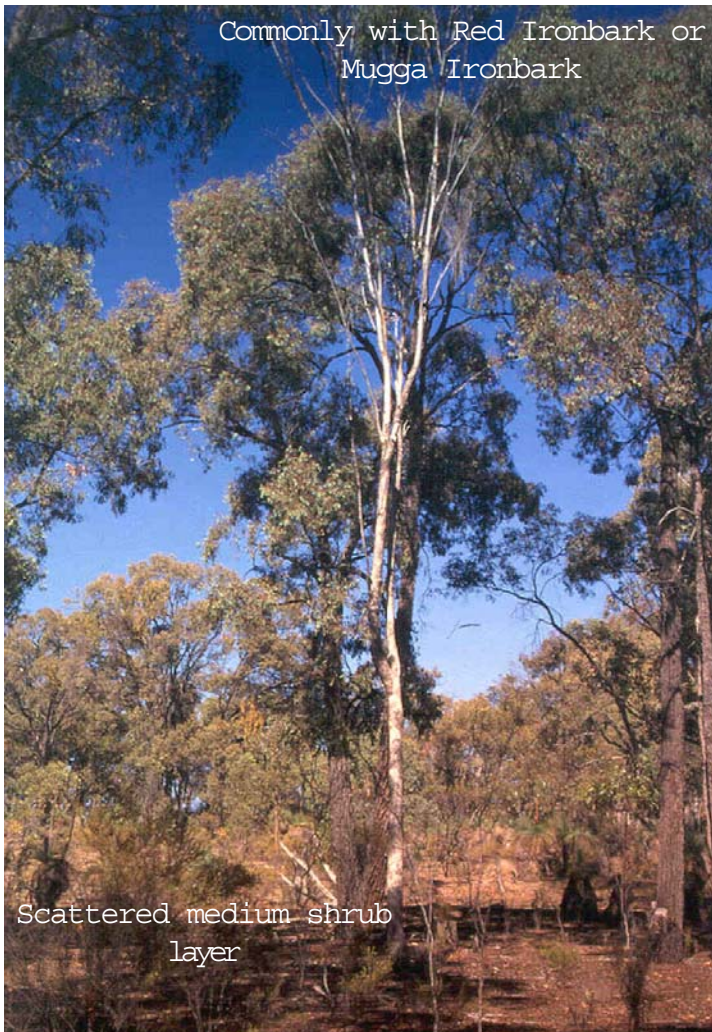


Photo: Sue Berwick

Figure 2. Box Ironbark Forest in good condition near Costerfield. There are, however very few large old trees remaining.

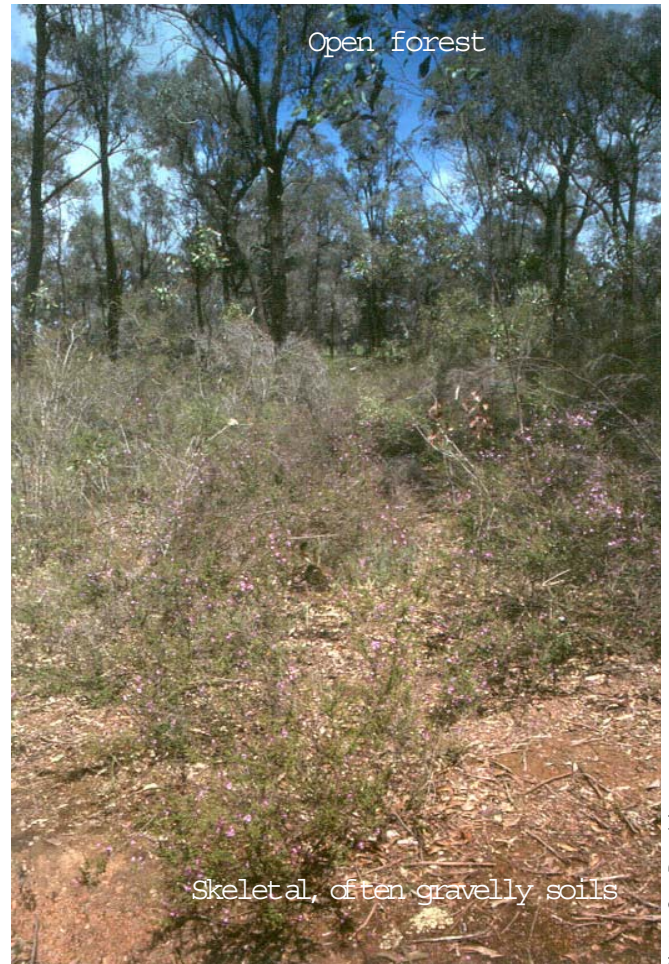


Photo: Sue Berwick

Figure 3. Box Ironbark Forest in good condition in the Killawarras.



Photo: Debbie Colbourne

Figure 1. Box Ironbark Forest with a healthy scattered Golden Wattle layer.

Box Ironbark Forest

Threatened in the Goulburn Broken Catchment

Description

Box Ironbark Forests are open forests that occur on low hills at altitudes between 150-230m, with an annual rainfall between 500-650mm. The skeletal sandy loam to clay loam soils are often gravelly, and are of low fertility with a poor moisture holding capacity.

The overstorey commonly (but not always) includes Red Ironbark (west of Goulburn River). Mugga Ironbark occurs around Boweya and the Killawarras, with Grey Box and Yellow Gum in the Rushworth area. Red Box and Red Stringybark occur on upper slopes.

The scattered shrub layer includes Golden Wattle, Spreading Wattle, Grey Everlasting and Daphne Heath.

The sparse ground layer includes Wallaby grasses, Rough Spear-grass, Silver Top Wallaby-grass, Black-anther Flax-lily, Shiny Everlasting and Chocolate-lily.

Species to Look Out For

Flora: Scented Bush-pea (v), Williamson's Wattle (r), Bitter Cryptandra and Velvet Daisy-bush (v), White Box.

Fauna: Swift Parrot (Ee), Regent Honeyeater (Ec) (both rely on the winter flowering of Ironbark and White Box for nectar), Barking Owl (e), Turquoise Parrot (n) (near Boweya and Killawarras), Tree Goanna (v) and Brush-tailed Phascogale (v).



Figures 5 to 8. Mugga Ironbark, Daphne Heath, Shiny Everlasting, Chocolate Lily

Photos: Mary Titcumb



Figure 9. Regent Honeyeater nest Photo: DSE/McCann

Figure 10. Turquoise Parrot Photo: Len Robinson c/o Viridans



Figure 11. Tree Goanna Photo: Mary Titcumb

Figure 12. Brush-tailed Phascogale Photo: Jerry Alexander

Why Box Ironbark Forests are Threatened

60% of Box Ironbark Forests in the Goulburn Broken Catchment have disappeared since European settlement. Of the 40% that remains, most has been disturbed at some stage and is degraded. Many of the plants and animals that relied on this habitat are now also threatened, and some are extinct. Over 18% of this remains on private land. Therefore, the support of private landholders is essential for the ongoing conservation of Box Ironbark Forests.

Current threats include, **inappropriate grazing regimes** (causes weed invasion; loss of native species through selective grazing and trampling; hinders native plant regeneration; disturbs the soil and increases nutrient levels), **mining** (causes soil disturbance, disrupts natural drainage and encourages weeds), **isolation** (restricted movement of fauna, difficult to maintain healthy gene pool), lack of native **understorey** and **ground layer** (which attract insect eating birds helping keep the overstorey healthy, and improve soil health through fixing nitrogen), lack of **natural regeneration**, **weed invasion**, **pest animals** and loss of **tree** and **ground habitat** (through timber harvesting, tidying-up of fallen timber and firewood collection).

Box Ironbark Forest

Threatened in the Goulburn Broken Catchment

Management Tips

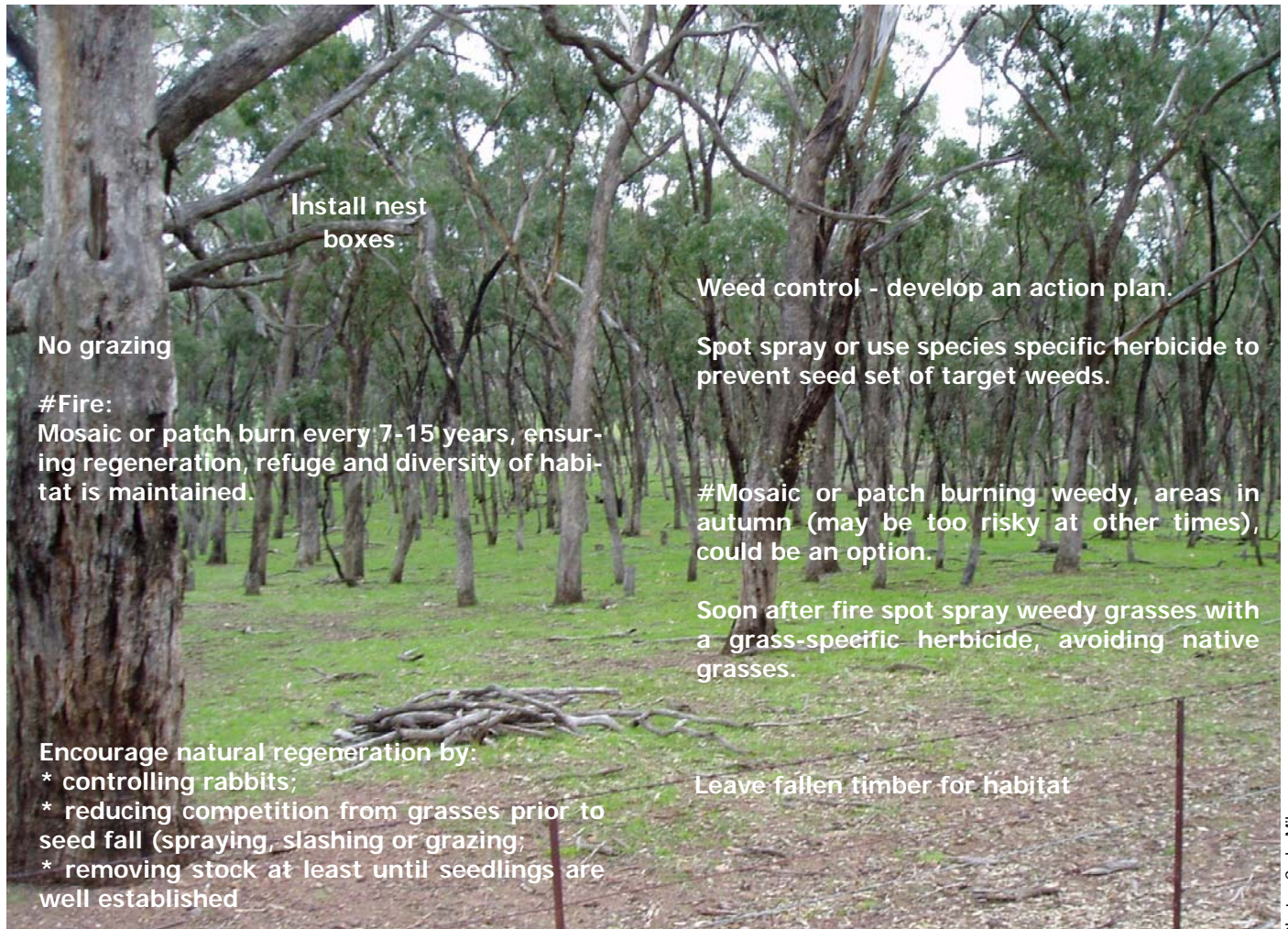


Figure 13. Box Ironbark Forest in a degraded state on private property. The native shrub and ground layer is largely absent and there are very few, if any large old trees.

May require expert input in decision making and planning. See your local DSE, DPI or CMA representative for further advice.

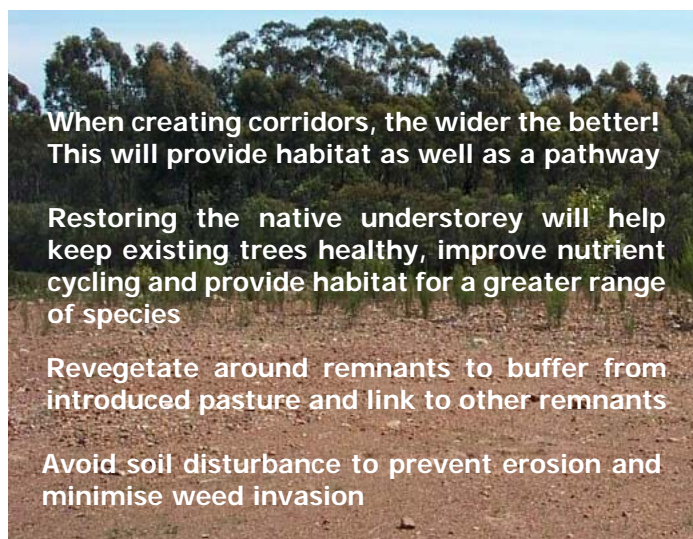


Figure 14. Restoring Box Ironbark Forest - an example of remnant with some regeneration occurring on private land.



Figure 15. Re-establishing Box Ironbark Forest - an example of x year old revegetation around existing trees on private property.

May require expert input in decision making and planning. See your local DSE or CMA representative for further advice.



Conservation Status

Box Ironbark Forest is **threatened** in the Goulburn Broken Catchment

- Victorian Riverina bioregion : **Vulnerable**
- Goldfields bioregion : **Depleted**
- Central Victorian Uplands bioregion : **Vulnerable**
- Northern Inland Slopes bioregion : **Vulnerable**

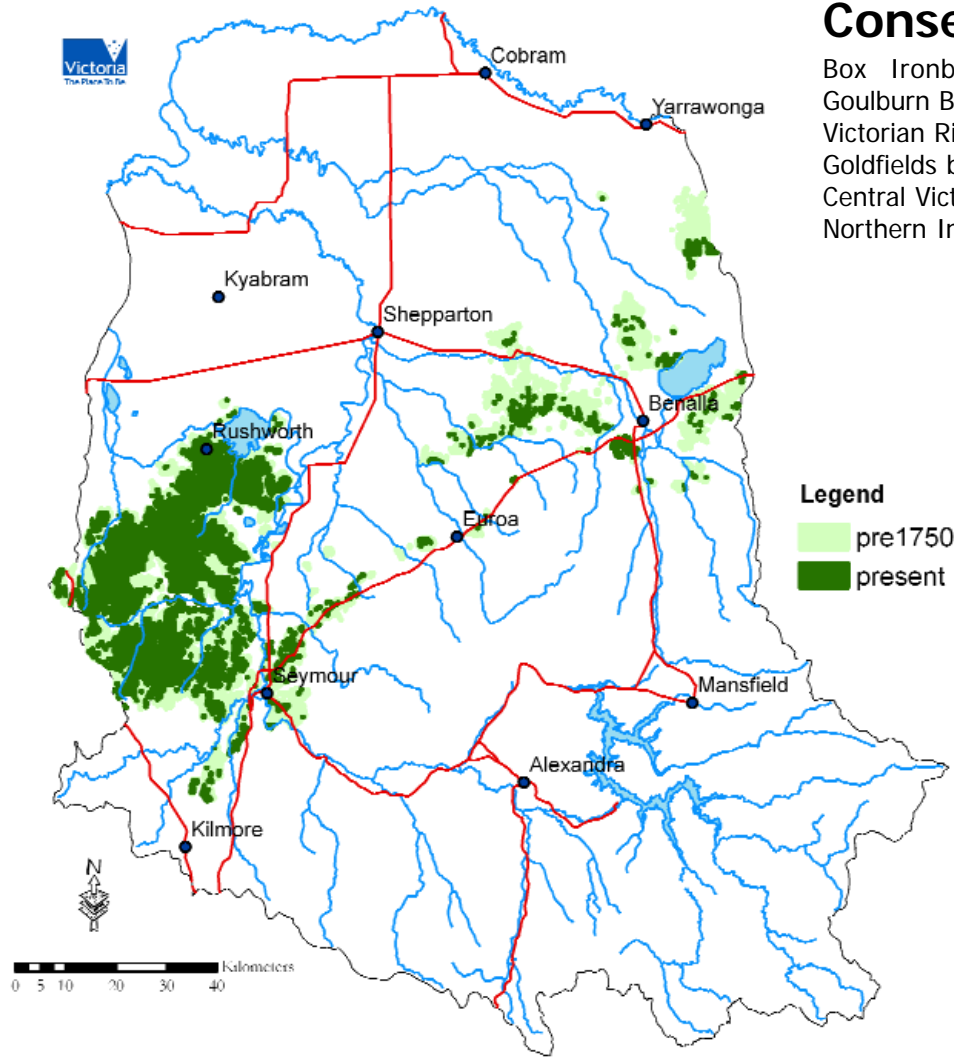


Figure 16. A representation of the pre-1750 and present day distribution of Box Ironbark Forest and its mosaics and complexes in the Goulburn Broken Catchment. The boundaries of the vegetation have been exaggerated to allow for the small scale of the map. The map was produced from Base Data from DSE Corporate Library. The State of Victoria does not warrant the accuracy or completeness of information on this map. Any person using or relying upon such information does so on the basis that the State of Victoria shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information.

References:

Berwick, S. (unpublished) *Pre-1750 EVC mapping, Goulburn Broken CMA*, Department of Natural Resources and Environment, Benalla

Department of Natural Resources and Environment (1996) *Conserving Box-Ironbark Forests in Victoria Education Kit*, Department of Natural Resources and Environment, Melbourne.

Department of Sustainability and Environment (2004) *EVC Bioregional Conservation Status Table*, a support document to: Department of Natural Resources and Environment (2002) *Victoria's Native Vegetation Management - A Framework for Action Support Data*, NRE.

Platt, S.J. (2002) *How to Plan Wildlife Landscapes: a guide for community organisations*, Department of Natural Resources and Environment, Melbourne.

Viridans Pty Ltd. (2004) *Victorian Fauna Display*, Viridans Pty Ltd., Melbourne.

Acknowledgments:



This project was a partnership between the Goulburn Broken Catchment Management Authority and Department of Sustainability and Environment, and funded by NAP: *Australian Governments and local communities working together to prevent, repair and manage rising salinity and declining water quality across Australia*. Thanks to comments from Alison Oates, Biodiversity & Natural Resource Division,

action DSE and Glen Johnson, Water and Biodiversity Team, North East DSE; Jenni Nunan, GIS team, DSE, Benalla for producing the maps; for Salinity & Water feedback and comments from the Biodiversity Team in the Goulburn Broken and NorthEast, DSE; the DPI LINKS officers and CMOs, the AUSTRALIA GBCMA waterways and vegetation officers and to all who contributed photographs and support.

Compiled by: Mary Titcumb, Department of Sustainability and Environment

For further information about this publication, contact:

Department of Sustainability and Environment or Goulburn Broken Catchment Management Authority
Benalla (03) 5761 1611

© The State of Victoria, Department of Sustainability and Environment, May 2005.

ISBN 1-920742-11-5

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.