Department of Sustainability and Environment

Shallow Sands Woodland

Threatened in the Goulburn Broken Catchment 99% of Shallow Sand Woodlands have been cleared. 94% of what remains is on private land.



Figure 1. An example of Shallow Sand Woodland near Dookie in good condition.



Figure 2. An example of Shallow Sand Woodland near Dookie in good condition.



Shallow Sands Woodland

Threatened in the Goulburn Broken Catchmen

Description

Shallow Sand Woodlands occur on the plains with sandy loam soils. They are often associated with Plains Grassy Woodlands and surrounds or are adjacent to Sand Ridge Woodlands. They also occur on broader areas of plains covered by shallow sands overlaying drainage-impeding clays. They occur at elevations of 100-125m and an annual rainfall of 400-550mm.

This woodland, (or open forest) is a grassy ecosystem with an overstorey of Yellow Box, White Cypress-pine and Buloke, sometimes with Grey Box and River Red Gum.

The sparse shrub layer consists of Golden Wattle, Mallee Wattle, Varnish Wattle, Curved Rice-flower, Weeping Pittosporum, Senna and Ruby Saltbush.

The species rich ground layer contains Rough Spear-grass, Bristly Wallaby-grass, Yellowish Bluebell and Many-flowered Mat-rush. Although no longer found in this vegetation type, historical records suggest that Silver Banksia, Yarran Wattle, Broom Ballart and Pale-fruit Ballart occurred in this community.

Species To Look Out For

Flora: Buloke, Buloke Mistletoe (v), White Cypress-pine, Sweet Quandong, Desert Cassia, Silver Banksia and Spurred Spear-grass.

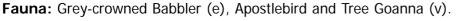




Figure 7. Grey-crowned Babbler Photo: Graeme Chapman

Figure 8. Apostlebird Photo: DSE/McCann

Figure 9. Tree Goanna Photo: Mary Titcumb

Why Shallow Sands Woodlands are Threatened

More than 99% of Shallow Sands Woodlands in the Goulburn Broken Catchment have disappeared since European settlement. Over 94% of what remains is on private land. Many of the plants and animals that rely on this habitat are now also threatened, and some are extinct. Therefore, the support of private landholders is essential for the ongoing conservation of Shallow Sands Woodlands.

Current threats include, **poor timing of stock grazing and overgrazing** (causes loss of native species, hinders native plant regeneration, disturbs the soil and increases nutrient levels), **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**, **soil disturbance** (eg. ploughing and pugging, favouring weed species), **weed invasion**, **pest animals** and loss of **tree** and **ground habitat** (through timber harvesting, tidying-up of fallen timber, firewood collection, irrigation agriculture and stubble burning and ploughing).



Figures 3-6. White Cypress Pine, Buloke, Weeping Pittosporum, Many-flowered Matrush.

Photos: Carla Miles (3, 4), Sue Berwick (5) Mary Titcumb (6)

Shallow Sands Woodland

Threatened in the Goulburn Broken Catchmen

Management Tips

Weed control - develop an action plan.

Annual grass control is critical. Spot spra or use species specific herbicide to preven seed set of target weeds.

#Mosaic or patch burning weedy, open areas in early summer immediately following exotic grass seed set (many are too green to burn in spring), could be an option. Avoid White Cypress-pine and Buloke regeneration (highly sensitive to fire).

Soon after fire spot spray weedy grasses with a grass-specific herbicide, avoiding native grasses.

Fencing and grazing management of these remnants is critical.

Grazing:

Fence to exclude or manage stock grazing. Pulse graze for annual and perennial grass weeds for short periods in early spring (if necessary), early summer (post native flowering and seed set).

Protect White Cypress-pines and Buloke from grazing. Regeneration is often preferentially grazed by stock and rabbits.

Fire:

This EVC does not require a regular fire regime.

re

Debbie Colbourne

Photo: 1

Figure 10. An example of a degraded Shallow Sands Woodland near Timmering. # May require expert input in decision making and planning. See your local DSE, DPI or CMA representative for further advice.

Avoid soil disturbance to prevent erosion (sandy soils often unstable) and minimise weed invasion Encourage natural regeneration by controlling rabbits, reducing competition with grasses prior to seed fall and removing stock.

Avoid driving vehicles through remnant to minimise disturbance

Rabbit control is critical for natural regeneration of White Cypress-pines.

Revegetate around remnants to buffer from pasture and link to other remnants

Direct seed or replant key overstorey and shrub species, and protect from stock and rabbits. Revegetate areas after weed treatment to prevent the same, or other weeds reinvading

Leave fallen timber for habitat

Figure 11. An example of a degraded Shallow Sands Woodland near Timmering. # May require expert input in decision making and planning. See your local DSE, DPI or CMA representative for further advice.

例例為自己

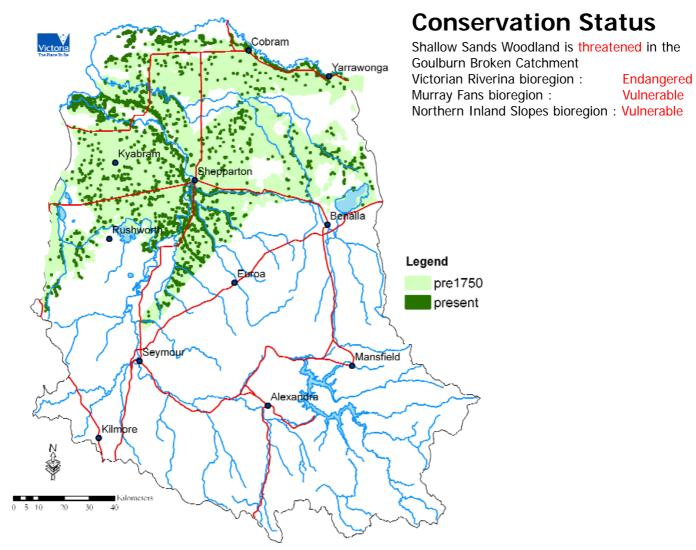


Figure 12. A representation of the pre-1750 and present day distribution of Shallow Sands Woodland and is mosaics and complexes in the Goulburn Broken Catchment. The boundaries of the vegetation have been exaggerated to allow for the small scale of the map. The map was produced from Base Data from DSE 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:

Barlow, T. (1998) *Grassy Guidelines How to manage native grasslands and grassy woodlands on your property*, Trust for Nature, Melbourne. Berwick, S. (unpublished) *Pre-1750 EVC mapping, Goulburn Broken CMA*, Department of Natural Resources and Environment, Benalla 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.

Prober, S. and Thiele, K. (2004) Restoring Grassy White Box Woodlands, Charles Sturt University, Albury.

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 guality across Australia. Thanks to comments from Alison Oates, Biodiversity & Natural Resource Division,

actionDSE and Glen Johnson, Water and Biodiversity Team, North East DSE; Jenni Nunan, GIS team, DSE, Benalla for producing the maps; for Salinity & Waterfeedback and comments from the Biodiversity Team in the Goulburn Broken and NorthEast, DSE; the DPI LINKS officers and CMOs, the AUSTRALIAGBCMA 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

 $\ensuremath{\mathbb{C}}$ 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.