Department of Sustainability and Environment

# Valley Grassy Forest

Threatened in the Goulburn Broken Catchment

94% of Valley Grassy Forests have been cleared. 88% of what remains is on private land.



Figure 1. An example of Valley Grassy Forest east of Seymour, in good condition, with a ground layer dominated by Kangaroo Grass.



Figure 3. An example of Valley Grassy Forest in good condition south east of Benalla.



Figure 2. An example of Valley Grassy Forest in good condition



Figure 4. An example of Valley Grassy Forest east of Seymour, in good condition, with a ground layer dominated by Kangaroo Grass.



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#### Description

Valley Grassy Forest occurs on broad, gently sloping valleys of the surrounding dry foothills at elevations of 150-400m, with an annual rainfall 650-800mm.

It supports an open forest of White Box (northern regions of the Catchment) and Yellow Box, sometimes with Candlebark (southern half of the Catchment), Apple Box (eastern region of the Catchment) and Silver-leaf Stringybark (Swanpool and Lima regions of the Catchment).

The tall open shrub layer is typically Silver Wattle and Tree-violet.

Characteristically the valley floor has a low, dense grassy layer of Weeping Grass and in season, a rich array of herbs, lilies, grasses and sedges dominate the ground layer such as Chocolate Lily, Kidney-weed, Ivy-leaf Violet, Slender Tick-trefoil, Stinking Pennywort and Austral Cranesbill. At the drier end of the spectrum the ground layer may be sparse and slightly less diverse, but with the moisture-loving species still remaining.

### **Species to Look Out For**

**Flora:** Lima Stringybark (Ve), Slender Tick-trefoil(k) and Apple Box (on the edge of its range).

Fauna: Long-nosed Bandicoot, Brush-tailed Phascogale (v) and Barking Owl (e).



Figure 5. Long-nosed Bandicoot Photo: DSE/McCann

Figure 6. Barking Owl Photo: Natasha Schedvin

Figure 7. Brush-tailed Phascogale Photo: Jerry Alexander

### Why Valley Grassy Forests are Threatened

More than 94% of Valley Grassy Forests in the Goulburn Broken Catchment have disappeared since European settlement. Over 88% 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 Valley Grassy Forests.

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 and firewood collection).



Figures 5-8. White Box, Silver Wattle, Weeping Grass, Stinking Pennywort.

Photos: Mary Titcumb

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#### **Management Tips**

nstall nest / boxes

Leave fallen timber for habitat

Weed control - develop an action plan.

Spot spray or use species specific herbicide to prevent seed set of target weeds.

Crash grazing while weeds are in flower (before seed-set) over successive years can help control annual and perennial 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.

Soon after fire spot spray weedy grasses with a grass-specific herbicide, avoiding native grasses. Encourage natural regeneration by: \* controlling rabbits;

 reducing competition from grasses prior to seed fall (spraying, slashing or grazing);
removing stock until seedlings are well established

Expand existing remnants by revegetating

Link to other existing patches

#### Grazing:

Debbie

Fence to exclude or manage stock grazing. If necessary pulse graze (short bursts of grazing with long rest periods) for annual grassy weeds in early spring or early summer (post native flowering and seed set).

Gaudion

Photo:

Figure 12. An example of a degraded Valley Grassy Forest in July, completely lacking a native shrub-layer, and with a mixed ground layer of native grasses and annual and perennial weeds.

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

#Restore native understorey by direct seeding and / or replanting

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

Control small infestations of weeds first

Figure 13. An example of scattered trees of what used to be Valley Grassy Forest . # May require expert input in decision making and planning. See your local DSE or CMA representative for further advice.



### Restore overstorey by planting scattered trees by hand

Avoid disturbance to prevent erosion and minimise weed invasion

Figure 14. An example of Valley Grassy Forest in December at Samaria without the overstorey, but with Small Grass Trees still remaining and a sward of Kanagaroo Grass.



#### **Conservation Status**

Valley Grassy Forest is threatened in the GoulburnBroken CatchmentVictorian Riverina bioregion :VulnerableGoldfields bioregion:VulnerableCentral Victorian Uplands bioregion :VulnerableNorthern Inland Slopes bioregion :EndangeredHighlands - Northern Fall bioregion :Endangered

Figure 12. A representation of the pre-1750 and present day distribution of Valley Grassy 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:

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.

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