Department of ustainability and Environment

Swampy Riparian Woodland Threatened in the Goulburn Broken Catchment

74% of Swampy Riparian Woodlands have been cleared. 50% of what remains is on private land

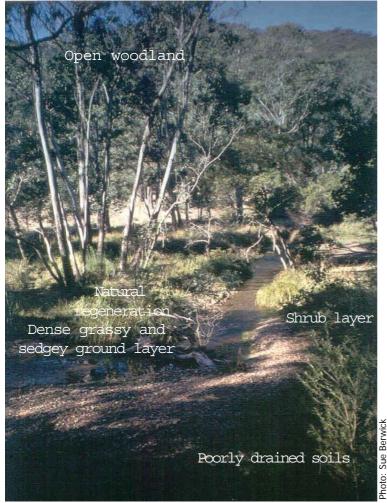


Figure 1. An example of Swampy Riparian Woodland in good condition with some indicative and habitat features highlighted.

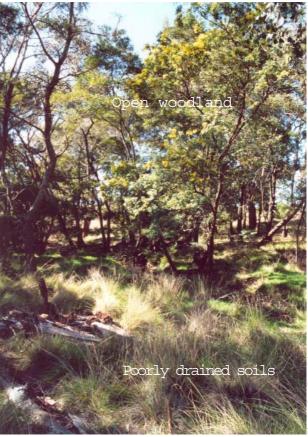


Figure 2. A moderately healthy example of Swampy Riparian Woodland, with some introduced grasses encroaching.



Swampy Riparian Woodland

Description

Swampy Riparian Woodland occurs in poorly drained sections of streams and rivers. (i.e. wide creek and river flats with low topography and slow stream flows.) Annual rainfall is 900-1500mm at elevations of 300-800m.

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The overstorey, (typically Mountain Swamp Gum), has a woodland structure. The understorey consists of a range of large and medium shrub species, including Ovens Wattle, Tea-tree, Prickly Tea-tree, Burgan, Blackwood and Prickly Currant-bush.

The ground layer is normally dense with sedges and large tussock grasses such as Leafy Flat-sedge, Tall Sedge and ferns like Fishbone Water-fern, Soft Water-fern and Mother Shield-fern.

Species To Look Out For

Flora: Omeo Gum (r), Native Raspberry (don't confuse with exotic blackberry). Fauna: Powerful Owl (v), Eastern Horseshoe Bat (v), Common Bent-wing Bat (e).



Figure 7. Powerful Owl Photo: DSE/McCann

Figure 8. Eastern Horseshoe Bat Figure 9. Common Bent-wing Bat Photo: Lindy Lumsden Photo: Lindy Lumsden



Figures 3-6. Mountain Swamp Gum, Blackwood, Tall Sedge, and Fishbone Waterfern.

Photos: Mary Titcumb

Why Swampy Riparian Woodlands are Threatened

By its nature, riparian land is critical to the lifecycles of many native animals and plants, it provides wildlife corridors as well as being a refuge for animals in times of drought and fire. It is fragile, and its productivity also makes it vulnerable to over-use. It performs a vital link between land and water ecosystems.

While more than 74% of Swampy Riparian Woodlands in the Goulburn Broken Catchment still remain, the alteration of flooding regimes have impacted on the quality of these remnants. Many of the plants and animals that rely on this habitat are now threatened also. More than 50% of this remains on private land, so the support of private landholders is essential for the ongoing conservation of this vegetation type.

Current threats include, **drainage** for agriculture changes riparian functions (which can result in loss of native species and reduced viability of the system), **poor timing of stock grazing and overgrazing** (erodes the bank, 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).

Swampy Riparian Woodland

tall nest boxe

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Management Tips

Encourage natural regeneration by: * controlling rabbits, * reducing competition from grasses prior to seed fall and * removing stock at least until seedlings are well established

Leave fallen timber for habitat both instream and on banks

Establish off stream watering

Fencing is critical.

Retain access, since occasional crash grazing for weed control or fire fuel reduction may be necessary. Avoid stock access when soils are wet, to prevent pugging and in spring and early summer to allow flowering and seed-set of native plants. Weed control - develop an action plan. Target smaller isolated infestations first, precluding chemical residues entering the waterway. Use appropriate herbicide for waterways.

#Restore native understorey by direct seeding and / or replanting

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

Restoring the native understorey will help keep existing trees healthy, improve nutrient cycling and provide habitat for a greater range of species

hoto: Sue Berwick

Figure 10. An example of Swampy Riparian Woodland in degraded condition. Some introduced grasses are beginning to encroach and pugging is evident.

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

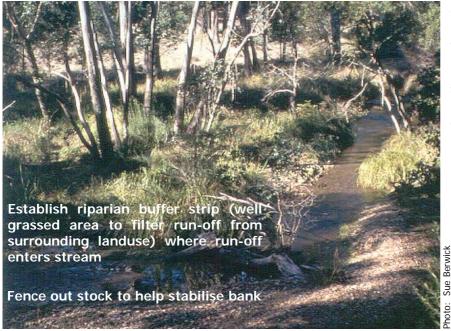


Figure 11. Need a photograph of Riparian Forest in degraded condition.

Some additional tips for erosion control *Stabilise bed with rock or woody debris and allow beds and bank to be colonised by grass

*Use range of species - grasses, reeds, shrubs and trees

*Establish vegetation as far down bank as possible as well as on the bank top

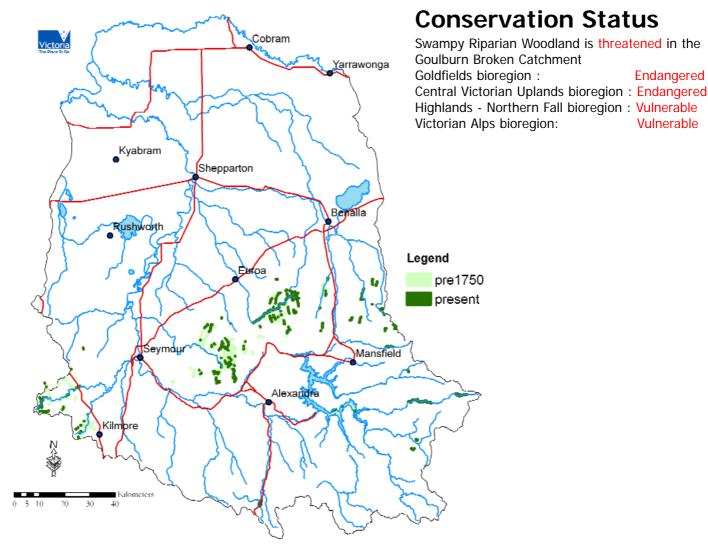


Figure 12. A representation of the pre-1750 and present day distribution of Swampy Riparian Woodland and its mosaics and complexes in the Goulburn Broken Catchment. The boundaries of the vegetation have been exaggerated to allow for the small scale of the map. The map was produced from Base Data from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

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