SIGNIFICANT FLORA

FACT SHEET

RIVER RED GUM WOODLANDS OF WATERCOURSES AND FLOODPLAINS

OCCURRENCE

The majestic River Red Gum (Eucalyptus camaldulensis) is the largest tree growing in the South Australian Arid Lands Region. It forms a fringing woodland community along creeklines and areas subject to regular inundation, with a diverse associated understorey where not heavily grazed. Older River Red Gum trees in particular have hollow limbs and main trunks, providing nesting sites and habitat for a range of indigenous birdlife, particularly parrots, and small mammals, lizards and insect species. River Red Gum woodlands occurs mainly in the Flinders and Olary Ranges and in Central Australia. In particular, this tree colonises the major watercourses in the Flinders Ranges which carry floodwater onto the outwash plains westward towards Lake Torrens, northward towards Lake Eyre and eastward to Lake Frome. In the far north of South Australia, a number of the major drainage systems which carry floodwaters across the gibber plains towards the western edge of Lake Eyre support River Red Gum woodlands.

As the frequency of flooding decreases and groundwater salinity increases along these systems, the gums are replaced by plant communities more tolerant of drought and increasing soil salinity, such as Coolabah (Eucalyptus coolabah), Broughton Willow (Acacia salicina), Inland Boobialla (Myoporum acuminatum) and Old-man Saltbush (Atriplex nummularia).

THREATS

With many River Red Gum communities in the northern Flinders Ranges and the Far North severely affected by drought in recent years, the main threat to these woodlands is the reduced regeneration of the trees due to insufficient significant flooding events. The lack of flood flows down watercourses for nearly a decade has resulted in extensive or near-complete mortality of the mature River Red Gums along these creeklines.
A compounding threat to the biodiversity of these woodlands has been years of grazing pressure.

River Red Gum communities occur on watercourses and the presence of permanent springs, waterholes or the availability of groundwater at shallow depths resulted in these areas being developed in the early years of European settlement. During this time the land’s capacity to carry stock was vastly over-estimated. In the latter part of the 19th century, for example, the area now comprising the Flinders Ranges National Park carried up to 120,000 sheep.

Many River Red Gum communities have been permanently affected by soil denudation and erosion and the spread of weedy species like Onion Weed (Asphodelus fistulosus) and Wards Weed (Carrichtera annua).

Evidence of the erosion caused by over-grazing is still obvious, particularly along the watercourses and floodout areas.

Early records show that River Red Gum woodlands had a productive understorey of perennial grasses, shrubs such as Saltbush (Atriplex vesicaria, A. stipitata) and Butterfly Bush (Pterostylis labichoides), and various annual and short-lived perennial herbs and forbs.

Once this understorey was removed or substantially modified, soil disturbance and weed invasion permanently changed the composition of these woodlands, with introduced weeds such as Wards Weed, Onion Weed and Horehound (Marrubium vulgare) now forming dense swards throughout much of this vegetation type.

Unpalatable native shrubs like Prickly Wattle (Acacia victoriae) and Silver Wattle (A. rivalis) also dominate large areas where formerly they were a minor component of the understorey vegetation.

Red Gum fringing community and regeneration
A. Robinson

River Red Gum trees are often targeted for woodcutting which is illegal on pastoral land without the permission of the Pastoral Board and the timber is also in demand for the outdoor furniture trade.