

## THE LARGEST INTACT TEMPERATE WOODLANDS ON EARTH: FLORISTIC PATTERNS IN SALMON GUM WOODLANDS IN THE GREAT WESTERN WOODLANDS

Judith Harvey<sup>1</sup>

<sup>1</sup>Curtin University

Salmon Gum is an iconic Western Australian gum tree once widespread through the Wheatbelt and now is only common east of the clearing line in the area known as the Great Western Woodlands (GWW). Little is known about its structure and understorey composition there, how this was impacted by extensive timber cutting activities of early last century or how this relates to salmon gum woodlands to the west. We investigated what environmental variables and processes correlate with the regional patterns in floristic composition in salmon gum woodland communities across the GWW. Vegetation and soil data was collected at 100 sites spread over this vast area (15M ha). Analysis revealed two main communities whose composition is influenced by climate and to a lesser extent soils. Existing data from previous surveys in the Wheatbelt were incorporated with the GWW data to look at patterns over the whole of the distribution of salmon gum. These analyses inform the current nomination that all Wheatbelt Eucalypt woodlands be classified as a Threatened Ecological Community (at the Federal level); in particular emphasizing the distinctness of Wheatbelt compared with GWW salmon gum woodlands.

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Judith Harvey has over 24 research years of experience, in WA government conservation agencies, in plant ecology, fire ecology, and vegetation mapping and condition assessment. Plus, 6 years working on woodlands around Canberra. She has recently completed a Masters degree assessing the variability in salmon gum understorey in SW WA.