

Title of the proposed presentation

Science partnerships can deliver restoration solutions, but urban spaces provide other challenges.

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Abstract (300–500 words)

Banksia woodlands of the Swan Coastal Plain sit within a global biodiverse region inside Australia's only internationally recognised biodiversity hotspot. These woodlands represent an important part of the rich biodiversity fabric of this world-class Floristic Region. Banksia woodlands are now highly fragmented, particularly in urbanised remnants for much of the Perth region. Indeed, since colonisation in 1832, Banksia woodlands within 50 km of the Perth CBD have been reduced to 35% of their original extent. What remains is under continuous threat from both natural and anthropogenic disturbance phenomena including weeds, feral animals, diseases, frequent fires, groundwater extraction, recreational pursuits, and land development. Whilst some land development pressures are obliged to follow a detailed environmental impact assessment and approval process before clearing, this does not apply to other pressures such as urban development, resulting in the rapid loss of Banksia woodlands. A significant challenge in managing Banksia woodlands is addressing the rapid loss of this natural community (through proposals for clearing) whilst Perth is in the midst of, and will continue to face unprecedented urban and industrial expansion.

Kings Park Science has been involved in providing the science to underpin management and restoration of the Banksia woodland systems. By consolidating > 20 years of restoration science and practice between Kings Park and some external stakeholders, this presentation will identify knowledge relating to the restoration requirements for Banksia woodlands but also outline some challenges (many unforeseen) in ensuring continued success of these restoration programs. This research and the partnerships that have been developed have been captured in a practitioner's guide that will be presented and many help to inform restoration of other degraded areas in urban and non-urban areas.

List of keywords

Western Australia, Banksia woodlands, Biodiversity, Practitioner guide