

Acknowledgments

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Lawn as a Living Lab concept

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Sponsors

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West Coast Turf

The Turf Growers Association of WA

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lawn as a living lab



THE UNIVERSITY OF
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School of Design





This site is a living lab for the ongoing research project at the UWA School of Design, *Lawn as a cultural and environmental global phenomenon in Perth, Western Australia: Searching for sustainable solutions in times of a drying climate*. The foundation of this project is an interdisciplinary collaboration between researchers, landscape architecture practitioners, commercial nurseries and the turf industry with Local and State Government departments. The project explores the phenomenon of lawn from environmental, socio-cultural and design perspectives. It tests design sustainable solutions for urban green open spaces in a drying climate.

This experimental site demonstrates the complex character of lawns as urban ecosystems. One aim of this installation is to educate students, the community and campus visitors about different types of lawns and management practices. It explores lawn structure and composition, irrigation and maintenance variations, the potentials of native biodiversity introduction and the capacity of lawn and native ground cover vegetation to mitigate the local climate of urban green spaces.



This living lab exhibits the following lawn gradient: old lawn left uncut (Couch and Kikuyu mix), artificial turf, three traditional lawn species used in Perth with conventional irrigation and mowing (*Cynodon dactylon*, *Stenotaphrum secundatum* and *Pennisetum clandestinum*), spontaneous lawn (abandoned ground left to natural plant succession processes) and native ground covers of *Dichondra*, *Eremophila*, *Myoporum* and *Scaevola* species.

Paths of crushed laterite gravel surround each 2m x 2m plot. The combination of paths and lawn plots on the site simulate the urban heat island effect and demonstrate how lawn and native ground cover vegetation mitigate this effect under various conditions. Plots are regularly measured for surface temperature.

