



Event Takeaway: Designing Climate Resilient Landscapes

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Keith Sacre, Sales Director, Barcham Trees

- **Long-term strategic management is necessary to increase tree population diversity.** The first task is to identify what diversity we have and what we want. Tree population diversity will vary due to location and priorities. One of the most comprehensive models for strategic management is '*The Sustainable Urban Forest, A Step-by-Step Approach*', Davy Institute, 2016.
- **Research has indicated that there are many species which are not currently used or infrequently used which have the capabilities to thrive in the urban environment.** '*Tree Species Selection for Green Infrastructure: A Guide for Specifiers*', Dr Andrew Hiron and Dr Henrik Sjomann, Tree and Design Action Group, 2019, Available online at: <https://www.tdag.org.uk/>.
- **Specifiers need to be more adventurous in their species choice and relate that species choice to the overall diversity objectives.** A tendency to reuse the same planting palette has reduced the diversity in new developments.
- **Tree Nurseries must be part of the dialogue and be involved in discussions about species choice.** They should be given the confidence to invest in producing an increased range of materials with contract growing. Contract growing provides nurseries with the assurance that the trees will sell, encouraging them to enlarge their species range.

Giacomo Guzzon, Senior Landscape Architect, Gillespies

- **Identify the sociability of your plants.** Less social plants should be planted far from each other and in smaller groups. Highly social plants should be close to each other and planted in larger groups. The sociability level should inform planting schemes and will support its resilience.
- **The right plant, the right place.** If species are planted in conditions that are similar to their wild habitats, they would live longer, be more resilient and be easier to manage. When plants are

compatible with each other and the site, maintenance of individual species is no longer necessary, the entire community is managed.

- **Five Principles of the Plant Community.** Legible planting character, stress as a resource, related populations not isolated individuals, management not maintenance, and layering plants vertically.
- **Accepting the non-green.** Drought conditions and drought-friendly landscapes require us and the public to shift the accepted aesthetic for public landscapes.

Judith Puckmayr, Senior Landscape Architect, & Bob Bray, Founding Director, Robert Bray Associates

- **Maintenance of rain gardens.** They do not generate but do collect litter, need regular weeding, require a mid-summer tidy of old flowering shoots, need annual clearance and 50-75mm of mulch and occasionally require renewal. Integrating these tasks into general site maintenance is essential.
- **The maintenance schedule for rain gardens.** Schedules usually require monthly litter collection and weeding visits, annual midsummer tidying, annual clearance of herbaceous plants to 100mm with pruning and mulch, and replacing any failed plants.
- **Dryer summers will change the bioretention profile and planting design.** If dry conditions continue, planting style and planting maintenance should be designed to sustain planting throughout these drought periods. The use of grey water may be a solution to irrigating urban planting.
- **There is often a disconnect between the commissioning decision-makers and the maintenance decision-makers in landscape design and management.** People want an attractive rain garden, but few public spaces can sustain desirable rain garden vegetation without irrigation. Bespoke maintenance programmes are required if we want more than trees and hedgerows.

Howard Gray, Green Blue Urban

- **Individual properties and neighbourhoods will have to independently manage their stormwater in the future.** Onsite features, such as tree pits and rain gardens, offer more value to the property and its occupants than retention or detention tanks below ground or outflows to a pond.
- **Kerb build-outs for pedestrians and rain gardens.** Streets can be designed achieve traffic and walkability outcomes as well as stormwater neutrality within neighbourhoods with street trees and rain gardens.
- **Project example: Greener Grangetown in Cardiff.** Retrofitting 'rain gardens' slow rainwater run-off flows and remove contaminants, cleaning and diverting rainwater directly into the nearby River Taff. Previously, rainwater run-off was pumped 8km for treatment before being discharged into the sea. The work was commissioned by the City of Cardiff Council, Dŵr Cymru Welsh Water and Natural Resources Wales and led by Arup.

Speakers:

Keith Sacre, Sales Director, Barcham Trees

Attendees: 44

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