

10/11/21, 5:41
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Can't stand the heat? Plant a tree | Western
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Can't stand the heat? Plant a tree

Heatwaves and eye-watering power bills are a fact of life in Western Sydney. But Dr Sebastian Pfautsch says simple tweaks around the home can help us all keep our cool

It's not your imagination: Summers in Western Sydney are getting hotter. And climate change is only part of the problem, according to urban heat expert Dr Sebastian Pfautsch, a Senior Research Fellow at Western.

"Urbanisation itself increases the temperature in cities," he says. "When you replace paddocks and bushland with roads and buildings, you lose those open, pervious surfaces that take up rainwater, evaporate it and generate a cooling effect."

In his most recent research, Dr Pfautsch has been measuring microclimates throughout the region, installing 360 heat sensors in Parramatta, Cumberland and Campbelltown. And he's been surprised by the results. "During a heatwave, temperatures across Parramatta can vary by 8°C to 10°C."

Dr Sebastian Pfautsch - Alumni
GradLife

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10/11/21, 5:41
PM

1/
2

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Sebastian Pfautsch. Photo:
Sally Tsoutas

Dr Pfautsch hopes government bodies will use this information to combat hot-spots and better allocate emergency services. But, he warns, there's only so much those in charge can do. "Private citizens need to help improve the heat resilience of their suburbs; about 80 per cent of the land is privately owned and that's where we can get massive change."

Where to start? Plant a tree - and water

it regularly.

"Evapotranspiration from trees is actually the best air conditioning system we have for urban spaces; you just have to provide sufficient water to make it work." Also consider a water feature and, when renovating, be meticulous about the materials and colours you choose (fake lawns and black roofing is asking for trouble).

Earlier this year, Dr Pfautsch's research made headlines when he revealed common playground surfaces, including AstroTurf and soft-fall rubber, can heat up to more than 100°C on a summer's day. "The injuries from these materials are horrific," he says. "We have reports of toddlers with second-degree burns on their feet."

While industry change has been slow, the work generated interest from the NSW Department of Planning, Industry and Environment, which has challenged Dr Pfautsch to turn a typical high school in Parramatta, built in the 1970s, into a "cool school". His plans range from the simple (planting trees and installing awnings) to the elaborate (replacing a bitumen roof with a school garden).

"In two years, when the work has been done, we can assess what effect it's had on air temperature and quality," he says. "Then we can grow that into state-wide - maybe even national - design guidelines."

WORDS BY EMMA
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Sebastian Pfautsch. Photo: Sally
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