

Thursday, 16 May 2024

Dear Friends,

Please help CWSS understand tree health in Perth after our driest, warmest summer ever

Summer 2024 was extreme for heat and lack of rain. Perth's trees are suffering. CWSS wants to measure the impact of the extreme conditions on our urban canopy. We want to learn about vulnerability and resilience to find out what will help our trees survive such tough conditions.

To measure the impact of the summer on Perth's trees we will use remote sensing tools. But we need your help to interpret our findings correctly.

To help us, you just need to visit your local bushland, park or streets, and record the health of the trees. We hope you will look at a mix of healthy and stressed trees. For each tree, please note the approximate percentage of its canopy that is healthy, bare, or has dead leaves, and enter it in a web application available here: <https://tree-death-perth.uc.r.appspot.com>, or from the QR code below. Clicking on a map will record where the tree is. Some example tree health ratings are shown on the other side of this page.

You have the option of sharing your name and contact details with us on the web form. Sharing your information is voluntary, and you need only do it once. Your contact details will be used to update you on the findings of this study, and deleted when it concludes.

Thank you for supporting this research. Together we can help plot a climate – resilient future for our city and its vegetation.

Warmly

Sally Thompson

Co-Director, Centre for Water and Spatial Science



Using the Web App

Videos showing how to use the web app are available at the links below.

Widescreen: <https://www.dropbox.com/s/j6j5chscv3ta7uo/wide-screen.mov?dl=0>

Phone:

<https://www.dropbox.com/scl/fi/of36ygigvq456ix8n5y0i/phone.mov?rlkey=464mjgf1iyr7y4dklgqodi02y&dl=0>

Conducting Canopy Ratings.

Live leaves are green and appear healthy.

Bare canopy has lost its leaf area.

Dead canopy contains leaves, but the leaves are dead- e.g. brown or bleached, dry and brittle.

You need only rate the canopy approximately – e.g. to the nearest 10%.



40% Live Canopy

60% Bare Canopy

30% Dead Canopy

70% Bare Canopy

50% Dead Canopy

50% Bare Canopy

100% Dead Canopy

Tree Type

We will ask you to identify the type of tree as best you can. A tree's genus/species (e.g. *Acacia saligna*) or common name (e.g. golden wreath wattle, koojong) is great. Looser identification (e.g. acacia), or a description (e.g. native shrub) is very helpful. If the tree can't be identified, writing "unknown" is fine.

Please try to avoid rating deciduous trees.

Notes

An optional notes field is available if you see factors other than climate that might have impacted the tree health or appearance. Examples include being close to a building site, pruning below powerlines, or heavy flowering.

Want to do more?

UWA CWSS will do additional, in-depth field studies to measure specific tree and canopy health metrics (e.g. leaf water content, leaf chlorophyll content). This work is well suited to a small team of volunteers. If your organisation would like to be involved or suggest a site for such a study, please contact Sally at sally.thompson@uwa.edu.au.