

Gardening Sustainably

Monina Gilbey

Green Gecko
Studios 

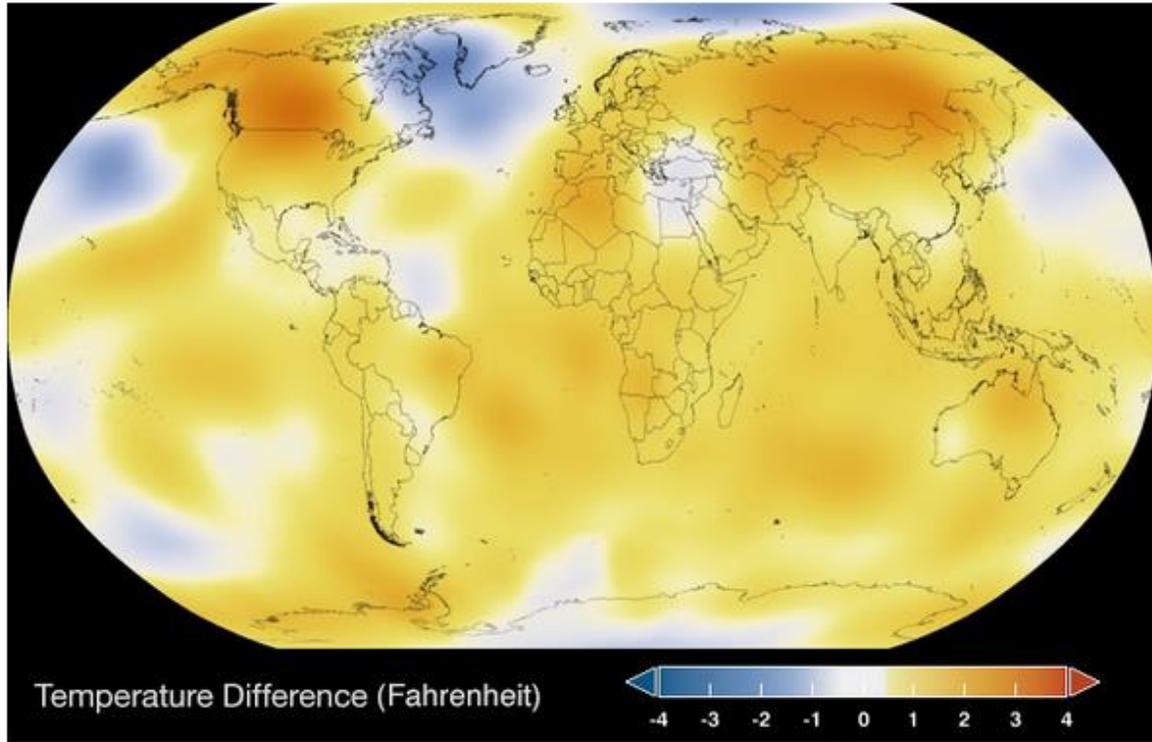
If gardens are a window on our mind,
I see a passion for the European environment that indicates
that **we are still**, at heart, **uncomfortable** in our own land.
**If we see no beauty in Australian natives... can we really count
ourselves as having a truly sustainable future adapted to
Australian conditions? Tim Flannery**

Increasing temperatures

TIME SERIES: 1884 TO 2015

1990

Data source: NASA/GISS
Credit: NASA Scientific Visualization Studio



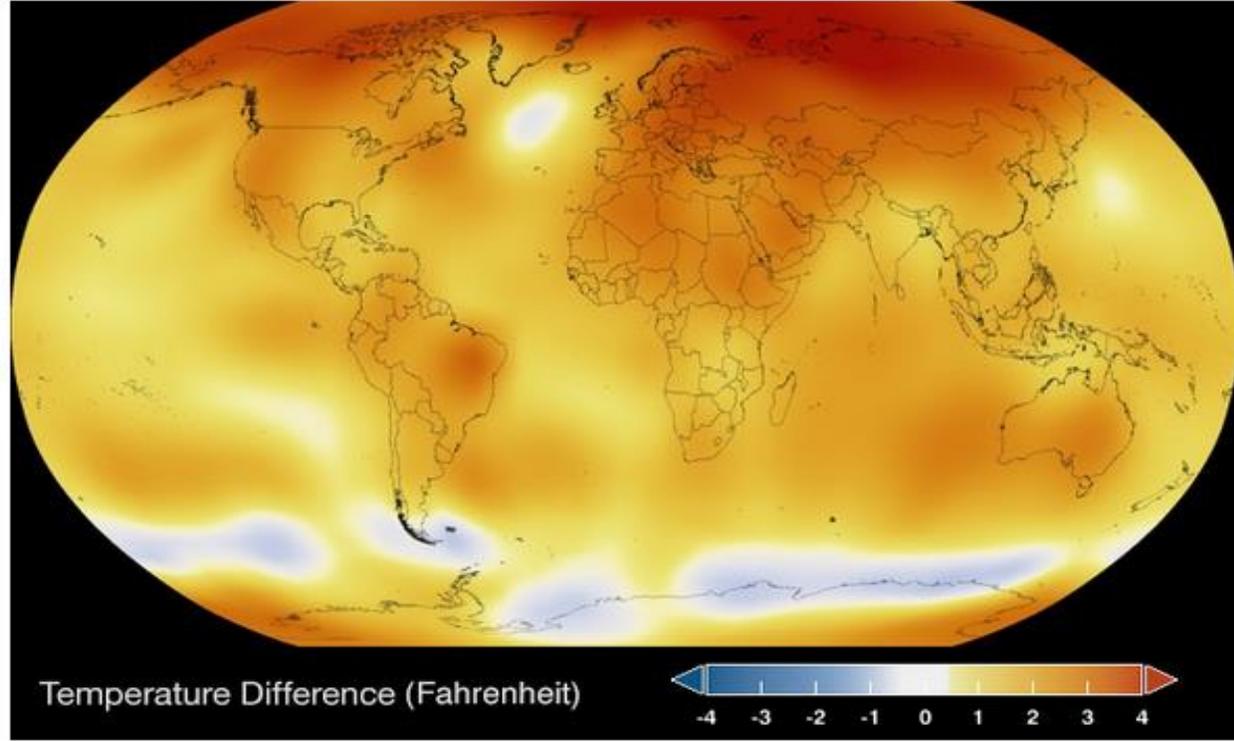
Temperature Difference (Fahrenheit)



TIME SERIES: 1884 TO 2015

2015

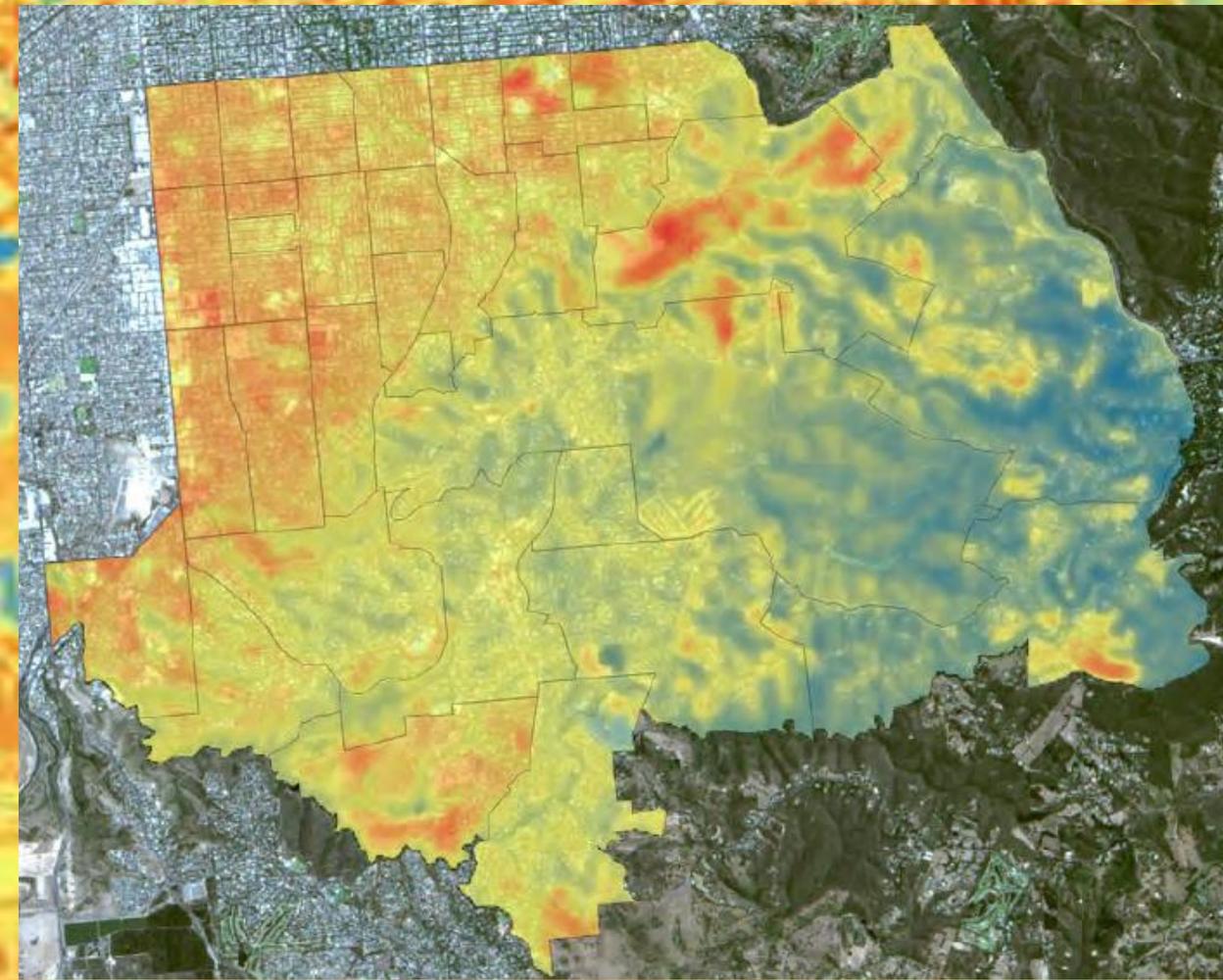
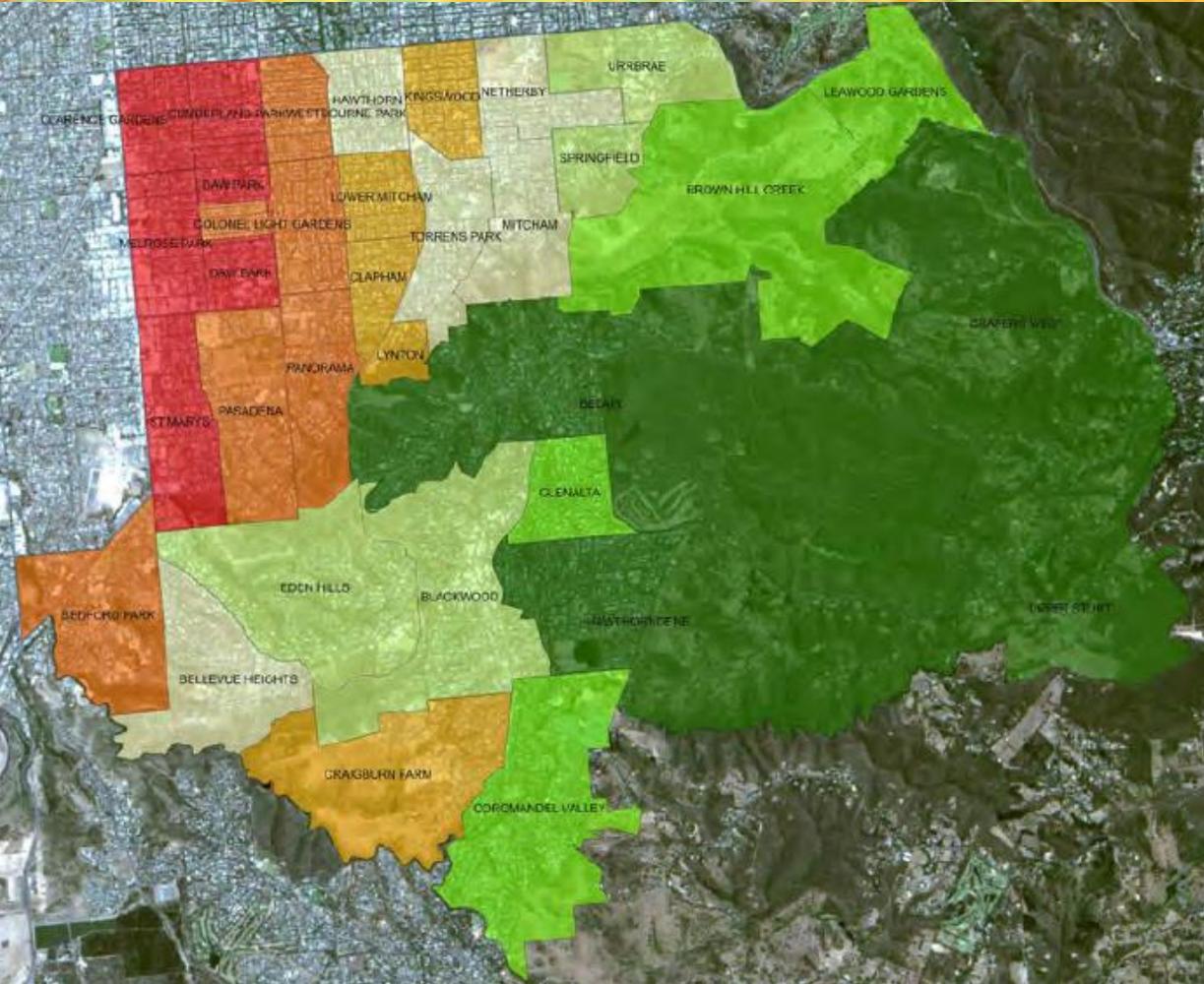
Data source: NASA/GISS
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Temperature Difference (Fahrenheit)



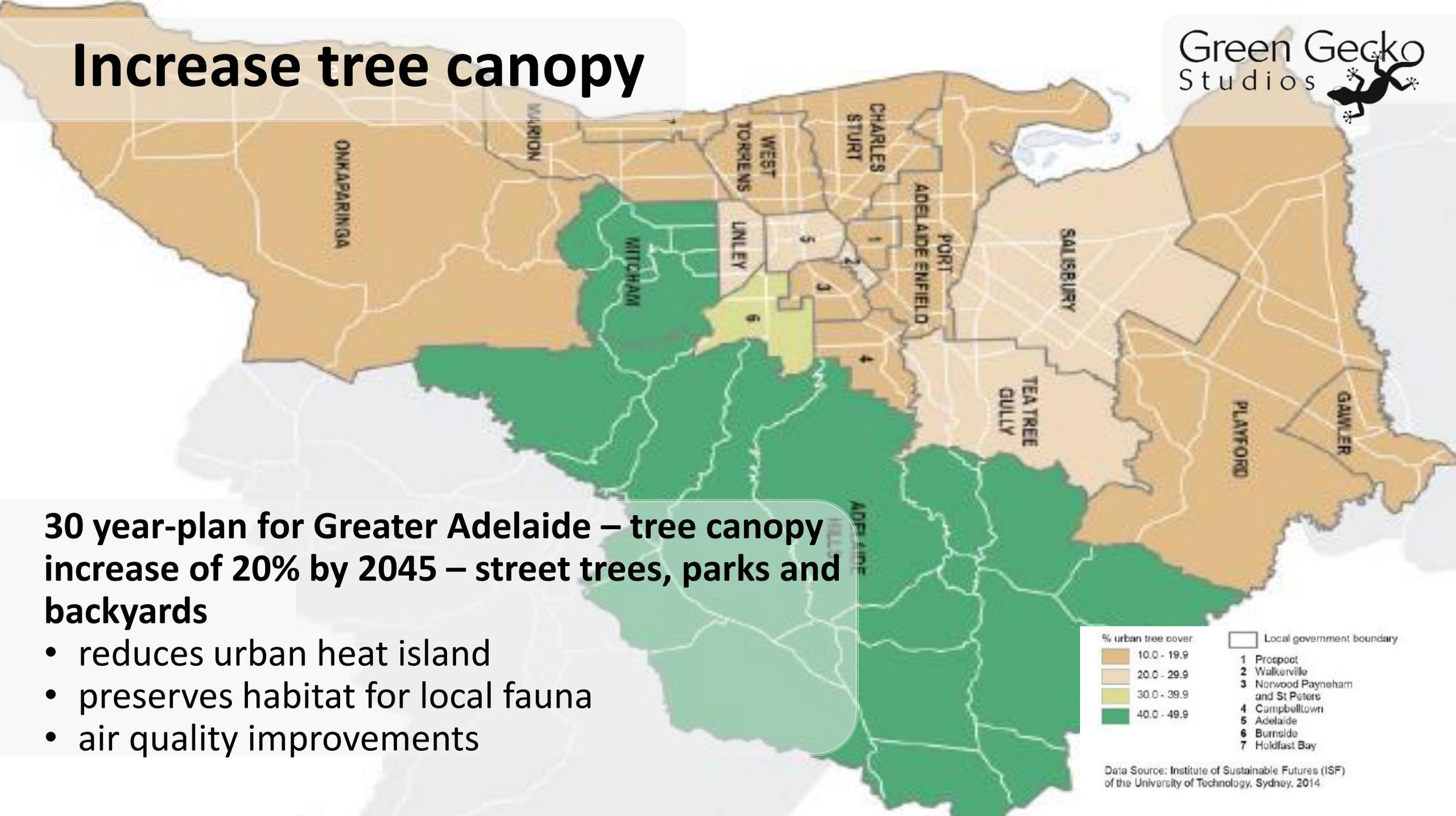
Thermal imaging



Increase tree canopy

30 year-plan for Greater Adelaide – tree canopy increase of 20% by 2045 – street trees, parks and backyards

- reduces urban heat island
- preserves habitat for local fauna
- air quality improvements



Data Source: Institute of Sustainable Futures (ISF) of the University of Technology, Sydney, 2014.

Food choices without bees



Make your more garden sustainable

- Design – integration of planting & landscaping
- Innovation – inventive use of space
- Self sufficiency
- Nature play – engaging children
- Biodiversity



Gardens of Paradise

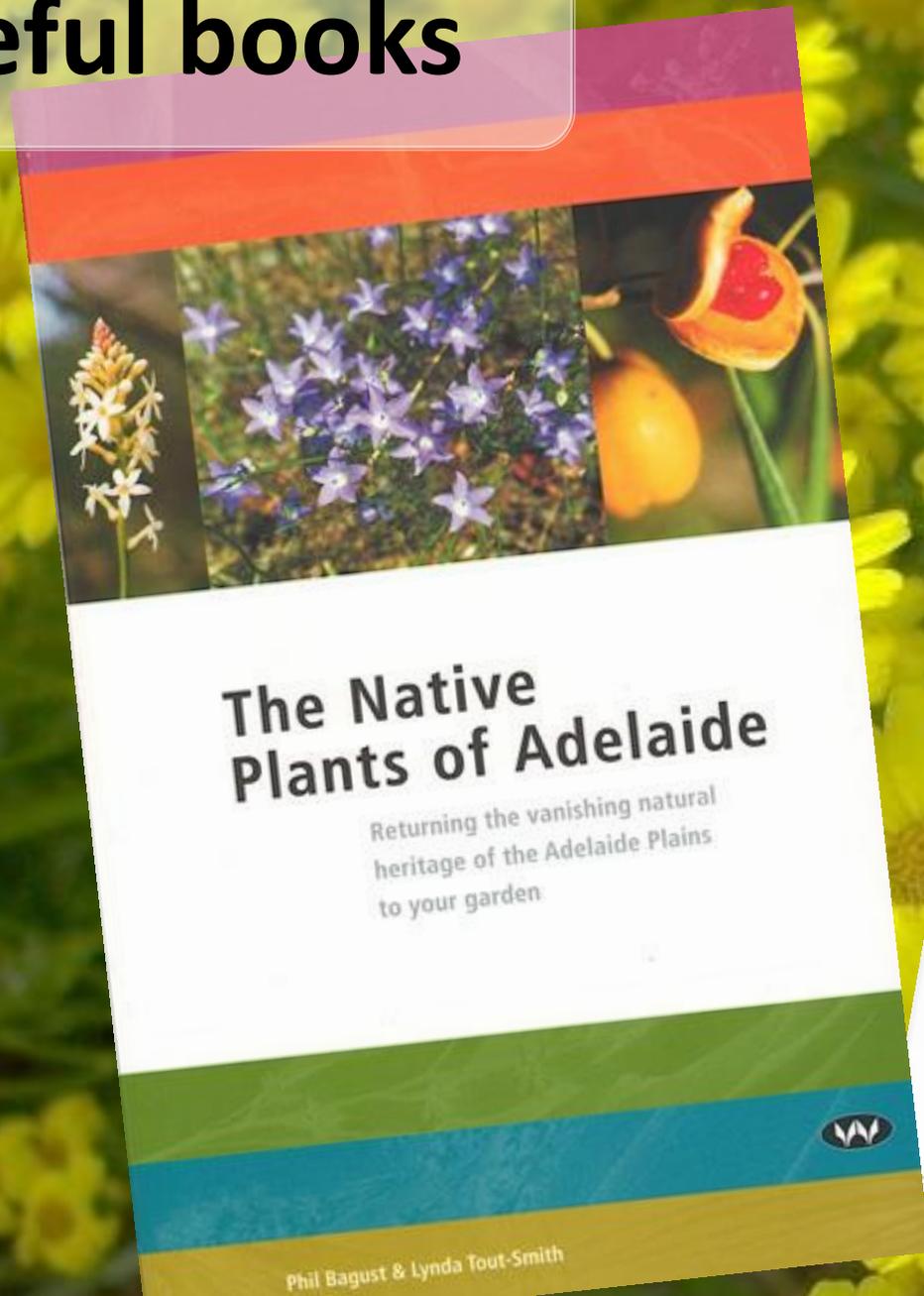


But they are gardens of trees, not of flowers; green wildernesses. Imagine... for days, even weeks, you must ride with no shade, and the sun overhead, and nothing but the bleached bones of dead animals strewn the track. Then when you come to trees and running water, you will call it a garden. It will not be flowers and their garishness that your eyes crave for, but a green cavern full of shadows and pools where goldfish dart, and the sound of a little stream.

Useful websites

- naturalresources.sa.gov.au
- butterflygardening.net.au
- www.npsp.sa.gov.au

Useful books



COMMON

Myoporum species

Boobiallas *Myoporaceae*

Description Ranging from prostrate groundcovers to graceful drooping trees up to 10 m tall, at least five *Myoporum* species are found on the Adelaide Plains.

Leaves *M. platycarpum* (Sugarwood), the only tree in the group, has thin leaves with small serrations near the tip. All the other *Myoporums* have thick semi-succulent leaves.

Flowers Asymmetrical five-petalled flowers about 1 cm in diameter appear in spring, sometimes downy, often with a pattern of purplish spots on the petals and a delicate scent.

Fruit *M. platycarpum* and *M. parvifolium* (the prostrate Creeping Boobialla) have brown papery capsules. The other shrubby species all develop fleshy berries, ripening either to white or a reddish colour.

Distribution *M. acuminatum* (Native Myrtle) and *M. platycarpum* only occur on the northern Adelaide Plains. *M. insulare* (Coastal Boobialla) and *M. parvifolium* are coastal specialists. *M. viscosum* (Sticky Boobialla) was once found scattered in many localities.

Ecology The berries are food for birds.

Similar species The related *Eremophila deserti* (Turkey Bush) is a medium-sized shrub with similar flowers but is rare on the northern Adelaide Plains.

Cultivation Most species are easily grown from tip cuttings, seeds are often difficult to germinate. Some species can be grown from seed by soaking the stone overnight in warm water, while others are grown by fermenting away the flesh and planting the stone.



Myoporum insulare



Myoporum viscosum



Myoporum insulare

The Native Plants of Adelaide

Useful books

Attracting Butterflies to your Garden.

What to Grow and Conserve in the Adelaide Region



HUNT, GRUND, KEANE & FORREST

Butterfly Gardening Reference

Papilionidae Family

Chequered Swallowtail

Papilio demoleus sibericus

Abundance in Adelaide area: Uncommon

Flight: Sep-May

Wingspan: m 72 mm; f 75 mm

Mature larva length: 45mm

This lovely Swallowtail is an occasional visitor to Adelaide in the course of its migratory flights. It will breed here when it finds its caterpillar food plant, but probably cannot survive the winters. Young caterpillars resemble bird droppings during the first four instars, but in the fifth are mostly green. Its caterpillar food plants (Cullen spp.) make an attractive addition to gardens and butterflies can also use the flowers as a nectar source. The Common Grass-blue butterfly also uses these plants for breeding.



Interestingly, the butterfly emerges from the pupa in as little as three weeks or as much as ten months, or longer. This can help the survival of this and adapted species in adverse years.

Caterpillar food plants: Scurf-peas (Cullen spp.). Caterpillars eat the flowers and soft green parts of these annual or short-lived perennial plants.

Adelaide native species: Tall Scurf-pea (Cullen australasicum; previously known as *Phoradendron*).

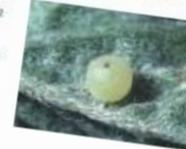
Other South Australian species: Annual Scurf-pea (Cullen caninum), Native Lucerne (Cullen graveolens), Spreading Scurf-pea (Cullen patens).

Though comparatively rare in the Adelaide region, the butterfly still breeds in the area, wherever it encounters the now rare remnant examples of its caterpillar food plant, the Scurf-pea.

The Chequered Swallowtail is one of the largest butterflies regularly seen in southern Australia and as such, with its pale yellow and black colouration and rapid flight, attracts attention from those who have an interest in butterflies.

This butterfly is quite different in appearance from other South Australian species. Firstly it is quite large, being from 72–75mm across the expanded wings. The background colour of the entire wing surface is usually yellow but ranges from near white to quite a deep chrome yellow. On the upper surface of the hind wing, there is a blue and black 'eyespot' near the junction of the outer and upper margins of the wing. At the angle between the outer and lower margins of this wing there is a large red spot, situated at the base of the broad, black marginal marking.

The mature caterpillar is roughly cylindrical and slightly humped towards the head. The body colour ranges from green to yellow-green, with thin black areas between the body segments. There are numerous, black-edged, orange spots, and a yellow line along the lower margin of the body.



Book: 'Attracting butterflies to your garden' available now! Visit www.butterflygardening.net.au for details.

Useful books



Find out more

Videos:

- Marla Spivak – TED Talk on ‘Why bees are disappearing’.
- Gardening Australia: It comes down to love

Book:

- South Australian Native Bees by Susanne Richards

Find out more

Websites:

- honeybee.org.au
- southaustraliannativebees.webs.com
- aussiebee.com.au
- Google “My mum’s garden is a bee hotel”

Find out more



Movies:

- Queen of the Sun
- Vanishing of the Bees
- More than Honey
- Messages from bees – Japanese documentary (some translation issues)

Find out more

Green Gecko
Studios 

Movies:

- Food Inc
- Project Wild Thing



Thanks for your bee-autiful work!