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Managing Mature Eucalyptus Trees in an Urban Environment

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Making progress possible. **Together.**

Smell thegum trees...

- Thank you for the opportunity
- About me..
- My connection with gum trees...the size, the smell, the cool shade
- To share practical experience gained over years... Durbanville 1972....2000...
- Limited specific literature available
- Based on general arboriculture theory



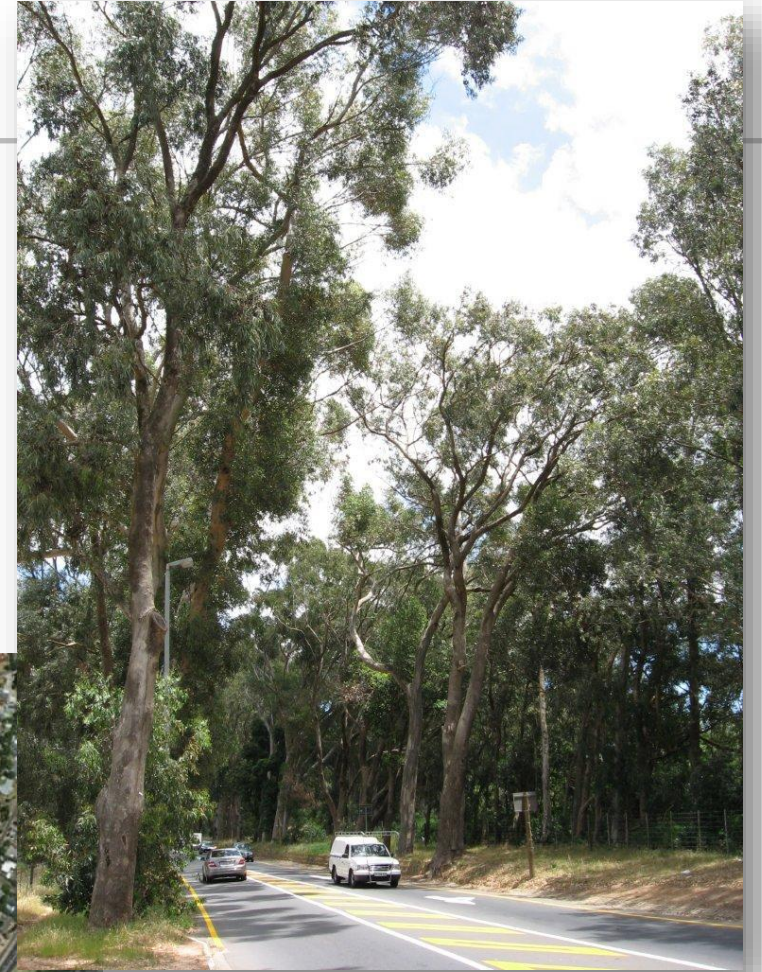
Where they grow

- **Racecourse Road, Durbanville**
- Other locations: Widespread in Cape Town
 - West Coast Avenues: Atlantis, Melkbosstrand, Blouberg
 - Helderberg College Rd, Somerset West (**nearby**)
 - Mitchell's Plain
 - Southern suburbs: Wynberg
 - Informal areas: See pics



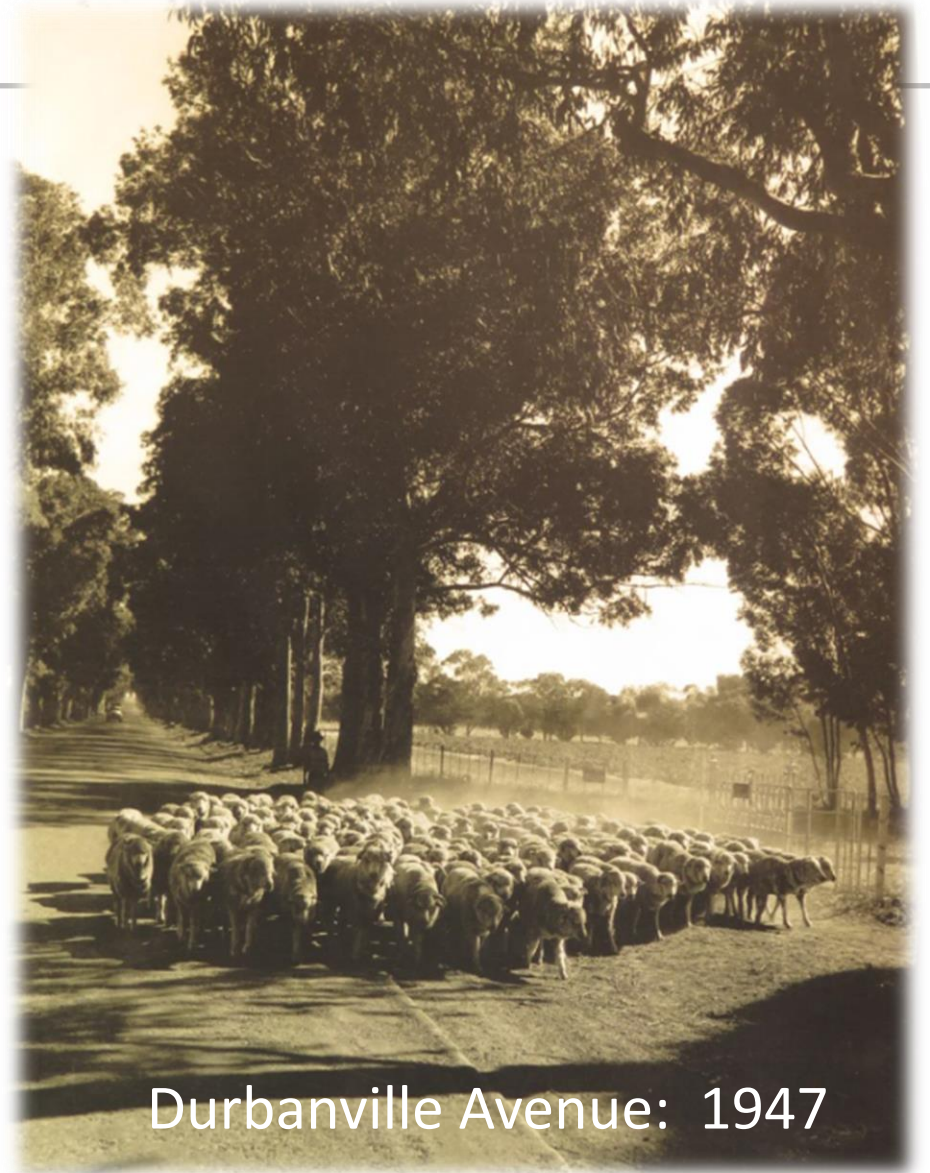
Racecourse Road in Numbers

- Number of trees: 268
- Age: 80-100 years
- Length of Avenue: 1800 meters
- Size of trees: 10-25 meters before topping.
After topping: 7-10 meters



Historical context

- History of *Eucalyptus* in Cape Town and the Western Cape
- First plantations: Worcester 1870; woodlots: supply fuel for railways and mining timber
- To shade farm produce on trucks
- To drain excess soil water in winter
- To beautify

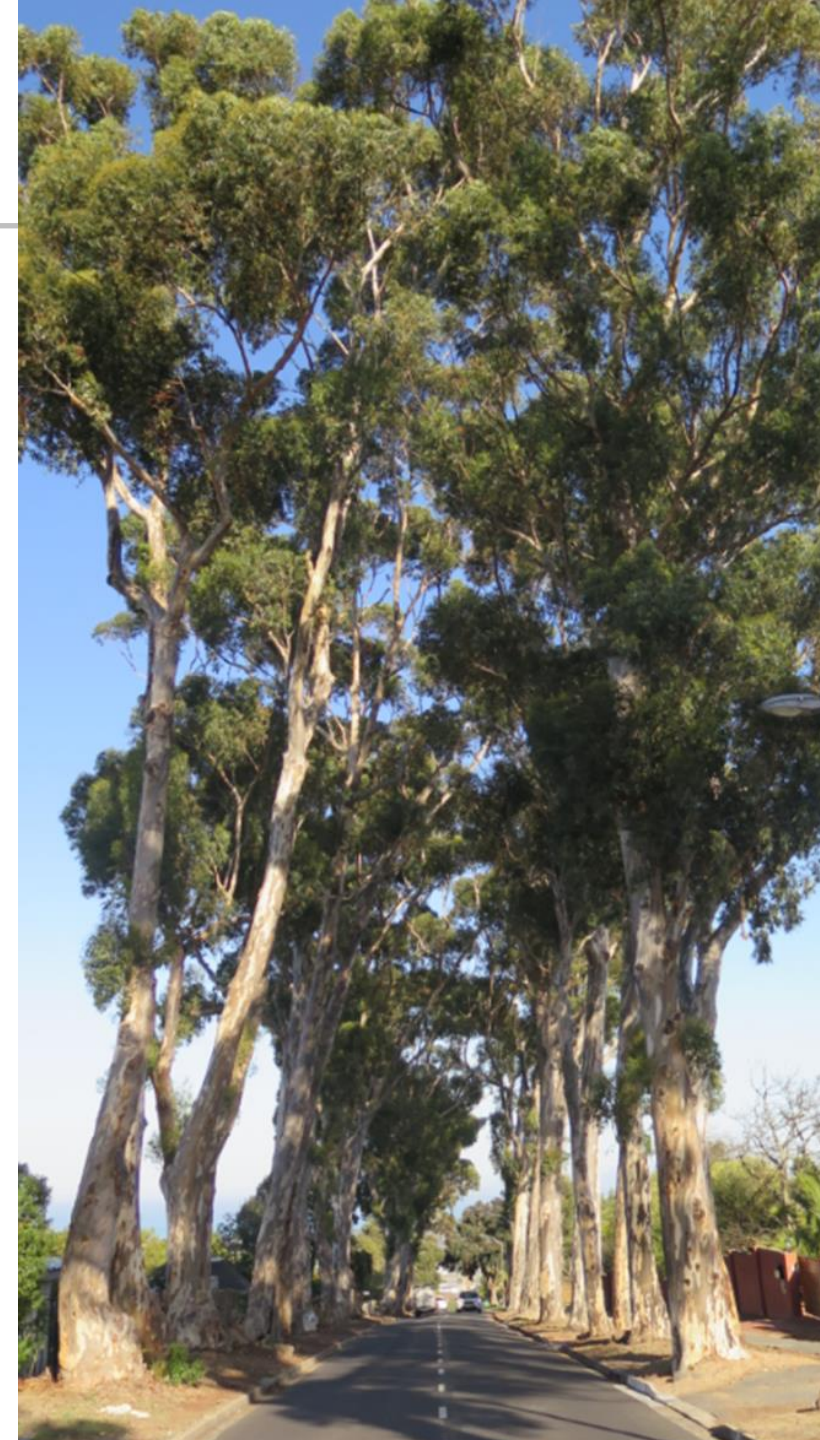


Durbanville Avenue: 1947



Why Eucalyptus?

- An Australian genus of 700 species (also *Corymbia* and *Angophora*)
- Mainly *Eucalyptus cladocalyx* (Sugar gum)
- Also *Corymbia ficifolia* (Flowering gum)
- Benefits (general)
 - Environmental, Economic, Social
- Size and scale: bigger than local trees
- Drought / wind resistant
- PSHB resistant: Increasing importance



Why Eucalyptus?

- Planting program mainly in Cape Flats 1980's. "Greening the City"
- Honey production
- Part of cultural / historical landscape
- Firewood: increasing need
- Timber / pulp



Why Not Eucalyptus

- Size: require space
- Water consumption
- Risk: Branch failures
- Branch drop; summer branch drop
- Public perceptions and opinion (“aliens”)
- Invasive status: NEMBA



Dave Pepler For Blue Gums ("Weg Platteland Winter 2022")

Eucalyptus may be kept and grown...

- In certain arid biomes: Nama and succulent Karoo, Desert biomes
- In cultivated land at least 50m from untransformed land
- Within 50m of homesteads
- Trees in urban areas with a trunk diameter of 400mm or more (in 2014)
- In formal plantations

Water consumption; Estimated at 200 liter per tree per day (large trees)

No proven allopathic effects (soil poisoning)



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Hoekom die
bloekom?

Die reuse van ons landskap – bloekombome – is oor 'n groot deel van Suid-Afrika versprei en bied lafenis aan mens en dier, en veral bye. Tog het dit mode



BO Gaan staan teen 'n bloekomstam en kyk in die lug op. Elke toneel is anders. LINKS Wat is imponanter as 'n laning bloekoms waardeur jy ry? Daar's een by die Montpellier-wynplaas buite Tulbagh, een op die Bakoondpad net buite Koringberg, en dan dié poort tot Porterville as jy op die R44 van Citrusdal se kant af kom. OORKANT Menige bloekom se taak is om aan te kondig hier is 'n plaashuis met lewe. En dan raak sommige boere kreatief met hulle klousie bloekoms... dalk om enige elemente af te skrik?

Public Perceptions

- Media exposure: Positive and Negative
- Sentiment: Rural character vs “threat to property”
- “Water guzzlers”



Management: General

- Management: focus on safety and sustainability
- Identify high risk trees: through routes, sizes, high risk target (road)
- Annual Tree inspections: Incremental approach
 - Visual
 - Self / Consultants
 - Radar / Sonar technology

EXAMPLE OF SCAN REPORT

Legend:

Brown:

Healthy wood

Green:

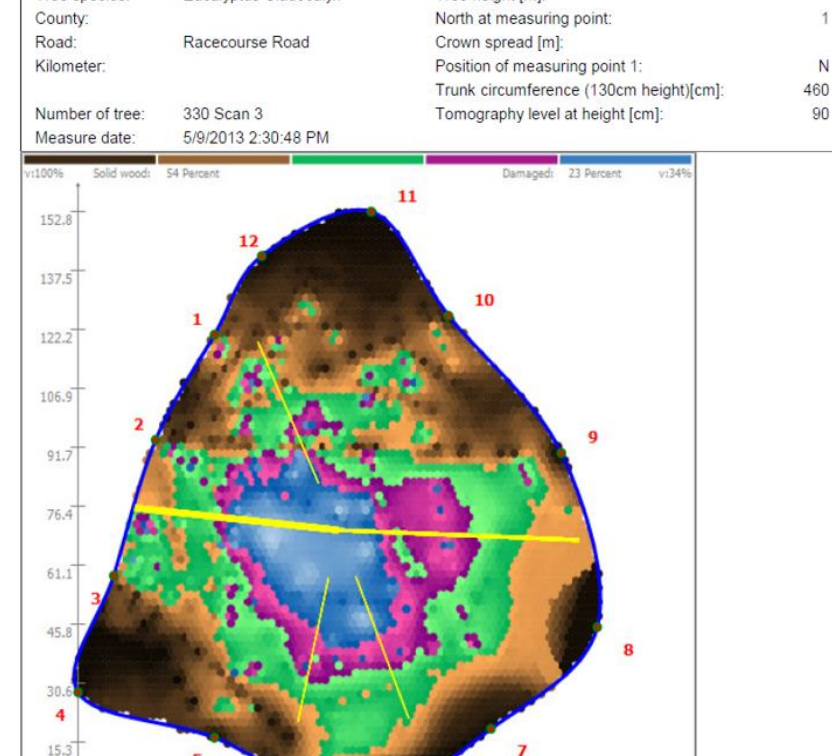
Incipient decay

Violet:

Slight decay

Blue:

Advanced decay



Management Interventions

- Remove dead and dying trees
- Clean out dead / dying material
- Thin / “drop crotch” pruning
- “Lateral pruning”
- “To top or not to top“: guideline: *the very last resort*
- Practical lessons learnt:
 - Public information: media, flyers
 - Traffic regulation: Temporary road signage; flagmen, patience



Management: Topping

- Detrimental to tree health
- Short term benefit “beer money”
- Needs repeat every 5 to 10 years
- Starvation, worse if repeats
- Open wounds: pathogens
- Shock to tree and environment
- Regrowth “broomsticks” needs thinning
- Increased expenses
- Disfigures tree / spoils shape



Threats

- Roads widen / Infrastructure
- Development of land
- Tree theft: Firewood
- Public pressure: fear, nuisance factor
- Political interference
- Likes and dislikes
- Unmanaged risk



Recommendations and way forward

- Protect your trees
- Educate communities about value of trees
- Make sure your trees are safe: annual inspection with record
- Use of Technology: mobile devices to plot and record each tree
- Top only if nothing else works; follow up every 5 to 10 years

My Survey

▼ PHYSICAL DESCRIPTION

Species

Common Name

Height

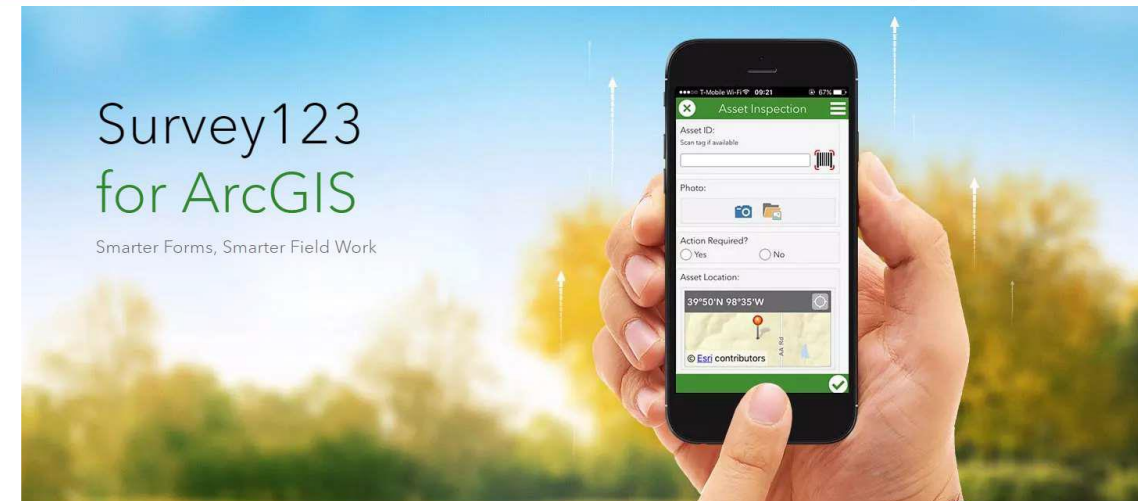
DBH mm (Diameter breast height)

Tree Significance

Overhead Obstructions

Yes

No



References

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- Harris R.W Arboriculture: 1983, Prentice Hall, New Jersey
- <http://www.treesforyou.org/Planting/Pruning/topping.htm>

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Thank You

Making progress possible. Together.