

## Factors Used in Existing AMENITY Tree Valuation Methods (generally for urban areas)

Peter Thyer July 2005

Age	Importance in landscape / Impact
Amenity role / Interest / Attraction	Land type / zoning, public, private, recreation etc
Aesthetic value	Land value
Botanic interest	Land value increase / decrease
Canopy spread	Likelihood of causing damage
Canopy volume	Live crown size (width x height)
Compounded replacement cost	Location suitability
Condition of tree	Market value of tree as a transplant
Cost factor / \$ value unit	Nuisance / Detractions caused by the tree
Cost of maintenance required	Personal association
Cost of small nursery stock	Presence of other trees
Cost to install small tree and maintain to size of previous tree	Price of nursery stock according to tree canopy volume
Cost to clean up damaged tree and site	Price to supply and install nursery stock
Cost to repair tree damage	Public access to the tree
Cost to supply and install equivalent size tree	Rate of growth
Danger caused by the tree	Re-establishment potential (difficulty of establishing new tree)
Diameter at breast height (DBH)	Relation to setting
Endangered / rarity rating of the tree	Remnant of native vegetation
Environmental benefit	Site suitability
Form	Size
Frequency of observation	Social benefit
Frequency of occurrence of the species	Species
Function / Screen / landscape feature	Stress the tree is enduring
Girth	Useful life expectancy beyond present
Growing space available	Vigour /Health / Damage
Height	Visibility
Historical significance / association	Visual impact
Historical listing of the tree	Wildlife habitat
Historical listing of land where the tree is growing	Value to owner / value to community
Others:	

## **Factors that could be used in Amenity/General tree valuation methods**

(Not forestry or crops)

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Air humidification

Air ionisation / de-ionisation

Barrier use, to provide safety and separation of pedestrians and cars etc

Biodiversity support

Carbon sequestration

Chemical air pollution absorption

Climate amelioration

Community 'willingness to pay' a method of polling the community to see how much each household would be willing to pay to keep the tree if it was threatened with removal, then adding up all the household amounts to get a value of the tree to that community

Emotional stress / fear (for people who do not like / are afraid of trees)

Emotional wellbeing (for people who feel happy when they see trees) tree change with season, flowers etc

Equivalent infrastructure, what cost of sculpture, artwork, shade structure, picnic shelter etc would be necessary to achieve similar benefits

Erosion control

Glare reduction

Habitat for beneficial animals / organisms

Habitat for birds, occurrence of birdsong

Improvement of soil and ground water condition

Infrastructure protection eg. Extended bitumen paving life in tree shade

Intrinsic value, just because they are

Noise reduction

Oxygen production

Particulate air pollution binding / absorption

Recreational use

Reduction of heat island effects

Reduction of soil salinity

Reduction of soil water logging

Reliability of performance, age, size etc

Road and urban visual indicator use, to mark town entry, bridges, residential streets, schools etc

Shade

Sick building (environment) syndrome remediation

Soil toxin uptake / neutralisation

Storm water capture and retardation

Summer shade / winter sun provision, degree of solar access when desired

Travel Cost method: How many people and how much are they willing to spend to visit a location because of the tree(s)

Urban forest honey production

Urban forest timber supply

UV reduction and reduced skin cancer risk

Water channel flow control, dispersion, turbulence

Wind shelter

Others: