

NURSERY PAPERS

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Survey of Nursery Industry Attitudes towards the Australian Urban Forest

In order to better understand the attitudes of the Australian nursery and garden industry (NGI) in relation to urban forests, Nursery and Garden Industry Australia (NGIA) undertook a Survey of Nursery Industry Attitudes towards the Australian Urban Forest.

The survey was conducted online via Survey Monkey during September and October 2012 and targeted the retail, production and allied sectors of the Australian NGI. In this month's Nursery Paper, NGIA Environmental & Technical Policy Manager, Dr Anthony Kachenko reports on the key results and recommendations of this survey.

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The Australian nursery and garden industry (NGI) has a lead role to play in servicing, managing and promoting the urban forest, a term used to describe all of the trees and shrubs on all public and private land in and around urban areas (including bushland, parkland, gardens and street trees). The urban forest term is now commonly accepted in town planning and environmental management and has become more widely known in the general community

In April 2012, the launch of the National Urban Forest Alliance (NUFA) resulted in a new era of urban tree management in Australia (www.nufa.com.au). The NUFA arose from the partnerships and collaborations arising from the development of i-TreeEco software for application in Australia. i-TreeEco is part of a suite of urban forest analysis tools and provides information ranging from environmental benefits, canopy and land cover, stormwater analysis, species selection and storm damage management. The tool is currently available for use in all Australian states and territories and can be freely downloaded from www.itreetools.org

The NUFA is a coalition of key not for profit associations, councils and private companies involved with the management and development of the Australian urban forest. Alliance partners represent a vast array of stakeholders and are united in their pursuits. The NUFA envisages a thriving, sustainable and diverse Australian urban forest that creates a healthy ecosystem that is valued and cared for by all Australians as an essential environmental, economic, and community asset. The chair of NUFA is Arboriculture Australia with NGIA acting as the vice-chair.

In order for NGIA to maintain a proactive position on the NUFA and best represent the interests and needs of the Australian NGI, it is necessary to collate the views from the wider industry in order

to ensure industry is a responsible and assertive leader on this key environmental issue as part of its commitment to the NUFA. This report will contribute to clarifying key areas of focus for the NUFA in response to the direct needs of the Australian NGI and determine priorities and next steps for the NUFA to take. This information will also be used to inform, develop and improve industry strategy and policy positions on urban forestry as well as future marketing, research and development investment in alignment with the NGI Strategic Plan 2010-2015.



Survey Objectives

The key objectives of this survey were to identify the:

1. Key influencers for the NUFA to educate on the benefits of the urban forest
2. Benefits, constraints, issues, threats and concerns of urban tree management to address as part of future marketing, research and development investment in alignment with the NGI Strategic Plan 2010-2015
3. Key messages for the NUFA to develop into communications
4. Ideal communication vehicles for delivery of these messages

Methodology

The survey instrument consisted of a short online questionnaire conducted via Survey Monkey during September and October 2012. The questionnaire was designed to collect as much information as possible within the time constraints of an online format. All questions were optional.

A total of 1637 businesses were forwarded the survey by email, including 850 production nurseries and 787 retail businesses. The survey was widely communicated using a range of materials including on the NGIA's Facebook page (www.facebook.com/nurseryandgarden) and website (www.ngia.com.au).

Results and Discussion

Responses were received by 131 businesses (Table 1), an overall response rate of approximately 8%. The majority of responses were received by production nurseries (52%), followed by the retail sector (15%) and allied sectors (10%). An additional 23% of responses were from the education, landscape design and architecture sectors. The majority of respondents identified their primary qualification as horticulture (82%).

Approximately 65% of respondents indicated they were involved in plant propagation/production which reflects the high participation of growers who completed this survey. Only 3.1% of respondents indicated they were involved in both strategic planning and tree urban forest management.

Table 1: Survey participation by region

State/Territory	Total Responses
QLD	23
NSW & ACT	33
VIC	28
TAS	4
SA	10
NT	1
WA	22
N/A	10
Total	131

Of the respondents surveyed, 36% offered a consultation service on urban trees to other persons or organisations (Figure 1). These results suggest an opportunity for growth and value add for respondents surveyed.

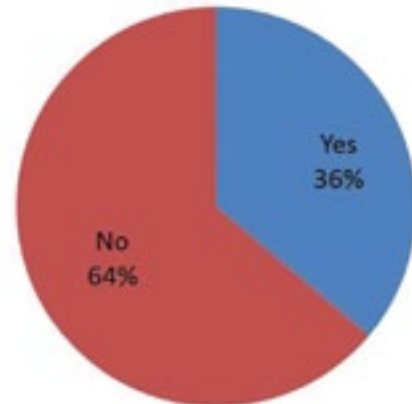


Figure 1: Percentage of survey respondents who offered a consultation service on urban trees

Target Stakeholders for the NUFA to Contact

It is important to prioritise stakeholders to ensure key messages developed by the NUFA and allocations of resources for communication of these key messages are prioritised accordingly. Respondents were asked to rate a range of target stakeholders for the NUFA to contact on a scale of 1 (least important) to 5 (most important). Local Government was the most important stakeholder identified by respondents (66%) followed by town planners (54%) and the community (50%; Figure 2). Respondents indicated that the least important stakeholder is the nursery industry (31%). These results are aligned to the industry needs as identified in the Nursery and Garden Industry Strategic Investment Plan 2012-2016.

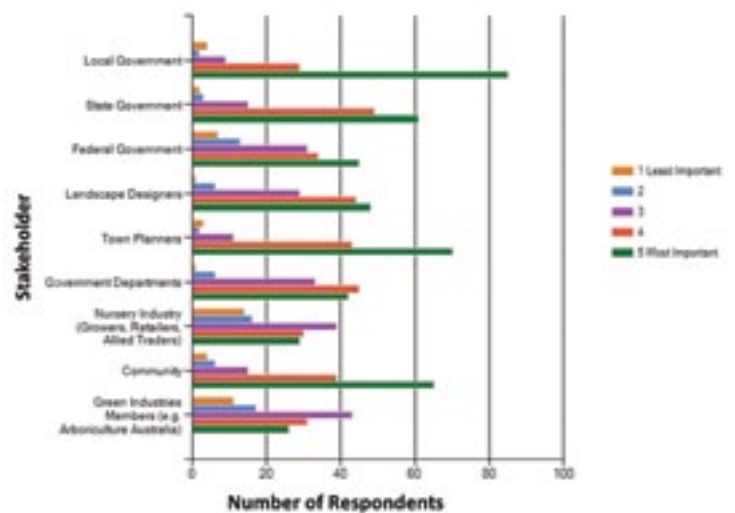


Figure 2: Summary of most important stakeholder to educate as indicated by survey respondents

Benefits of Urban Forests for the NUFA to Target in Future Communications

In order to prioritise messages detailing the benefits of the urban forest to key stakeholders, respondents were asked to identify the most important benefits of the urban forest. Respondents were asked to rate a range of benefits of urban forests for the NUFA to target in future communications on a scale of 1 (least important) to 5 (most important). The most important benefits of trees as identified by respondents include the environmental (63%), ecological (46%) and social/psychological (43%) benefits (Figure 3). Cultural/heritage was the least important benefit for the NUFA to target in future communications (5%). These results support efforts by the nursery industry to reinforce the environmental benefits of trees using tools such as i-TreeEco.

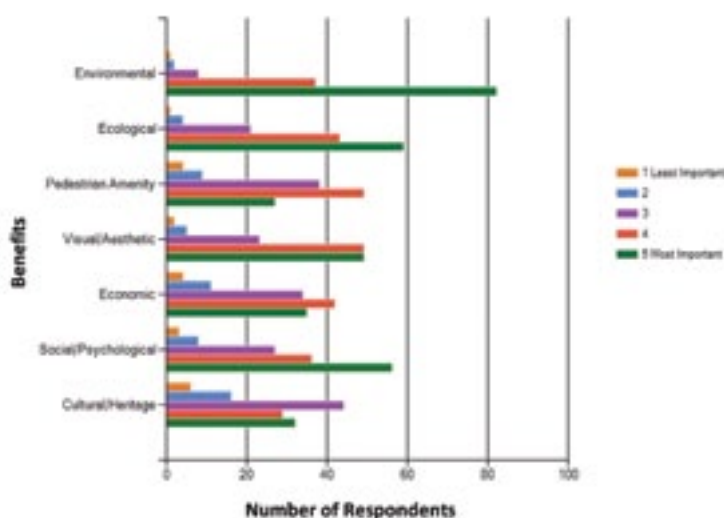


Figure 3: Benefits of urban forests for the NUFA to target in future communications as indicated by survey respondents

Concerns Regarding the Urban Forest

Lack of knowledge about the urban forest is one of the primary concerns that the NUFA wants to mitigate. The survey asked respondents to quantify their opinions on which concerns regarding the urban forest the NUFA should focus on. Respondents were asked to rate a range of concerns regarding the urban forest on a scale of 1 (least important) to 5 (most important). Approximately 64% of respondents indicated that the most important concerns the NUFA should focus on include the education of Government and Regulators followed closely by the education of consumers on the benefits of urban tree planting (58%). Of least concern to the respondents was mitigating issues/problems with tree propagation/production (19%).

Threats to Urban Forest Planting

There are a variety of threats which range from financial to regulatory in nature that impact on current and future urban forest developments. Respondents were asked to rate a range

of threats to urban forests, on a scale of 1 (least important) to 5 (most important). Lack of knowledge by others (46%), lack of political support (44%) and planning and development policies (40%) were the most important threats identified by respondents to urban forest planning (Figure 4). These results were similar to Ely (2011) who also reported the lack of knowledge by others among Australian street tree practitioners as a threat to urban forest planting. Respondents indicated that public liability (damages and injury) were the lowest threat to urban forest planning. These results clearly demonstrate the need for the NUFA to develop and maintain strong linkages with regulators and the authorities to address these threats and develop workable solutions beneficial to all stakeholders.

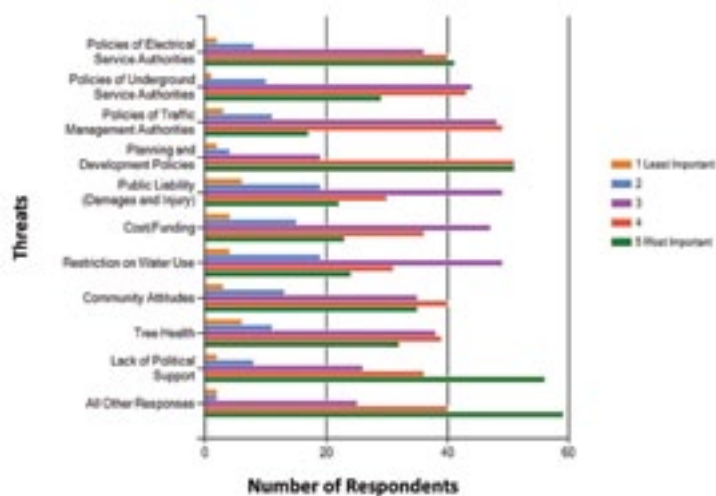


Figure 4: Threats on urban forest planning

Tree Species Selection

Respondents were asked to rank practices that apply when plants are purchased by stakeholders in order for the NUFA to better understand stakeholder needs. Survey respondents indicated the most important attributes of trees when purchased by stakeholders included height (78%), availability and cost (71%), and drought tolerance (70%). Conversely, recommendations by utility agencies (20%) and community consultation (13%) were the least important attributes of trees when purchased by stakeholders. These results reflect the need for increased attention on the 'right tree for the right place'.

Future NUFA Communications

The most appropriate communication method for communicating NUFA's objectives with stakeholder groups identified by survey respondents was articles (33%), websites (32%) and workshops (30%). These communication channels will be investigated further as part of NUFA as well as activities undertaken as part of the NGI Strategic Plan 2010-2015.

Additional Survey Comments

Respondents were also invited to provide any additional comments, with 35 respondents doing so. Comments covered a variety of

topics including threats to the urban forest as well as opportunities for further education. A selection of these comments was as follows:

- There remains an obvious ignorance in sectors of the public as to the value of trees, not only for environmental benefit but in terms of increasing real estate values.
- I would love to see a resource (online) where simple calculations for carbon sequestration and other economic benefits of popular species can be worked out (estimates would be fine) by anyone using the tool. I fear that the only way to encourage tree planting by home-owners is for them to see a financial or environmental benefit.
- I think the main bit of information we require is how much carbon different tree species trap, to help promote trees to the home owner and other planters.
- Small size blocks inhibit the spread of the urban forest. It's up to governments at all levels to legislate change to planning laws.
- I think education is the most important aspect of urban forest management. We need to educate the government as well as the community so we can work together to establish and maintain a health functioning urban forest.
- Education of consumers and the wider community on the benefits of urban tree planting should continue as a priority for industry, particularly in relation to quantifying the environmental, ecological and social/psychological benefits of urban forests. Local Government and town planners should also receive targeted education about urban forest benefits.
- Industry should look at ways to address issues of issues/problems for planting trees in urban relating to poor tree health and damage to infrastructure as part of selecting 'the right tree for the right place'. This approach should also balance availability and cost with considerations such as tree height and drought tolerance.
- Future communications regarding the NUFA's objectives and benefits of urban forests should consider editorial and written media, websites and workshops and should target key stakeholder groups.

The results from this survey will assist the NUFA and NGIA set priorities and identify opportunities in servicing, managing and promoting the urban forest as part of the Nursery and Garden Industry Strategic Plan 2012-2015.

Conclusions

This study provided comprehensive and reliable information on industry attitudes in relation to urban forests using a web based survey during September and October 2012. The survey targeted the retail, production and allied sectors of the Australian nursery and garden industry.

The survey explored the attitudes and perceptions of respondents in terms of the urban forest benefits, problems, constraints and threats, as well as, the best way for the NUFA to communicate its objectives. The following recommendations have been developed on the basis of this survey.

- The education of Government and Regulators on the benefits of urban tree planting is paramount in order to drive change and greater adoption of urban forests.



Acknowledgements

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Reference

- Ely, M. (2011). A survey of attitudes and practices of Australian street tree practitioners.

Further Information

For additional information, consult the following nursery papers which are all available electronically from www.ngia.com.au

- **Mitigating Extreme Summer Temperatures with Vegetation.** Issue Number 5. June 2012
- **Estimating the benefits of Australian Street Trees using i-Tree Stratum - A Pilot Study.** Issue Number 8. October 2011.
- **Working Towards Greener Cities: A Report From the Urban GreenScapes Symposium 2009.** Issue Number 2. March 2009.