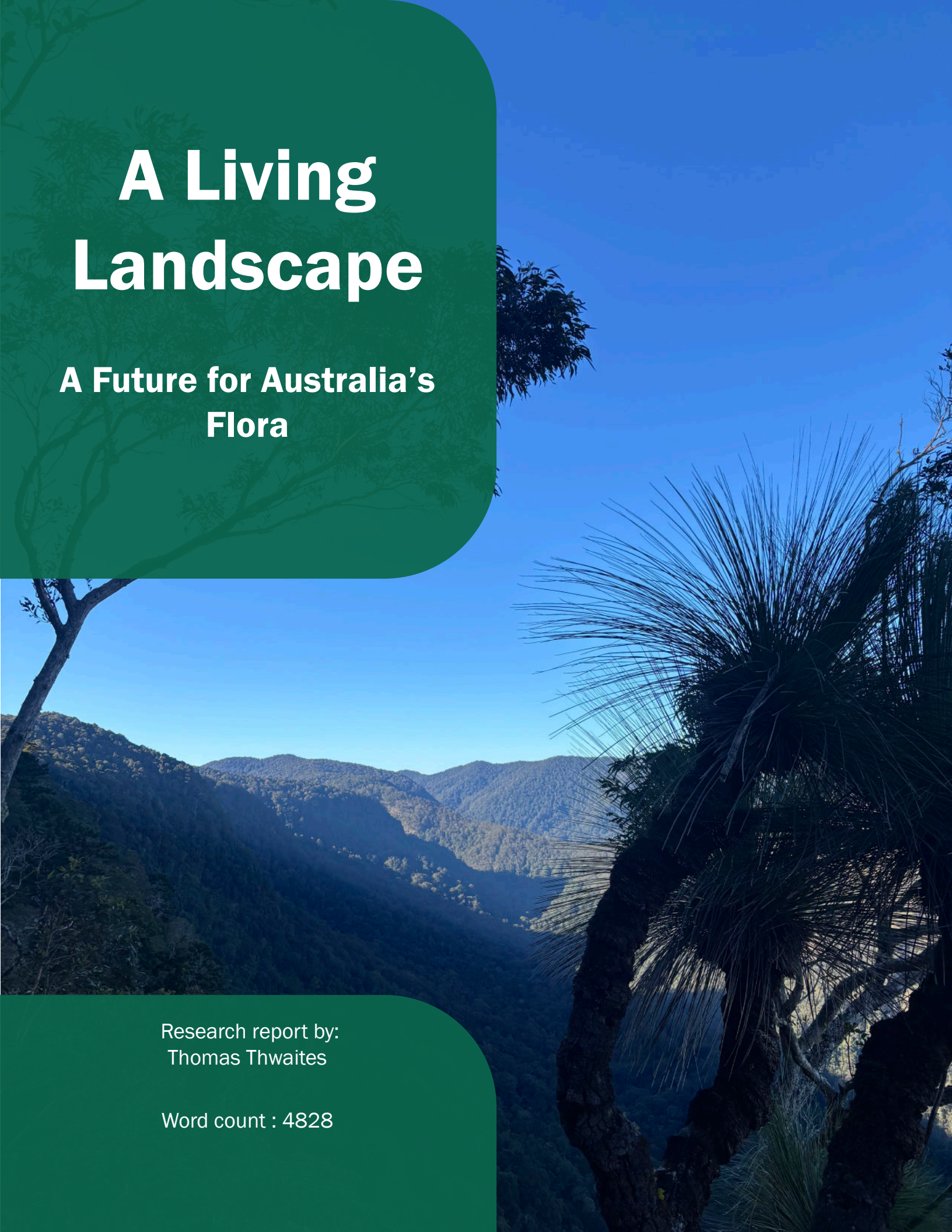
A Living Landscape

A Future for Australia's Flora



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Executive summary

This report will explore the challenges that flora conservation faces in Australia. Australian flora populations have been experiencing mass amounts of decline in native and endangered species. Aspects such as deforestation, climate change, and land degradation all lead to this problem growing year after year.

The research conducted throughout this report explores existing products, current systems, and policy. Primary research was also conducted through interviews and surveys with industry experts. Benchmarking provided key insight which was driven through secondary findings and provided clear gaps within the market. By addressing these gaps within the market and flaws within the current system, there is an opportunity to create impactful design which is presented through understanding design opportunities.

Statement of Authenticity

This is to certify that to the best of my knowledge, the content of this report is my own work. This report has not been submitted for any subject or for other purposes. I certify that the intellectual content of this report is the product of my own work and that all the assistance received in preparing this report and sources have been acknowledged.

Thomas Thwaites, n11280611
6/09/2025

Statement of Use of AI

I have utilised Generative AI in this report (ChatGPT) to assist in multiple ways.
(1) Research and resource collection
(2) Editing and word count reduction across the report

Thomas Thwaites, n11280611
6/09/2025

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Section 1

Introduction

While many people focus on conservation of fauna, Australian flora is under far greater threat. Associate Professor Vanessa Adams (University of Tasmania, 2023) states that Australia is bult up of almost 88% endemic species, meaning they are unique only to Australia. Whilst Australia hosts this wide pool of diversity amongst its unique climates, these species are under threat from deforestation, climate change, and land degradation with massive effects form the 2020 wildfires that destroyed great amounts of natural habitats effecting 587 threatened plant species (Gallagher et al., 2021), emphasizing the importance of ensuring protection native flora.

This environmental pressure intern creates challenges within flora conservation such as access to seeds for future conservation, funding, planting efficiency and poorly structured policies. To best address these challenges the entire process of flora conservation from the collection of seeds to the post planting care will require in depth analysis to ensure the longevity of Australian eco systems.
This report will investigate existing systems and products through secondary research and benchmarking. Qualitative and quantitative analysis methods of primary data will also be performed to better understand industry experts struggles within the current processes. This data will then be utilised to develop design opportunities to assist within those processes (Figure (1)).

The purpose of this project is to better understand the pain points and struggles throughout the flora planting process to further assist and develop conservation efforts within Australia and create meaningful impact throughout the country.

Figure (1): Project structure

Background

Australia is facing many large issues when it comes to conservation of flora. These issues range from general policy, post plant care, seed banks, and current planting systems. State by the DCCE It has been found that between 1995 and 2017 there has been a 75% decrease in threatened plants population (Department of Climate Change, Energy, the Environment and Water, 2021). These alarming statistics can also be seen between 2021, in which 1395 plants were considered under threat (Dcceew.gov.au, 2021). This number of threatened plants has now grown to 1,700 in 2025 (Dcceew.gov.au, 2022).

Government Policy and Legislation

One of the primary system put in place by the government is the carbon credit scheme (ACCU) (Australian Government, 2024). This system is in place to reduce greenhouse emissions. The primary fields that implement this system are agriculture, waste management, forestry and other carbon producing projects (DCCEEW, 2024). These policies create an environment for lack of accountability with ASU stating that 45% credit area cells did not satisfy the Clean Energy Regulator's first regeneration gateway (Australian National University, 2024). This means that they are providing assurance that any form of regeneration is occurring. This ability to be able to easily manipulate the policies provides a system that prevents conservation from being performed for benefits of companies that create a lot of environmental harm.

Mining is a massive part of Australia economy and contributes heavily to creating environmental disruption. According to Mudd, in 2003 it was estimated that mining had disturbed 165,00 ha and has only preliminary rehabilitated 36,952 ha (Mudd, 2007).

This type of disruption with minimal compensation shows major issue into policy and enforcement by the government. Current system such as environmental impact statements provides a great insight into how much damage companies are causing to the environment (Queensland Government, 2025). This type of infrastructure is effective and meaningful action that provide resources to develop appropriate carbon offset. This process, however, requires massive amounts of land to have plants introduced into when mines are not filled due to cost. Due to the lack of restriction of replanting effected areas this leads to 95% of located land for planting being not comprehensively cleared, meaning this planting may affect a perfectly healthy habitat that hasn't been affected from clearance (Australian National University, 2024).

Other issues such as seed collection for seed banks can be seen to be lacking as there is a 'lack of national industry standards for this process'. (Broadhurst, Waters and Coates, 2017) This means that because of mass habitat loss from fires (Gallagher et al., 2021) combined with the lack of funding, seed collection and conservation is limited. Seed banks play a valuable role is creating a secure future and supply of seeds and play a direct role in supporting biodiversity and ecosystems (Wambugu, Nyamongo and Kirwa, 2023). Developing systems to benefit seed banks is vitally important for Australia to further maintain our unique flora diversity.

Background

Current mitigation management

Planting stages can be broken up into three primary section these are, Pre-planting, planting/ dispersal, Post planting care (Maher and Auldist, 2022). These three areas have subcategories that create up this process as seen in Figure 2.

The most common method for environmental growth is based around tree planting companies in both carbon planting and tree farm planting. This form of planting trees is effective but can be seen to cause fatigue as 60% of their maximum heart rate through a singular working day (Hodges and Kennedy, 2011). There is also a correlation with effort over experience as experienced planters can plant more due to consistency of effort over skill (Hodges and Kennedy, 2011). This shows that current planting methods require physical ability to increase efficiency and that there is a lack of opportunity for skill to be developed to increase planting efficiency.

Research has also indicated three different methods of seed implementation; local provenance, predictive provenance, and admixture provenance *(Appendix (1))*. Utilising an admixture approach provides the best resilience to habitat fragmentation and climate change (Breed et al., 2012). This is also supported through Adrienne Basey enforcing reintroduction efforts benefitting from this process which can allow for endangered species to thrive within environments again (St. Clair et al., 2020). This form of supportive planting in a polyculture arrangement allows for growth of native plants and opportunities for biomimicry.

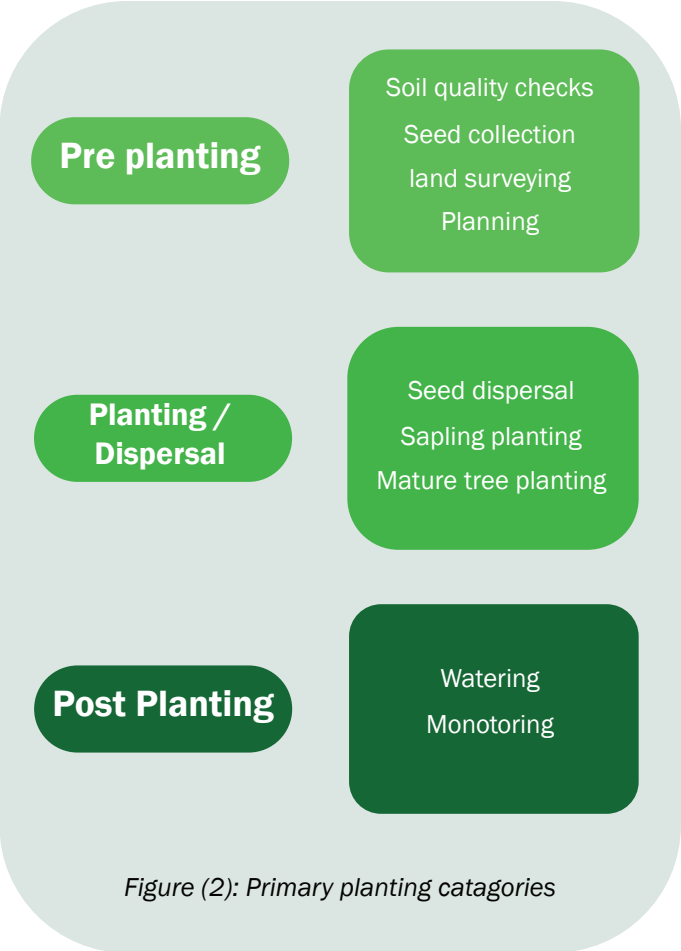


Figure (2): Primary planting catagories

Once plants have been introduced into a new environment through planting there is a vital after-care process that is often overlooked. When introducing plant into new environments, especially arid ones, neglecting post plant care can lead to increased mortality rates (Gann et al., 2019). Efforts however can be seen to be counteracted through post-planting care allowing for the newly planted species to be affected by harsh conditions. Efforts seen within Africa to hold back the Sahara utilising the 'Green wall' show that there are possibilities to allow for post plant care without requiring human intervention (UNCCD, 2023).

Benchmarking

The following benchmarking will look at the existing products in place to assist with seed collection, planting, and post planting. This market analysis will identify key gaps that will allow for design implementation to be discovered. Developing an understanding of the current market allows for patterns, trends and key insights to be identified to help guide future products.

Seed collection methods

Seed collection is a vital part of maintaining and ensuring the continued existence of plant species and further development of natural habitats *(Wambugu, Nyamongo and Kirwa, 2023)*. Seedbanks are a massive contributor to the storage and protection of species that can also be utilised for planting to further grow ecosystems. To be able to provide seeds to these facilities, collection of seeds needs to be performed, which is seen to be a slow and tedious process that is required to follow strict guidelines to prevent further damage *(Florentine et al., 2023)*. Six main methods of seed collection have been identified as seen in *figure (3)*. These methods have been rated on a scale out of sixty to be able to identify the holes within the market and which current methods are best use. .

Methods	Mechanical harvesting	Direct collection from plants	Collection from the ground	Seed nets	Wild collection	Farm collection
Efficency	8	6	6	4	7	2
Seed quality	7	9	7	8	9	10
Plant health	6	7	10	10	10	10
Low intensive Labour	9	2	2	10	2	5
Seed diversity	5	10	10	3	10	6
Consisetency	10	8	6	6	7	10
Cost	2	10	10	9	10	7
Total	47	52	51	50	55	50

Figure (3): comparing seed collection methods on a 1-10 scale on efficiency, seed quality, plant health, Low intensive labor, seed diversity, consistency, and cost

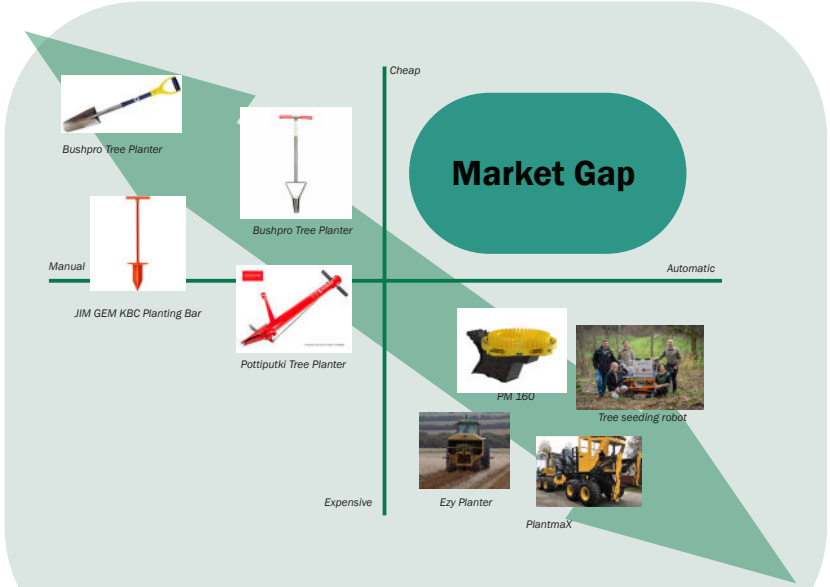
From this graph the highest score was Wild collection which can be a mixture of both plant and floor collection. This method allows for unique and endangered species to be collected whilst also identifying natural ecosystems through collection. Tools used for this method can still be seen to be slow and ineffective. The worst method within these metrics was the mechanical harvesting robot as this provides a quick form of collection but is still limited by where it can be utilised, cost, and its collection of diverse and rare seeds.

Benchmarking

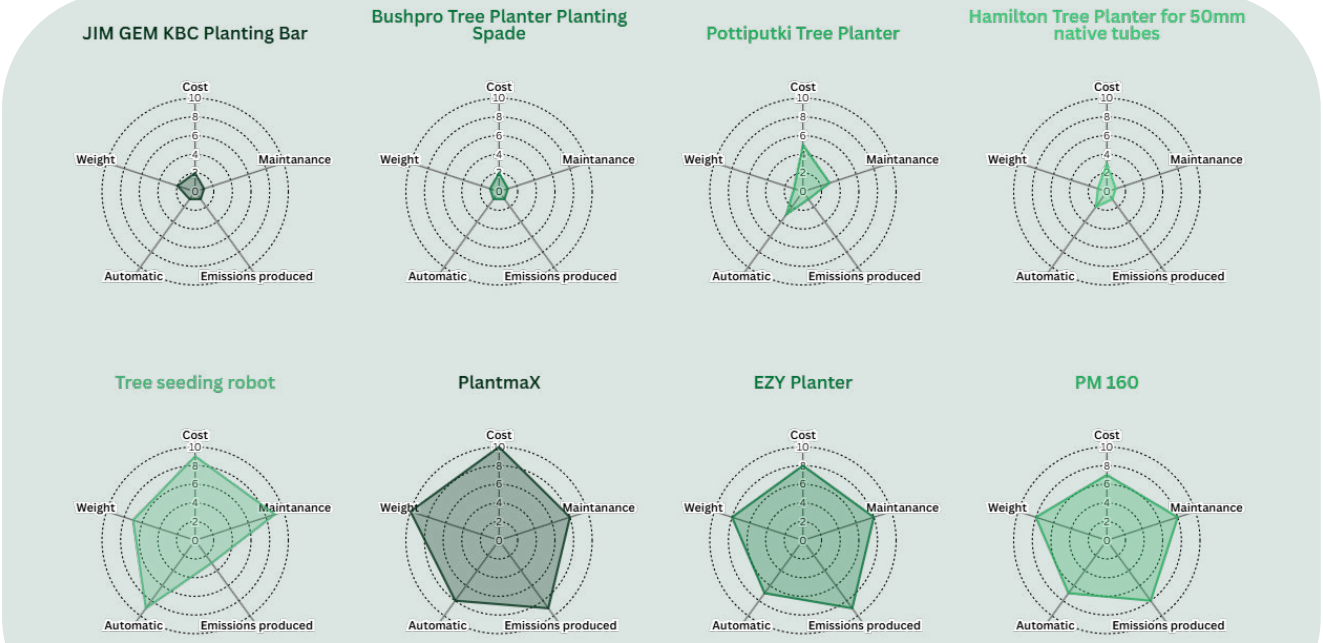
Planting products

Planting tools and products have been seen to create a very wide gap within the market. This gap seen in *Graph (1)* compares products on a cheap vs automatic matrix. This same process was performed across the same products for four other criteria as seen in Graph *(2)*. This comparison allows for insight into why current methods may be utilized or avoided. This also allows for an understanding of weak points and opportunities within the market across a large array of criteria.

The current and the most popular methods are shoveled but as stated before within research this can lead to fatigue (Hodges and Kennedy, 2011), in turn leading to slower work rates. These graphs show a massive lack of products that provide a cheap and automated process with minimal maintenance. This also corelates to emission produced which can be seen through the utilization of heavy equipment when automatic the process. All affordable options have minimal to low automation requiring labors activity.



Graph (1): Matrix comparing cost and automation of planting products



Graph (2): Spider graphs comparing all analysed products on Cost, weight, maintenance, emissions produced, and automation.

Benchmarking

Post plant care

Post plant care covers a wide range of methods from irrigation and special seed coatings to specially designed pots to promote growth. This process is vitally important to assist in maintaining a long-lasting ecosystem. Each of these methods benefits a specific part of the plant growth process. To better understand how each type of method will affect post planting a table has been made that ranked each method against each other when comparing stages of growth and the mortality rate of the plants Figure (4).

	Seed	Seedling	Sapling	Mature tree
Reticulation	3	1	1	3
Manual watering and monotoring	4	2	4	4
Land Life Cocoon	2	1	5	5
Seed coating	1	3	6	6
Rain / Weather	6	5	3	1
Fertelisation	5	4	2	2

Figure (4): Comparing different post-planting care methods and products across the four main stages of plant growth on a 1-6 scale.

From this analysis each process is better at different stages with some providing more support across the whole process. Products such as the land life cocoon developed by land life company (Landlifecompany.com, 2022), provide high quality support at early stages of development but are outgrown and seen to drop in effectiveness. Systems such as reticulation are seen to be effective across the whole process but require high costs and a lot of maintenance Appendix (2). There is a lack of products that assist through the whole process to a high level but products that assist greatly across multiple areas. This shows that there is room for development in post planting care for a wholistic design.

Benchmarking

Market gaps

Utilising the key identified stage of the planting process figure (2). Key market insights have been discovered for all three stages.

Stage 1: Seed collection

Seed collection is a very long process that still needs ways to more efficiently collect and store seeds to assist in seed bank growth. Looking towards more automated systems that provide consistent results and that is cost effective would highly benefit this area of the process. Along with these attributes being able to collect and identify rare and native species would create a better chance of maintaining and expanding the native flora species in Australia.

Stage 2: Planting

The planting process currently can be seen to still be dominated by manual labor and light weight tools. Implementing a solution that increases efficiency, allows for faster planting through skill and technique and provides a simple and easy to use product and providing affordable automation would really create change within this stage.

Stage 3: Post-planting care

This final stage of the process still is in need of a product that would allow for an overall better mortality rate throughout the entire process. There are currently some effective solutions to individual stages but still lack covering the entire seed to mature tree lifespan.

Section 2

Research

To conduct affective primary research a clear approach needed to be developed. To ensure a wide range of data being collected triangulation was implemented. This process allows for higher quality data and provides insight into a wider range of individuals. This form of collection also allows for a wide range of unique data types to be collected. These data types can range from different levels of quantitative and qualitative data types (Heale and Forbes, 2013). This method was achieved using multiple surveys and interviews. (Figure (5))

To develop the question that would be asked within both the surveys and interviews, the primary data that was compiled from section one was utilised.

Recruitment for interviews was performed through outreach via email. These emails were provided with all appropriate forms and sent to potential participants to inform them of the report and interview that they could participate in. For the public survey, an access link was posted on multiple forms of social media and forms which allowed for access to many participants. The professional survey was emailed and posted on social media platform to be taken via professionals listed.

2 surveys

1 - Profetional or experianced survey (12 responses)

2 - General public survey (53 responses

3 Interviews

1 - Tree planter

2 - Tree planting facilitator

3- geologist and mining expert

Figure (5): Surveys and interviews conducted

Surveys

Two surveys were conducted ranging from a general survey to understanding how much people from the public know about conservation and current systems in place. The public survey utilised quantitative data to best represent groups' views on topics whilst minimising misinformed results (Oldendick, 2017).

A professional survey was also conducted that focused on collecting data from experienced planters or industry experts within the related fields. This survey relied on quantitative and qualitative data to best create an understanding from a wide range of industry experienced people (Mays and Pope, 2000). This survey was only supplied to know experienced or industry professionals to maintain validity of data collection.

Interviews

Three semi-structured interviews were conducted for this report. Two of these interviews were permitted for use within this report. These interviews were picked to target all three key areas of the planting process (Figure (2)). The two permitted interviews were industry professionals from planting facilitators and organisers and a mining professional and geologist. This range of participants allows for a broad and diverse understanding of the whole process. The format for these surveys was one online 20-minute interview and one in person interview. A range of questions were preparade before interviews that allowed for flowing conversation. Due to the nature of semi structure interviews further question were asked to elaborate on new topics or themes that were brough up within the interview ((Wholey, Hatry and Newcomer, 2015, pp.492–505), (Mays and Pope, 2000)).

Analysis and Findings

To best extract qualitative and quantitative data from the primary research, analysis methods were implemented to best understand trends, challenges and opportunities within qualitative and quantitative data..

Interviews

To best extract qualitative and quantitative data from the primary research, analysis methods were implemented to best understand trends, challenges and opportunities within qualitative and quantitative data.
Each interview was recorded and transcribed on Word. Each of these transcripts were edited and analysed utilising thematic coding (Appendix 5). The coding was used across all interviews to identify the themes and trends. These themes and trends were broken into subcategories *figure (7)* and provided with one to two quotes to support these claims (Appendix (5). Along with quotes and highlighted text being implemented, a count was conducted when each subtopic was talked about to provide a form of quantitative data to better understand how frequently these topics were mentioned.

From these interviews there were some primary topics discovered *figure (6)*. These topics were found to be the most prominent and recuring among all interviews conducted.

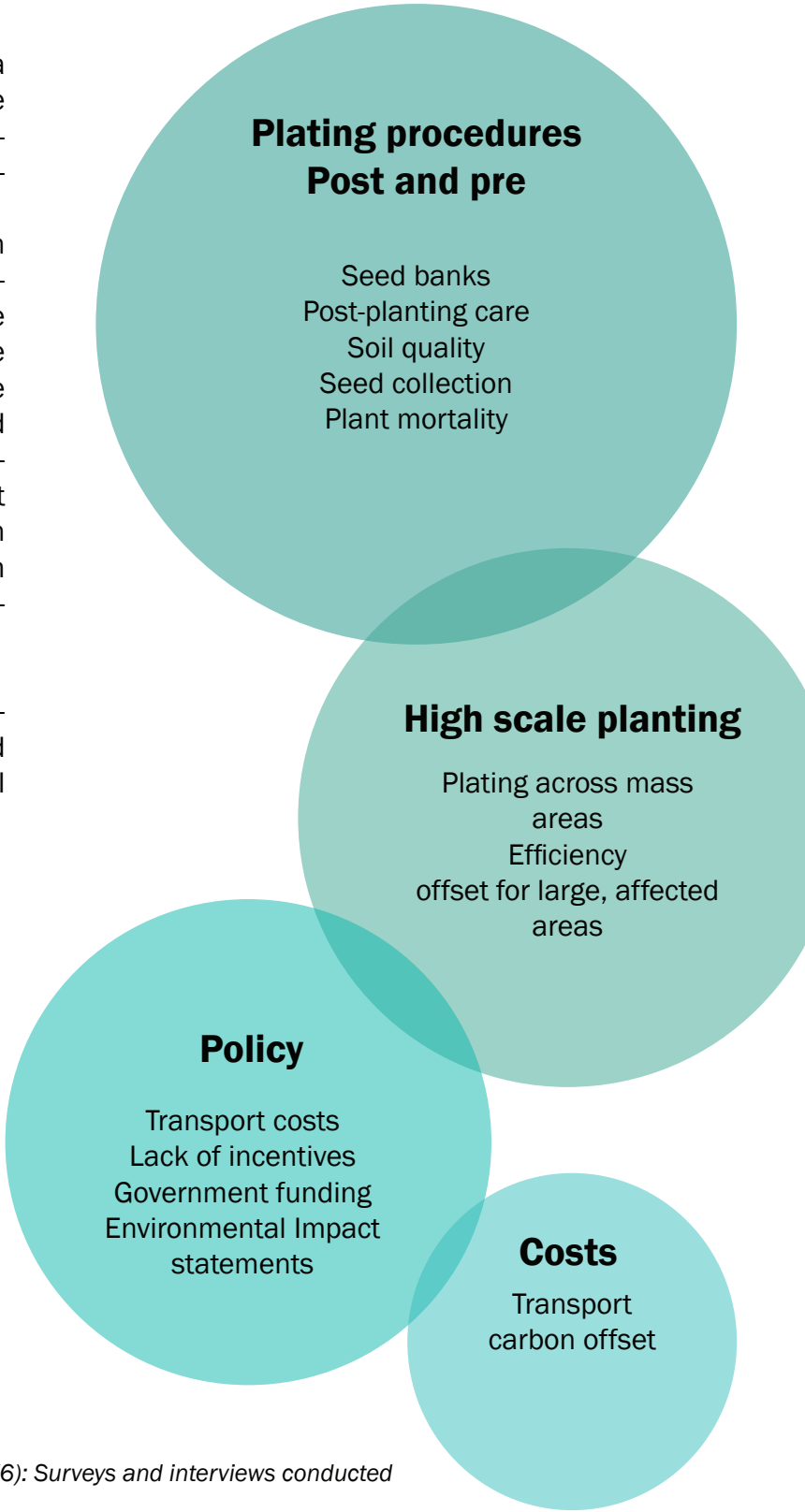


Figure (6): Surveys and interviews conducted

Analysis and Findings

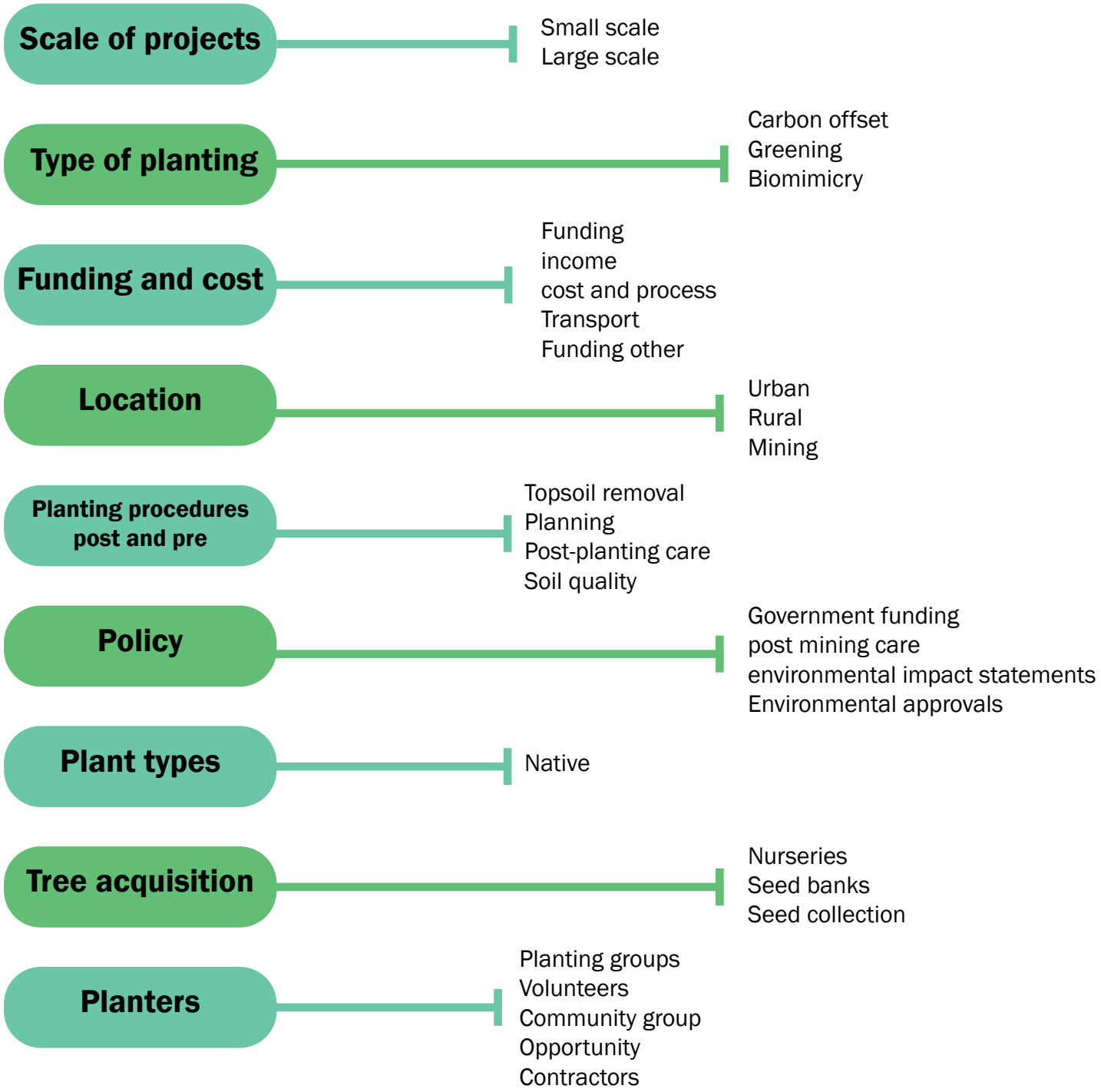


Figure (7) coding catagories and sub catagoties

Analysis and Findings

Planting procedures post and pre

Pre planting and post planting was the main area covered within the interviews. The primary sub-section within this trend was seed banks and post plant care.

"So there there's a need to also create seed banks and harvest seed to reseed areas." - Andrew

This shows a need for seed collection within mining and restoration projects. Whilst the collection is required it was also seen that the care for the plants post planting was also something that was needed to be accommodated for especially when planting across different areas for carbon offset.

"But the plants die. They they don't survive. So anything that sort of could improve the levels of success in combination with employment of locals." – Andrew

High scale planting

Findings from the interviews indicated that there are many issues within funding, seed collection, post planting care, and a focus on large scaling planting. A key insight was from the interview with Andrew where it was stated:

"it was probably 5 or 6 kilometres long and maybe 2 kilometres wide. Plus, it's it's waste dumps which would be similar footprint size." – Andrew.

This alongside with the notes from Colleena Fillipa going against targeting access to people to this service as it is already abundant.

"I don't think there's a lack of opportunity. Yeah. I think the opportunities are there. People are not taking them for some reason." – Colleena Fillipa

This primary data has led to an understanding that focusing on larger scale planting and conservation efforts would be the best area for the most impact possible.

Analysis and Findings

Policy

Policy was also a major aspect of each interview. These policies dictate process, restrictions, costs, and accessibility for further improvement and growth. Overall, the views on policy were not completely negative but showed major room for improvement. Good areas for policy were the carbon off set requirements for mining and environmental impact statements.

"Environmental impact statement and requirements that were put on the mine was to ensure post mining rehabilitation" - Andrew

"The other aspect is that when you get environmental approvals for mining, you disturbing areas and sometimes you don't actually revegetate the area that you've mined because it's left as a big hole." - Andrew

These policies also create carbon planting companies who utilise this system to assist in achieving those rehabilitation goals. Whilst this work Andrew is clear about how flawed the system still is.

Costs

Costs and funding were major issues brough up by Collinne who works with finding smaller companies compared to Andrew who works within giant corporations. These cost issues create limitations for transport, growth, and further development.

"The cost of transport we've just paid. Ohh my God $800. Not for the plants and not for the tree guards, but for the transport of it all up up to Mildura." - Colleena Fillipa

These costs of equipment and transport can overwhelm companies. Government assistance with these programs is also a key aspect of funding and would benefit smaller and larger groups greatly in remote locations.

"The government's making. You know, millions out of this pre labour. The very least they could do is, you know, support them and if they needed water, a water tank, you know, get them one sort of thing." – Colleena Fillipa

Surveys

Two surveys were conducted collecting a wide range of data from the public and professionals. The public survey focused on collecting qualitative data that represented sentiment and awareness of current problems that currently exist.

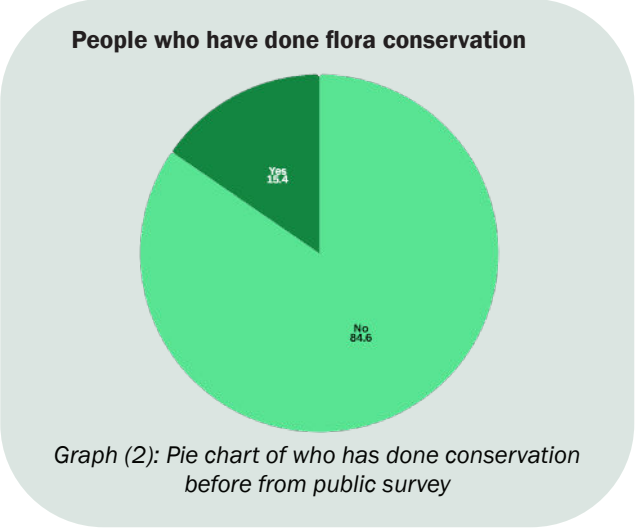
A survey was also conducted for professionals that utilised qualitative and quantitative data. This had a wide range of experienced experts and tree planters who were able to create unique insights.

Analysis and Findings

Public survey

A public survey was conducted that was posted on multiple social media platforms. This survey was utilised to collect a wide range of data that allowed for insight into issues and sentiment felt by the public. 52 people filled out this survey with a diverse spread of ages and genders partaking within the survey. All questions asked were quantitative based answers with three questions asking for a rating scale of 1 to 5 Graph (3).

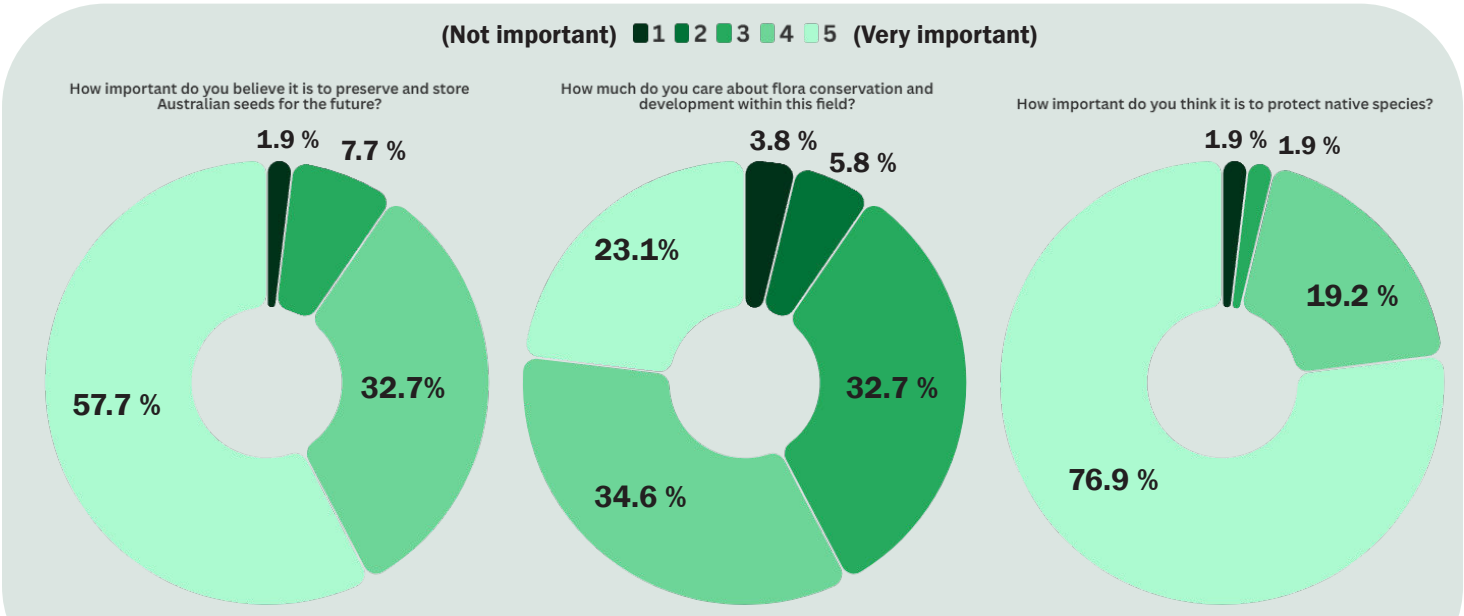
This data showed that whilst only 15.4% of people had done a form of flora conservation Graph (2) 76.9% of people believe it's very important to protect native species (Graph (3)). It can also be seen that 57.7 % of people believed it was very important to preserve and store Australian seeds Graph (3) with 59.6% of surveyed people know of seed banks (appendix (4)). This data shows that whilst people are showing a high level of care for maintaining, restoring and conserving Australian flora, people aren't willing to act.



Graph (2): Pie chart of who has done conservation before from public survey

Participants were also questioned on whether they knew the current carbon token system in Australia with 80.8 % of people answering no (Appendix (4)). This shows that people aren't informed about the policies and how carbon emissions are being handled effectively.

This public survey showed an abundance in care for conservation and preservation of seeds and native plants. This was also matched with an interest in seeing development within the field at 57.7% of people believing it's important or higher (Graph (3)).



Graph (3): Doughnut charts of the three ranking questioned ask within the public survey

Analysis and Findings

Professional survey

A second survey was developed which looked at targeting industry professional or experienced plantes *Appendix (3)*. These professionals were asked a range of questions with multiple choice and short-term responses being provided. This data was then analysed for trends with coding *graph (5)* and univariate and bivariate analysis of responses.

It was found that most participants planted native species with a primary focus in native seedlings. A key takeaway from understanding what people plant, is that no-one claimed to plant seeds. This key insight is important to understand, especially when it comes to people who work at seed banks as they would have easy access to this option.

One participant, who was a tree farmer mentioned that whilst planting native species only, they didn't utilise seed banks or any form of seed collection. This lack of seed implementation can be seen as a trend amongst participants *graph (4)*. Outliers of this trend were seed bank managers and carbon planters who state that they always collect seeds from the surrounding areas *graph (4)*.

Comparing two participants who conducted this survey it can be found that there were some major contradictions within the data provided. The first participant who work with seed banks planted in both urban and rural environments, utilising seedbanks "Always" and doing the same for collecting seeds from the chosen planting location. This person utilised endemic planting, meaning only planting from the chosen location. This correlates with the seed collection method in place and provides a key insight into how seedbanks utilises the provided resources to develop the existing area. This planting type combined with the fact that they plant for polyculture supports the trend of planting for biomimicry and developing planned environments that mimic the surround one.

Graph (4): Hierarchy graph, Participants and how often they collect seeds from surrounding locations

In contradiction a volunteer tree planter claims to "Never' utilise seed collection of any kind. This person also claims to plant native species in a polyculture approach, meaning they utilise a mix of native plants but not inherently the native plants located within the area. This shows a break in methods and approaches to planting and lack of seed collection can be seen as a trend amongst majority of participants as stated before in *graph (4)*.

Analysis and Findings

Coding analysis

Coding was also performed on the short answer question to find trends and themes amongst the participants. These themes were then compiled into a Sankey table to analyse common trends and themes found across all the participants and better reflect qualitative data collected graph (5).

What would benefit from change?

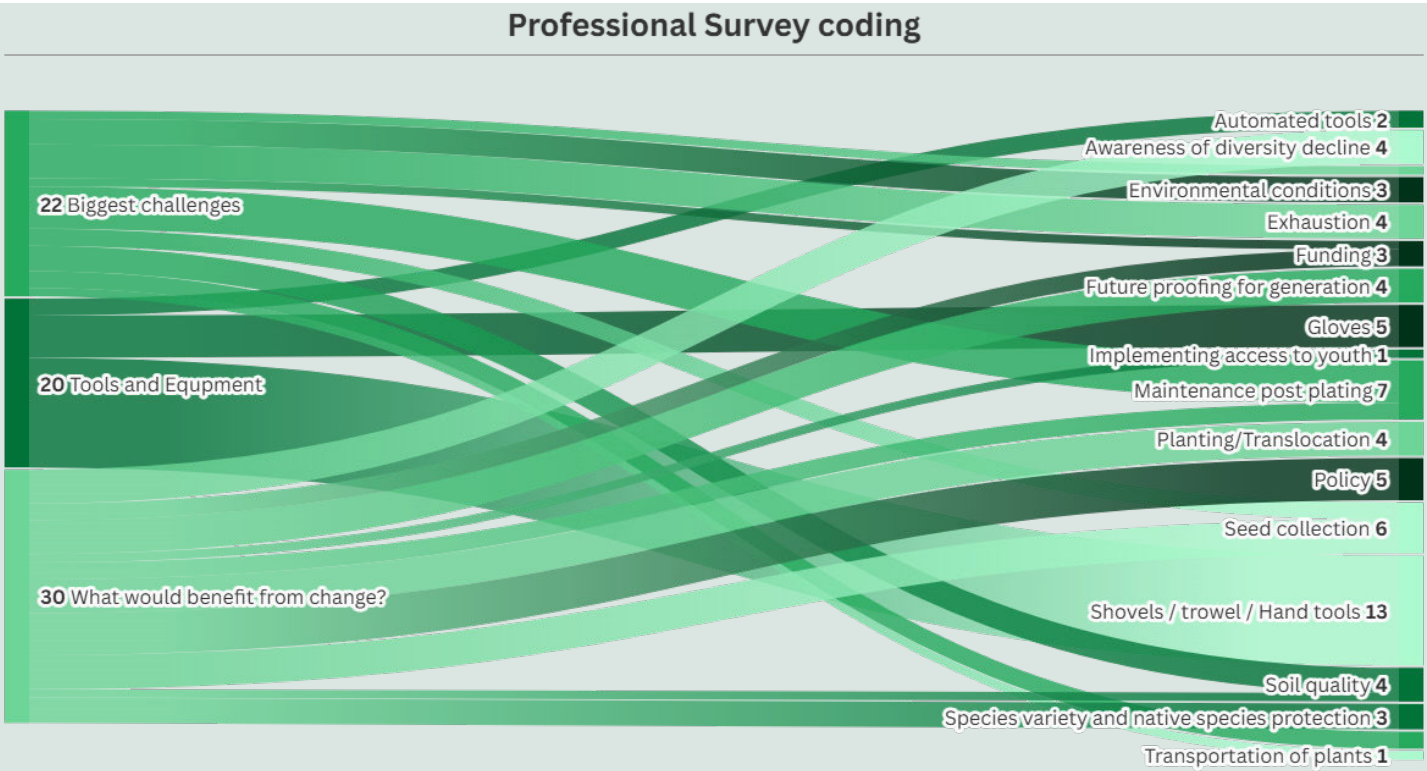
The biggest challenges identified were seed collection (6), maintenance of post planting (7), and policy (5). There were very few topics that had a low number of appearances showing that these themes are a strong trend across the whole field.

Tool and Equipment

The primary tools and equipment used were shovels/trowel/hand tools (13). This was the biggest trend across all aspects of the data collection graph (5). Comparing this to the challenge of planting/translocation having a higher trend as well as exhaustion shows reference between these manual labor processes and challenges.

Biggest challenges

The biggest challenges can be seen to be exhaustion (4), Maintenance post planting (7), and soil quality (4). These trends show a correlation with the other questions, providing great insight into themes that are create challenges for people within the field.



Graph (5): Sankey graph of qualitative data collected from professional survey

Section 3

Discussion

The background research conducted within this report developed an understanding of how the current planting process figure (2) faces issues that limit the ability to develop better results and success rates of flora conservation. Using this research in combination with primary data from industry experts, the following section will highlight the primary themes and trends and further explore how they fill the market gaps.

The primary factors discovered within the interviews, surveys, benchmarking and secondary research, that contribute towards the declining flora populations within Australia, point towards lack of funding and key solutions implemented within the three key stages of planting and collection figure (2).

Factors within these three stages that contribute to this seemingly expanding issue are the lack of policy and funding implementation. The existing policy was found to not encourage effective solutions for carbon offset and greening initiatives. This creates a climate that requires heavily volunteer-based work to accommodate these gaps within funding and policy.

The interviews' themes and professional survey themes were found to have heavy correlation The primary issues identified were seed collection, Planting efficiency, Cost, Post planting care, and maintenance of native plants. These align with subtopics within the three primary stages figure (2).

A significant difference from the literature and primary research was the emphasis on funding and implemented processes. It was revealed that these funding issues lead to restricted growth of companies and flora conservation efforts. Whilst both primary and secondary research emphesises on the importance of conservation of native species, literature failed to analyse how seed bank implementation can be improved upon utilising existing system such as mining companies collecting seeds after topsoil removal.

This lack of exposure to these methods and benefits may lead to the lack of utilisation by mining companies and tree planters as seen from the interview with Andrew. T and expert surveys. It can be seen those educated in this follow a seed collection process graph (4).

Apart from mining spaces, post-plant care also seemed to be more of an afterthought or left to others to maintain. This contradicts the common issue brought up about mortality rate in surveys and secondary data.

Limitations

Limitations of this research were a limited pool of planter and experts from around Australia. Due to Australia's vast climate, there are major differences between planting and processes in these areas. Surveys whilst only provided to select people for the professional interview, there was nothing stopping it being spread further and provided with faulty data from people in different countries, no experience, or other possible factors that would affect results.

Design Implications

From the research conducted within sections 1 and 2, multiple pain points and gaps within the market have been discovered. These gaps provide opportunity for design implementation to improve and develop the flora conservation practices within Australia. The primary areas that will be covered will directly relate to the identified areas from the research. These areas will also cover the three key stages of flora conservation figure (2).

Seed collection

One of the primary themes identified in all areas of research was seed collection and improvement of seed banking. Developing a solution that would allow for effective seed collection and identification would provide a way to improve and expand mainland Australian seed banks, intern creating more plants for conservation efforts.

Post-planting care

Developing a process for post planting care has been identified as an issue that requires design implementation. Due to Australia's climate, animals, and weather, post plant care is required to ensure long last solutions are in place. This will tackle the issue of developing a way to ensure the growth of plants that would provide a sustained ecosystem that can thrive and further sustain itself. This will ensure development isn't stunted and continues to thrive with improved mortality rates.

Planting efficiency

Planting has also been identified as an area that would benefit from design implementation. The speed of current planters and labors requirements can lead to effective but highly demanding work or slow progress. This current work requires many volunteers or workers to achieve desired results and can be stunted through many issues. Developing a way to increase efficiency, reduce fatigue or assist in dispersal over large areas would assist in creating a further effective planting system.

Accessibility and cost

Funding has been a major issue that has been brough up through primary research from most industry experts. Developing a way to reduce costs to rural planters would assist in developing better quality working environments, increasing output due to reduced costs and increasing efficiency.

Soil quality

Soil quality was a primary issue that was identified through both forms of research. As seen from interviews, bad soil quality can completely deter or prevent planting, even in areas that were once planted in. Developing a system that would allow for planting in these low-quality soils would provide a way of improving climates through flora implementation.

Conclusion

The purpose of this report was to utilise qualitative and quantitative data colocation methods and data triangulation to gain key insights into how Australian conservation could benefit from design implementation.

This report has found that Australia's flora conservation system and policies are flawed and underfunded. From these reports key findings, it's been found that there are issues within seed collection, planting methods, post-planting care, and limited funding. Without significant change, these issues will continue to limit and restrain restoration efforts and the longevity of Australia's unique biodiversity. With meaningful action and implementation of change within industry, Australia can develop a strong and long-lasting system that will improve upon native flora counts, restore effected ecosystems, and enforce long-term benefits.

The result from this report will lead to developing the criteria that will be used to develop a product solution that will create positive impact for Australian conservation.

Refrences

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