

Across all of our Project Phoenix activities and actions we pay respect to the Traditional Owners and Custodians of the lands and waters on which we work. We honour the resilience and continuing connection to country, culture and community of all Aboriginal and Torres Strait Islander people across Australia. We recognise the decisions we make today will impact the lives of generations to come.

First published 2021
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ISBN: xxx-x-xxxxxx-xx-x (Book) xxx-x-xxxxxx-xx-x (epub)

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Title: Revealed! The National Native Nursery Network

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Cover by Kerry O'Flaherty, Design Consultant
Internal design by Kerry O'Flaherty, Design Consultant
Proofread by Puddingburn Publishing Services

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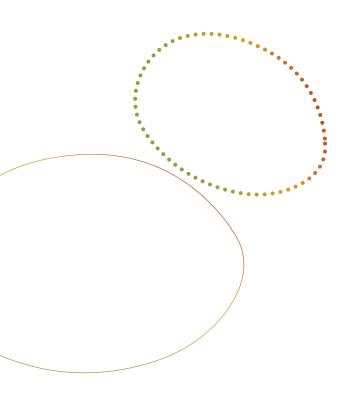
Project Phoenix is supported by the Australian Government's *Wildlife and Habitat Bushfire Recovery program* and coordinated by Greening Australia.





ACKNOWLEDGEMENTS

Greening Australia would like to acknowledge the hard work and dedication of the Project Phoenix Management Team: Samantha Craigie, Patricia Verden, Brian Ramsay, Irene Walker, Courtney Sullivan, Rowan Wood, Paul Della Libera, Kim Philliponi and Ella Campen.







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EXECUTIVE SUMMARY

About the project

Regional level identification will enable a clearer picture of the national capacity to respond to restoration requirements to be obtained. It will also create the opportunity for a dialogue within the native seed and nursery private sector and with state, territory and federal governments.

This would enable informed investment to support the delivery of regional conservation plans and fire recovery efforts.

Scope

The project involved a survey to provide point in time data at the national level of native nurseries that can support restoration.

This enabled identification of stakeholders who can contribute to a discussion on current sector capacity relative to emerging seed and plant demand.





Introduction

KG2 was commissioned to conduct a survey among nurseries (general, council-owned and Indigenous) to identify the size and composition of the native plant/seed market and to collect information on a series of topics of interest to this project:

- Do you grow native plants for restoration from native seed?
- Do you collect or buy native seed for your nursery?
- How many plants do you produce annually?
- Could you produce more plants if there was greater demand?
- Can you access enough seed to meet the demand for native plant production?
- Do you routinely test or ask for seed testing data?
- How do you test seed (internal/external testing)?
- Have any of your staff undertaken native seed management training?
- Would you like to access native seed management training?

KG2 owns and manages Australia's most comprehensive agriculture database which provided access for this survey to a full list of nurseries and councils as well as farmers to report on their native nurseries where applicable. Public data was used to supplement any gaps.

KG2 called 1620 nursery enterprises (1147 general nurseries, 345 councils and 128 Indigenous nurseries). From these, a report on the result of the calls has been provided to identify the reasons for being unable to contact them or, if contacted, why they were not eligible for the survey.

Eligibility to participate in the nursery survey took two forms. The first included those who had a nursery but did not grow native plants or produce native seed. These 92 respondents were only involved in the first section of the survey. The remaining 128 were asked the full survey.

As well as establishing an overview of the market, the full survey provided feedback on the ten areas of interest to Project Phoenix outlined in the introduction. They were also asked if they would be willing to give their details to provide future feedback to Project Phoenix.

In a separate exercise, KG2 called 181 farmers to investigate the incidence of on-farm native nurseries. This is reported separately to the nurseries.

All calls were made from KG2's in-house call centre using a CATI (computer assisted telephone interviews) system by trained, experienced interviewers. Being almost exclusively university agriculture graduate and post-graduate students, they have knowledge and understanding that enabled them to create a rapport with nursery contacts and probe their responses appropriately.

Data analysis, outputs and reporting were all completed in-house at KG2.







Issues

Nurseries on farms

- The potential of native nurseries on farms was raised prior to commencement of the survey. As there are so few of them, finding them amongst KG2's database was a difficult task. This was conducted separately from the nursery survey.
- KG2 spoke to 181 of the farmers most likely to have a have a native nursery. Among
 them, six had a native nursery of some capacity and did the full survey. Another three
 who had a nursery or regeneration capacity but did not grow or supply seed were asked
 if they were planning to do some in the future.

Seed only producers

• It became apparent early in the survey of nurseries that some only produced seed for restoration but did not grow plants. As a result, an additional question was asked to include these nurseries.

Making contact

Among the 1620 calls that were made, many general nurseries did not answer their
phone, were no longer a nursery or were unavailable for other reasons. Among
councils, many simply did not have a nursery. However, this was important to being
able to provide an assessment of the size of the market.

Comments

Not applicable

Key outputs

The key outputs for this project are:

- nursery survey report
- spreadsheet of nursery contacts who agreed to provide their details to Project Phoenix and
- spreadsheet of individual comments made in the nursery and farm survey.





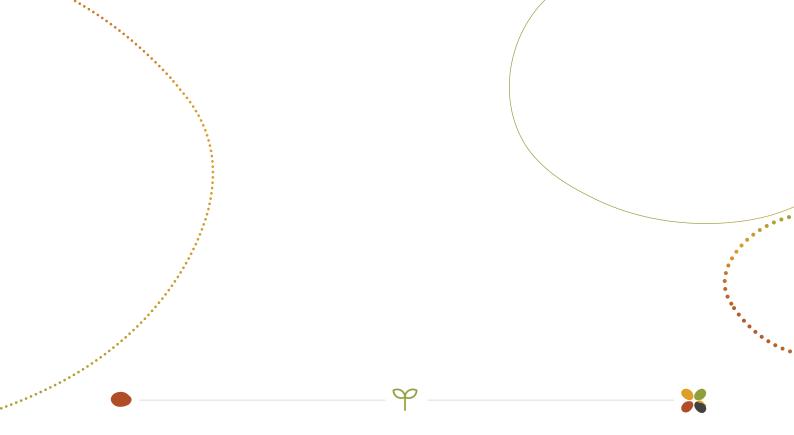
Outcomes

The nursery survey identified that around 8% of nurseries grow native plants or produce native seed, ranging from 9% of general nurseries and 7% of council nurseries to 2% of Indigenous nurseries.

Allowing for the exclusion of ineligible contacts (e.g., councils without a nursery or those who have sold their nursery or retired), we estimate there are around 176 native nurseries in Australia (142 general nurseries, 31 council nurseries and 3 Indigenous nurseries).

The survey further provided a wealth of information in response to the areas of interest outlined in the introduction.

While the awareness of Project Phoenix was low, the response to it was positive and 97% of the 128 nursery respondents who were interviewed for the whole survey agreed to provide their contact details for further contact from Project Phoenix.



Findings

Overview of Nursery Survey Section 1

Sample of 220 including 92 nursery contacts who did not grow native plants or produce native seed for restoration and 128 who grew/produced native plants/seed

- Among the 220 contacts, 184 (84%) were general nurseries, 25 (11%) were council nurseries, 5 were seed producers (2%) and 5 were Indigenous nurseries (2%).
- 76% had less than 10 employees.
- 11% were owned and/or managed by Traditional owners.
- Overall, 55% of nurseries surveyed grew native plants for seed. This included 100% of the council nurseries and 51% of general nurseries, but only 20% of the five indigenous nurseries were growers/producers.
- 24% overall produced native seed for restoration, mostly among council nurseries (52%) and indigenous nurseries (40%). Less than one in five general nurseries produced native seed.
- 92 nurseries that did not grow native plants or produce native seed were only involved in the first section of the survey.
- 77% of those who are not involved with native plants or seed reported that they have considered it.
- The main reasons for not having considered growing natives for restoration (if did not)
 were growing native plants was 'not our target market/business model', 'no space for
 it' and that they were a retail operation only.

Overview of Nursery Survey Section 2

Sample of 128 nursery contacts who grew/produced native plants/seed for restoration

- Among the 128 nurseries who grew native plants for restoration, 41% overall grew between 10,000 and 25,000 plants annually, with 49% growing at least 25,000.
- Council nurseries grew the largest number of plants with 56% growing more than 25,000 and only 4% less than 10,000.
- Among nurseries that produced native seed for restoration, 59% produced more than 50 kilograms. Councils averaged the largest weight of native seed, with 77% producing more than 50 kg.
- 96% of all respondent nurseries bought or collected native seed, with 50% both buying and collecting native seed, including 56% of general nurseries and the two Indigenous nurseries. Only 28% of council nurseries both bought and collected, with 64% only collecting seed. Only buying seed was highest in NSW (15%) and QLD (16%). The highest proportion who only collected was in QLD (47%), WA (42%) and SA (43%).





- 56% overall said they can access enough seed to meet demand. However, 34% said they could not, including 38% in general nurseries, indicating that there is untapped demand in the market. Access to enough seed was less of a concern for council nurseries where 76% said they could meet demand, but it varied by state, from 42% of those VIC to 86% of SA and 83% in WA.
- Among the nine nurseries who were owned or managed by a Traditional Owner group, the two factors given the strongest importance rating of 9 or 10 out of 10 were what's best for the environment (78%) and being able to meet demand (66%). The two factors given the most importance ratings of less than 7 were the financial benefit (44%) and what's best for the community (55%).
- 71% of respondents said they would produce more native plants/seed if there was greater demand. This was particularly true among general nurseries (75%), Indigenous nurseries (100%) and in QLD (84%) while only 52% of council nurseries would.
- Only 17% of respondents regularly test their seed or ask for seed testing and 71% rarely
 or never do. Councils were the least likely to test their seed with only 8% at least
 occasionally doing so, and 64% never testing. A very high 58% of those in QLD and 57%
 in NSW never test their seed or ask for seed testing.
- Barriers to expansion were dominated by 'space' (30%), training/staffing (21%) and 'no funding' (23%), with these barriers being more reported by council nurseries (32%, 28% and 36% respectively) than general nurseries (30%, 25% and 19% respectively). A 'lack of demand' was mentioned by no more than 17%, and less than 10% mentioned a 'lack of public awareness'. The availability of seed or stock was a barrier for 20% of councils.
- A variety of opportunities by expanding the native nursery were mentioned, indicating no clear position on the benefits of expansion. 'To maintain or improve the environment or biodiversity' was the most mentioned (34%), followed by 'increase sales' (18%).
- Only 34% had undertaken seed management training of staff. While 32% of councils report staff had undertaken training (lower than general nurseries or Indigenous), 12% in councils did not know. Training was highest in VIC (48%).
- A notable 69% of all respondents would like access to seed management training, and interest was highest among council nurseries (88%).
- Only 23% had heard of Project Phoenix before today. If they had, 45% rated the value of the program at 9 or 10/10 but 21% did not know.
- 97% of respondents agreed to provide their details to Project Phoenix for future communication and feedback.

Overview of Farm Nursery Survey

Sample of six farm nurseries who grew/produced native plants/seed for restoration and three who had a nursery but not for native plants/seed

• Five of the six farmers noted that they had less than 5 employees on the property. The other farmer reported having 5-10 employees.





- One of the six farm properties was owned by a Traditional Owner group.
- Five of the six farmers grew native plants from native seed for restoration, while two farmers produced native seed for restoration.
- The farmer that didn't grow natives but supplied seed noted that it was due to "Lack of time and operation complexity".
- Average annual amount of native plants grown for regeneration from farmer nurseries was 1850 plants.
- Average kilograms of seed produced annually for native regeneration was 1 kilogram.
- For farmers collecting or buying their native seeds supply, only one collected his seeds, two neither bought nor collected their seeds, and three only bought their seeds.
- Five out of six farmers stated that "Yes" they could access enough seed to meet their current demand for native plants for restoration, with the sixth not knowing.
- Four out of the six farmers stated they would not produce more native plants or seed if there was a greater demand. The remaining two farmers noted they would.
- None of the farmers did any form of seed testing for their natives.
- The main barriers for expanding the native nurseries on the farm property was lack of time (two of the six), followed by not enough returns/cost too high by three and being unable to expand by two.
- Four out of the six farmers did not note any opportunities to expanding the native nursery. The focus was primarily with their farms and not the nursery. Two noted regeneration of native area on the property as their opportunity for expanding.
- None of the farmers undertook any native seed management training for themselves or staff
- Two wanted to access native seed management training but four were not interested or didn't know if they wanted to access it.
- None of the farmers had heard of Project Phoenix before today.
- All the farmers who completed the full survey provided their details for further communication with project Phoenix.

Evidence

- Refer to full report Revealed! The National Native Nursery Network
- Nursery Survey Cross-tabs
- Farm nursery survey individual data
- Verbatim comments





RECOMMENDATIONS

RECOMMENDATIONS



General, council and Indigenous nurseries

- The limited incidence of growing native plants or producing native seed suggests an opportunity to engage and involve more nurseries in Project Phoenix. This is likely to require further in-depth analysis to identify ways to manage or increase demand, the areas or types of nursery most likely to participate, and communicate the benefits.
- Investigate the availability of training options, communicate to producers, and investigate options for those in areas where it is currently not available.
- The importance, best practice procedures, and benefits of testing need to be communicated and monitored.
- The project should seek to understand where, why and what products the demand is not currently meeting.
- There is enthusiasm for the project and increasing awareness of it and how nurseries can be involved should be a priority.



Farm nurseries

- While the interest by farmers may be low, the volume of farms suggests a potential worth investing in. The estimated from this survey point to in excess of 750 potential nurseries on farm.
- Further investigation of perceptions and attitudes to having a native nursery on farm and the motivators to consider it is warranted.
- Engage with farmers to increase awareness, understanding of project Phoenix and the value of native nurseries on farms.





WANT TO KNOW MORE?

For further information read the full report Revealed! The National Native Nursery Network.

Related Projects

- Join the National Seed Network!
- Australian native seed production in 2021
- What are conservation seed banks and what do they do?

This project contributes to the evidence base for a ten-year strategy to guide the native seed and landscape sector. The document, which is untitled until endorsement in September 2021, is referred to as the Strategy in all Project Phoenix publications.





2 POJECT PHOENIX

