How will this help save Silver Banksia?

By combining what we already know about Silver Banksia with the information from this project we will be able to:

- Develop guidelines about where Silver Banksia should be planted now and in the future
- 2. Provide advice about how and where to source seed for restoration
- 3. Help develop seed production areas to improve seed quality and build seed reserves for future use
- 4. Inform conservation values and priorities.

<u>Join the Silver Banksia Research</u> <u>Partnership</u>

Undertaking a large project like this requires resources – time, knowledge, commitment and money. By joining with us you will directly contribute to saving one of Australia's iconic plant species.













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Bringing Back the Banksias



Partnering to save Silver Banksia from the brink

Photo credit - Frank Carland

Silver Banksia

Banksia marginata is known as Silver Banksia because of the silvery underside of its leaves but is also called honeysuckle or dwarf honeysuckle. It is found across a large part of southeastern Australia from the Eyre Peninsula (SA) to north of Armidale (NSW) and in Tasmania and on the Bass Strait islands. It occurs at different altitudes, across a range of soils and with populations distributed from the coast to mountains. By providing food and shelter Silver Banksia is an important plant for many birds, mammals and insects. We know it was once a dominant tree in some ecosystems.

But this once common species has been lost from many parts of its range with many remaining populations now in decline.

Saving Silver Banksia

To save this iconic species from further decline we need to bring together the resources and knowledge of:

- NRM practitioners and agencies
- Local communities and landcare groups
- Researchers.



What do we need to know?

To bring Silver Banksia back from the brink we need to plant new populations and reinforce those we have left, especially those that are small and isolated. To do this requires a better understanding of the taxonomy, distribution, biology and genetics of Silver Banksia.

Taxonomy

Although treated as one species across its broad geographic range, Silver Banksia appears to vary in form and ecology. Several varieties were published in the 19th century but we do not know whether these forms and names represent natural variation within this one species or if we are dealing with a complex mix of several species. Sound taxonomy of Silver Banksia is critical to help make decisions regarding appropriate seed sources for revegetation, the conservation status of the species, and approaches to management.

Distribution

Silver Banksia has a very large distribution but has been lost or severely depleted in many places. But while we have a broad understanding of the historical and current footprint of Silver Banksia, we don't necessarily know where we should direct restoration efforts to maximise biodiversity outcomes and to account for rapid environmental change.

Modelling the distribution of Silver Banksia using past and present records will help us to understand where will be the best places to restore this iconic species in terms of restoring connectivity and building population resilience.

Biology

Banksias are known to be visited by insects and birds, as well as mammals in some cases. What we don't know is the suite of visitors to Silver Banksia that are effective as pollinators and whether the plants need to cross-pollinate for seed to be produced. Yet this foundational information will inform strategies regarding placement and connectivity of (re-) introduction sites, as well as strategies for improving seed production and quality.

Genetics

Understanding the local and landscape genetics of Silver Banksia is critical if we are to maximise restoration opportunities. An understanding of how much genetic diversity we have, where it is located and whether some of this diversity is adaptive to change will help us determine appropriate seed sources for restoration.

