

2020 YEAR IN REVIEW

### Your Footprint. Australia's Trees. Our Future.

MESSAGE FROM OUR CEO GRANTS SUMMARY FINANCIALS PROJECTS MONITORING 2021 PLANTING ANNOUNCEMENTS SUPPORTERS & PARTNERS 2020 has been a big year. Who could have imagined in January when we were still in the midst of the worst bushfires in Australian history that by March we would all be staying home, and that COVID-19 would change the way that all of us lived and worked? If these crises have shown us anything they have spotlighted our ability to adapt, highlighted our resilience and proven that change is possible.

We have also been in the midst of internal change this year as we revealed our new name, launched a new website and expanded our team. Climate change mitigation is the biggest challenge humans have ever experienced and we are still here to support you on your carbon neutral journey, but we are asking you and everyone to go one step further. Our vision is for a carbon positive future where we have reversed the impacts of burning fossil fuels. This is a big vision, it's asking a lot of everyone, but if this year has shown us anything it has shown us the possibility of transforming our lives.

While it often felt like the world was spiralling out of control, we have continued to use your donations to plant trees - planting over 500 hectares this year. We continue to plant only native species, endemic to their locality, and to work on projects with high restoration outcomes. These outcomes include providing habitat for endangered species, reducing salinity, and restoring biodiversity. You can read more about our projects and their impacts in this report.

This year, thanks to Lotterywest and their support, we also launched phase one of our CarbonCare<sup>™</sup> project. With the help of Carbon West and Clear South, we have been interviewing farmers, businesses and engaging with the many stakeholders within the Carbon Industry. The survey results, report and case studies will be available in the new year, and we will be sharing them across many platforms, including town hall events, to inform landholders, business owners and the community.Many of you also took part in our survey identifying how we can improve our online carbon calculator. We have been busy behind the scenes designing and building a calculator with the same great functionality, but a new and improved user experience. A big thank you to everyone who completed the survey and to those who have assisted in user testing. We are really looking forward to sharing it with you all in the New Year.

Finally, we have some amazing projects coming up for 2021. We will be planting a site near Nimbin in NSW which provides much needed corridor access for Koalas and other endangered species. We also have a great ecological restoration project planned for the South of WA. We are continuing to plant at Eurardy and in the Wheatbelt. Look out for further details about these great new projects over the coming weeks. The importance of understanding your carbon footprint and taking action to reduce and offset has never been more needed. Thank you to all of our supporters, to those who have been on this journey for many years, and to those who have joined us recently. Together we can plant for Australia's and the world's future.

Louise Tarrier Chief Executive Officer

### MESSAGE FROM OUR CEO

## **2020 GRANT SUMMARY**



In 2019, we were awarded a **Community Stewardship Grant** from the State NRM Program, as well as a **National Landcare Program Smart Farms Grant**.

We were delighted to share the results of our Saltland Carbon Project in the Wheatbelt with the NRM Grant Maker, and we will be utilsing the results to help us further develop saltland planting schemes. The second phase of this project has taken place, with planting in the Great Southern, and we look forward to updating you after monitoring is completed.

Rehabilitating salty soil is a huge challenge in the Western Australian landscape, and we know that the results from this research project will be of enormous benefit to the landholding community.







natural resource management program



# 2020 LOTTERYWEST GRANT



Work is now well underway from the funding received by Lotterywest. Throughout the winter months, CarbonWest and Clear South, who conducted research and stakeholder analysis for the organisation, have been busy surveying and interviewing industry representatives, organisations, indigenous groups, landholders, broadacre farmers, and landholders who already have planting projects on their land.

The raw data that has been collected will be shared in the New Year via reports, online seminars and town hall meetings.

We have now completed the report that reviewed co-benefits for the Yarra Yarra Biodiversity Corridor plantings, and this too will be shared over the coming months.

Work has begun on our new online carbon calculator which still retains the same great functionality of our previous calculator but will come with an enhanced user experience. Thank you so much to all the users of the current calculator that responded to the user survey.

The support from Lotterywest has enabled our CarbonCare<sup>™</sup> project to support greater social innovation to enable organisations to promote new ways of solving long-term environmental challenges.







#### EURARDY RESERVE, WA NANDA COUNTRY

- Region: Northern Country, WA
- Planted: 2019, 2020
- Future Planting: 2021-2023
- Size: 1,350 hectares
- Seedlings Count: 221,834 (handplanted)
- Land Owner: Bush Heritage Australia
- Planting Partner: E-Scapes
  Environmental

#### **PROJECT RECAP**

Eurardy Reserve extends over 30,000 hectares of Nanda Country. The land was purchased by Bush Heritage Australia (BHA) in 2005 for its high floristic biodiversity, hosting several threatened species. BHA's objective for the land was to protect and revegetate the cleared portion, with an aim to plant one million trees. Carbon Positive Australia was selected to partner on this project due to our extensive knowledge of planting and restoring Western Australia's unique landscape. Seed collection for the planting is all conducted from plants within the reserve.

#### WHAT HAPPENED THIS YEAR

In 2020, we planted a further 185,000 seedlings over an additional 200 hectares and infilled 100 hectares that were initially planted in 2019. This infill was due to an unseasonably long dry spell in 2019 which led to seed collection of certain species being unavailable in 2019. The planting to date has achieved strong survival rates despite a lower than average rainfall. We are hoping to announce soon that the project area has been extended from 750 hectares to 1350 hectares.

#### **SPECIES MIX**

Eucalyptus loxophleba subsp. supralaevis; Eucalyptus obtusiflora; Lamarchea hakeifolia; Melaleuca atroviridis; Melaleuca eleuterostachya; Melaleuca hollidayi

## 2020 PROJECTS | BROOKTON, WA BIODIVERSE PLANTING SITE

#### BROOKTON, WA (BIODIVERSE) BALARDONG NOONGAR COUNTRY

- Region: Central Country, WA
- Planted: 2019, 2020
- Size: 66 hectares
- Seedlings Count: 58,392
- Partner: FarmWoods & Sandalwood
  Solutions

#### **PROJECT RECAP**

This project is a native restoration project incorporating high value native Sandalwood. Before it was cleared for agricultural purposes, much of this geographical region was covered with native *Acacia sandalwood* woodlands. It is now widely accepted that the clearing of deep acid yellow wodjil soil should be avoided when possible, as the cleared soil is fragile and prone to wind and water erosion. The soil also tends to have higher water recharge rates than other soils, exacerbating the rise of saline water tables and secondary salinity problems. Sandalwood is an important part of the native mix and Sandalwood nuts have many therapeutic benefits that can be used commercially.

#### WHAT HAPPENED THIS YEAR

In July, we planted a further 33 hectares of biodiverse species including Sandalwood, increasing the total area for this restoration project to 66 hectares.

#### **SPECIES MIX**

Acacia lasiocalyx; Acacia meisneri; Allocasuarina huegelliana; Banksia attenuata; Banksia prionotes; Hakea multilineata; Hakea corymbosa; and Hakea prostra

#### BROOKTON, WA (SALTLAND) BALARDONG NOONGAR COUNTRY

- Region: Central Country, WA
- Planted: 2019, 2020
- Size: 19 hectares
- Seedlings Count: 23,288
- Supported By: State Natural Resource Management Program
- Partner: FarmWoods & Wheatbelt NRM

#### **PROJECT RECAP**

This site is a highly saline section of a working farm. Along with Borden and Cranbrook, it is providing vital research into how we can reverse and utilise saline soils. Salinity is a growing problem in Australia, with over 17 million hectares of land at risk. A primary cause of increased salinity is removal of native vegetation.

#### WHAT HAPPENED THIS YEAR

We planted a further 10 hectares and completed an in-fill of our 2019 planting. The in-fill was to remedy poor survival rates for certain species and sparce planting of sections in 2019. The research undertaken at this site will help us better understand planting for carbon on salt-impacted land.

#### **SPECIES MIX**

Melaleuca brophyi; Melaleuca lateriflora; Eucalyptus loxophleba subsp loxophleba; Acacia acuminate; Casuarina obesa; Melaleuca thyoides; Atriplex semibaccata

#### CRANBROOK, WA MINANG NOONGAR COUNTRY

- Region: Great Southern, WA
- Planted: 2020
- Size: 65 hectares
- Seedlings Count: 35,489 (hand-planted)
  + direct seeding
- Supported By: National Landcare Program: Smart Farms Small Grants
- Partner: Threshold Environmental

#### **PROJECT RECAP**

The goal of this project is to restore three separate areas of land using specifically designed seed mixes to replicate pre-European settlement vegetation. The project spans over 65 hectares of a working farm. A total of 85 local native plant species were used across all the project areas. This included 69 species used in direct seeding, and 25 species established by hand-planted seedings (some species were both seeded and hand planted).

#### WHAT HAPPENED THIS YEAR

Seedlings were collected in November and were germinated in the period prior to planting in July 2020.

- Biodiverse Sandalwood (30 ha): Stage one was completed in July 2020, establishing the sandalwood hosts across the site. A total of 40 different species were seeded across three different soil patches.
- Biodiverse Carbon (25 ha): This section had three different soil patches. A mix 64 species were direct seeded across the three patches, with a combination of 1,463 seedings and seeds. This should result in a coverage of 23,288 trees and shrubs.
- Saltland Carbon Planting (25 ha): A total of 11,644 seedlings were planted on this site, in a combination of 16 species. The dominant species were *Melaleuca cuticularis* and *halmaturorum*.

# 2020 PROJECTS | BORDEN, WA

#### BORDEN, WA KORENG NOONGAR COUNTRY

- Region: Great Southern, WA
- Planted: 2020
- Size: 10 hectares
- Seedlings Count: 23,288 (hand-planted) Supported By: National Landcare Program: Smart Farms Small Grants
- Partner: Threshold Environmental

#### **PROJECT RECAP**

This project is part of a working farm. The land has been affected by salt and erosion, which has accumulated over generations, caused by grazing and the clearing of native vegetation. The site will be studied as a part of our 'Saltland Carbon Planting' projects. Through our research, we are hoping to demonstrate how the right species can protect and improve high salinity soil, which species are most tolerant, and how we can improve productivity, enhance the natural environment, and provide carbon sequestration.

#### WHAT HAPPENED THIS YEAR

This site followed the same methodology as Cranbrook's Block 3. The site was mounded 2.0 meters apart (best practice for saline soils) and a total of 11,644 seedlings were planted. The dominant species were Melaleuca cuticularis and halmaturorum.

#### **SPECIES MIX**

Melaleuca Cuticularis; Melaleuca halmaturorum: Melaleuca sargentii; Melaleuca spathulate; Eucaluptus spathulate; Eucaluptus occidentalis; Eucaluptus alicola; Eucaluptus wandoo; Acacia; Atriplex

#### **EURARDY RESERVE**

At Eurardy Reserve, twelve permanent monitoring spots have been established across the site. Monitoring is being conducted by ecologist Tina Schroeder from Bush Heritage Australia, who is currently based onsite. Monitoring is conducted every six months, with initial monitoring in November 2019, and then again in March 2020.

- Survival rates in November were 98.5% they dropped by 22% in the period from November 19 to March 2020.
- Stem Density dropped from 192 stems per ha to 157 per ha.
- The key species Eucalyptus loxophleba was present at a density of 110 per ha.
- Results are tracking well considering the extremely low rainfall in 2019, with only 29mm between the two sampling periods. Sufficient winter rainfall in 2020 is critical for the continued survival of the seedlings.

#### **BROOKTON (SANDALWOOD)**

In July 2019, we planted the sandalwood host species working to a plant of 750 trees per hectare (host species only). Monitoring was conducted in November 2019, four months after planting, and again in May 2020 by Dr Peter Ritson. The FIRS (Forest Inventory Records System) was used for sampling design and recording.

- In November there was an average survival rate of 90%, however seedings were showing heat stress and there had been little seed germination.
- By May, survival rates had fallen to 67%, a result of below average rainfall over winter and summer.
- The remaining trees showed good growth supported by rainfall in February.

#### **BROOKTON (SALTLAND)**

Twelve hectares were planted in July 2019 using only hand-planted seedlings. Monitoring was conducted by Dr Peter Ritson in November 2019, four months after planting, and again in May 2020.

- Survival rates ranged from 54% to 80% with an average survival rate 69%.
- Many of the seedlings were showing heat stress, due to the very dry winter.
- Follow-up monitoring occurred in May 2020 the average survival rate by this time was 44% better than expected given the climate.

#### NIMBIN, NSW

Traditional Owners: Widjabul Region: Northeast NSW Size: 29 hectares This ecological restoration site will provide a corridor between two national parks. The site will increase habitat for endangered species, including koalas. We will also increase stocking in the dry rainforest area, improving biodiversity and encouraging further natural regeneration.

#### TOOTANELLUP, WA

Traditional Owners: Minang Noongar Region: Region Southern WA Size: 25 hectares

The property is a strategic link between the Tootanellup Nature Reserve, and a Water and Rivers Commission Reserve inclusive of Boggy Lake (part of a group of three freshwater wetlands of very high conservation value). Eco restoration of the property would resolve a bottle-neck constriction in this section of the Gondwana Link project.

#### EURARDY, WA

Traditional Owners: Nanda Noongar Region: Northern Country WA Size: Additional 277 hectares Eurardy protects more than 500 plant species, including five nationally endangered or vulnerable species. The reserve also forms a crucial ecological linkage between the Kalbarri National Park to the west, and the Toolong Nature Reserve to the northeast.

#### **BROOKTON, WA**

Traditional Owners: Balardong Noongar Region: Central Country WA Size: Additional 19 hectares Brookton is a working farm where we are restoring degraded land, including salt-impacted areas. We have been supported by State NRM grant to provide information and research on planting for carbon on high salinity land.











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