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# Training in seed collection equips community for long-term results

Spinifex Traditional Owners Byron Brooks (left) and Debbie Hansen collecting and sharing knowledge about the 'maku' tree.

A pilot programme rolled out by AngloGold Ashanti Australia utilising the expertise of an independent seed provider to train the remote Tjuntjuntjara Community in Western Australia on how to sustainably collect seeds to industry standards began in October.

It is hoped the initiative will leave a lasting legacy at the community by ensuring a regular income stream through the sale of seeds to independent merchants beyond the life of Tropicana.

Initially seeds collected by the community will be sold to AGAA's own seed provider Red Dirt Seeds.

Spinifex Land Management Coordinator Liam Mulcahy is excited about the collaborative work.

"An opportunity to gain introductory experience with the aim of future collaboration with regard to seed collection is a refreshing enterprise development within Tjuntjuntjara community," he said.

"It ticks a number of boxes in terms of economics and cultural applicability. Native seed provides Spinifex People with a sustainable resource that can be collected within both the Native Title Area and greater Great Victoria Desert.

"It utilises traditional knowledge in locating and identifying species and also draws from a long tradition of seed collection as a food source."

Red Dirt Seeds founder Jack Shinner recently visited the Tjuntjuntjara Community, 700 kilometres east of Kalgoorlie, to provide on-the-ground training and has undertaken similar work with indigenous groups in the Pilbara and wider Goldfields.

His relationship with AGAA goes back many years and started at Sunrise Dam.

"Working with Jack was very interesting, he taught us a lot about collecting seeds and how to prepare them to sell to companies," Spinifex Land Management Senior Ranger Scott Baird said.

"Seed collection is a good way to get out to country and do work that is interesting."

When you consider that around \$7 million will be spent on seed collection over the life of Tropicana alone (based on rehabilitating the cleared Tropicana footprint of 3,600 hectares at \$2,000/hectare for seed), it quickly becomes evident just how much money is involved when it comes to rehabilitation.



In fact the Revegetation Industry Association of WA (RIAWA), of which AGAA is a member, has recently released a new Code of Practice on seed standards and guidelines to try and ensure quality supplies to the seed market.

So it makes sense that the Tjuntjuntjara Community members, through Jack's efforts in collaboration with AGAA, work to these standards by becoming accredited through the RIAWA.

Depending on the species, seeds can fetch anything from \$80/kg up to \$1,400/kg and last year AGAA spent \$70,000 for 280 kilograms of seed at Tropicana.

According to AGAA Environmental Consultant Belinda Bastow there is a lot more to it than just picking seeds.

"As a member AGAA and RIAWA are trying to implement this voluntary code of practice for seed collection and accreditation and by using reputable seed pickers, and those pickers in turn working with community, we are supporting initiatives at a state-wide level but those with some form of local long-term benefit," she said.

"There needs to be certain protocols around it (seed harvesting), the picking needs to be sustainable and done in a way that doesn't destroy the plants.

"The quality of the seed is important, as is its location, how it is stored and what post-collection treatments are utilised so they can achieve a more industry-aligned rate. There are a lot of issues around quality...if you pick too early or too late the seed may not be viable.

"There is a lot of science behind it, you need to pick at the right time, treat it the right way, process and store it the right way."

In an arid environment like Tropicana, seeding is typically done in the warmer months between September-October.

However, before a seed germinates a whole series of behind-the-scenes activities has taken place.

Belinda takes it a step further.

"Ants can be an issue because they can pinch seed, we may need to encapsulate seed and [at collection time] we haven't determined yet whether we are going to hand seed or mechanically seed," she said.

"If we elect to use the latter there may be pre-treatment required or the seeds may need to be coated with something to actually make it easier for them to be evenly dispersed. Some seeds may need scarification; others may need smoking or require storage at 20 degrees or, because of their viability, may need to be stored for extended periods of time at 5 degrees."

The exact seeding mix and rate for Tropicana is yet to be determined, but knowledge is building in this area.

"It is all about balancing what we need and what should be left behind for the environment and the impact you may have on the environment," Belinda said.

A similar sentiment was shared by Debbie Hansen a Senior Spinifex Lady who shared her traditional knowledge of plants during the initial collaboration.

"Collecting the right seeds is important so the same plants are put back on country," Ms Hansen said.

"All the native plants provide good fruits and seeds to eat and are homes to animals. It would be good to imagine our children being able to sit down and dig and eat Maku (grub) just like our family has for generations."

Ultimately, a longer-term dream is for the community to consider developing its own seed farm.



Troy Hansen (left), Ethan Hansen, Scott Baird and Kumina Stevens collecting seeds.



Troy Hansen (left) and Scott Baird preparing seed for drying.



Red Dirt Seeds' Jack Shinner (left), with Spinifex Traditional Owners Troy Hansen, Kumina Stevens, Spinifex Land Management Senior Ranger Scott Baird and Ethan Hansen consolidating gathered seed.