

GARDEN FOR WILDLIFE

The importance of local provenance

Have you ever heard the term 'local provenance' when you have been buying plants?

A 'provenance' is a plant population containing a local genetic variation. Local provenance plants are grown from seed collected from healthy plants growing near to and in similar environmental conditions as the planting site, which gives new plants the best chance of survival.

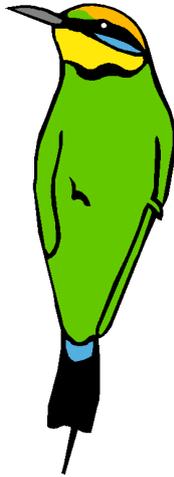
Many native plant species in Alice Springs also occur naturally across large areas of Australia, such as the River Red Gum, *Eucalyptus camaldulensis*. However, plants growing in a specific area have adapted to local conditions over a long period of time. This is to say that the River Red Gums along the Todd River are different, genetically, from the Red Gums growing along the Murray River in Victoria. It is important to conserve these genetic variations as they ensure a plant is better adapted to its local environment. For example, local provenance plants are better suited to local soil conditions, temperatures, rainfall and wind conditions. They support a wider range of locally native animals and plants than introduced species, and will have a better chance of thriving in harsh desert conditions.

Preserving local provenance populations is an important way of protecting biodiversity. Planting local plants increases the success of revegetation projects and decreases the risk of disrupting the



local flora gene pool, not to mention maintaining local character and conservation value. Bringing in plants from a different region, even if they are the same plant species, can through cross-pollination compromise a species' genetic integrity, weakening the population's ability to thrive in local conditions. Plant genes that have been naturally selected for over time (thousands of years of adaptation) will become diluted, reducing an ecosystem's long term ability to adapt and thrive.

When collecting local provenance seed, similarities in environmental conditions of the parent plant and planting site should be assessed through soil type, slope position, altitude and rainfall. Considering a plant's pollination and seed dispersal methods helps determine the size of a provenance range, and how far seed can be collected from the parent plant. For example, where the parent plant drops seed close by, provenance seed should be collected as close to the planting site as possible. If seed is dispersed by wind or water, provenance seed can be collected from remnant vegetation with matching environmental conditions that were once connected to the planting site. If plants have fleshy fruits that are spread by birds, seed could be collected further afield. Pollination distance for many Eucalypts can be a few kilometres, whereas for Acacias the distance will generally



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be much smaller.

So before buying a native plant for your garden ask for local provenance at your local nurseries. There are many nurseries in Alice Springs that specialise in local provenance, such as Geoff Miers Garden Solutions, the Greening Australia Nursery (open Thursdays), Tangentyere Nursery and Australian Plants Society/Olive Pink Botanic Gardens plant sales.

Dates to Remember

Wednesday 2 December - Film Screening: Lore of Love, at the Desert Park 7pm

Friday 4 December - Wiya! Angela Pamela EP launch and ALEC Christmas Party, Council Lawns from 5.30pm

Sunday December 6 – Field Naturalists Christmas Breakfast at Pitchi Ritchi Sanctuary, 8am. Contact Barb Gilfedder for more information 8955 5452

Monday December 7 – 10 - Land for Wildlife Biodiversity Surveys. All members welcome to participate in the field! Contact Ilse for more information: 8955 5222

Friday 11 December - Greening Australia Book Launch – *Weeds of central Australia: a field guide*. At Olive Pink Botanic Gardens, 3:30pm
- Christmas Markets – Todd Mall, 5-9pm

Saturday 12 December – Walk Against Warming, contact ALEC for details

Christmas:

Give a gift of a GFW or LFW membership. Send us the name and address of a potential member and we'll send them application forms courtesy of you.

Ilse Pickerd

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Garden for Wildlife Coordinator**

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