









MEDIA RELEASE

Embargoed until 31 July 2017

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Photos available here

Making travel plans... for plants!

More than 80 of Australia's leading plant conservation experts are meeting in Sydney this week for a national workshop on plant translocation.

Botanic Garden scientist and Australian Network for Plant Conservation committee member Dr Cathy Offord says plant translocation is a relatively new but rapidly growing field, which is used together with more traditional conservation approaches such as bush regeneration and weed management.

"65% of Australia's threatened species are plants, and without plant translocation, some species like the Nielson Park She-oak from Sydney Harbour would already be extinct," said Dr Offord.



Translocated Wollemi pine seedling amongst ferns. Photo NSW OEH

"Plant translocation is the plant equivalent of captive animal breeding and release programs that are increasingly carried out by zoos and animal sanctuaries.

Many Commonwealth and state conservation programs including the Threatened Species Strategy, 20 Million Trees, Landcare, parks organisations, botanic gardens and Saving Our Species (NSW) are already undertaking plant translocations.

The event, which is being held at the Royal Botanic Garden Sydney, is being hosted by the Australian Network for Plant Conservation, the Australian Government's National Environmental Science Programme, and the New South Wales Government.

Dr Offord hopes the *Plants Going Places* information day on 1 August will raise awareness that plants need help just as much as animals do.

The information day is being followed by a two day workshop which will bring together leading experts from every state and territory to review knowledge gathered from the 850 plant translocation projects that have been undertaken since 1976 and to review national guidelines.

Australia's Threatened Species Commissioner Mr Gregory Andrews is supporting the event.

"Plant translocation is an important tool in the fight against extinction. This event and the national review will keep Australia at the cutting edge of plant conservation, and that will benefit many of the threatened plants listed in Australia's Threatened Species Strategy," said Mr Andrews.

ENDS

Translocation case study stories

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- 3. Australia's first plant translocation a huge success in Vic

Insurance population offers new hope for iconic Wollemi Pine

Since the discovery of the only known population of Wollemi pine, one of the world's oldest and rarest *trees*, within Wollemi National Park in the Blue Mountains west of Sydney in 1994, scientists have grappled with securing the population's long term survival in the wild.

"Fewer than 100 individuals survive in a few canyons within Wollemi National Park, so there was a real risk of losing this living fossil to a catastrophic event such as bushfire or an outbreak of the deadly plant disease Phytophthora" said Dr Heidi Zimmer, Senior Scientist at the NSW Office of Environment and Heritage.



A translocated Wollemi pine seedling. Photo NSW OEH

In August 2012, after over a decade of planning, the Wollemi Recovery Team* established the first experimental insurance population. Together with staff from the Blue Mountains Botanic Garden the team translocated 191 saplings, propagated from cuttings taken from the original Wollemi pines.

"We had to find a secure and accessible site with the right mix of climate, soil and rainforest vegetation characteristics, select the plants, and ensure everything we took into the site was kept sterile from pathogens. We also built into the translocation an experiment to find the best light conditions for Wollemi pine survival and growth," said Dr Zimmer.

"Five years since the insurance population was established, the plants are showing very promising survival and growth rates, far greater than what we've observed in the wild population."

"Ultimately, we feel a bit like parents, success for us will be seeing these little Wollemi pines reach maturity and grow up to produce seed and seedlings of their own one day."

*The Wollemi Pine translocation is a collaboration between NSW Office of Environment and Heritage, Royal Botanic Gardens, National Parks and Wildlife Service the University of Melbourne (UoM) and the University of Western Sydney (UWS).

The Wollemi Pine is listed as one of six iconic species in the NSW Government's Saving our Species program and almost \$180,000 will be invested this financial year in conservation projects to help save the Wollemi Pine.

Tragedy with fairy-tale ending for a sex mimicking spider orchid

17% of all threatened plants in Australia are orchids.

Mellblom's Spider-orchid was once common in Victoria and South Australia, but by 2015 it was in a bad way, with only 400 scattered plants left in the wild.

"It was already extinct in South Australia and could have been extinct in Victoria within decades," said Dr Noushka Reiter, Research Scientist leading the orchid conservation program at the Royal Botanic Garden Victoria.

The conservation strategy has hinged on translocating plants grown at the Royal Botanic Garden Victoria and wasps.

"Mellblom's Spider-orchid has a remarkable pollination strategy," said Dr Reiter.



Mellblom's Spider-orchid tricks wasps into mating to move pollen. Photo Noushka Paiter

"The orchid lures male thynnid wasps by mimicking the sex pheromones of the female wasp. Wasps pick up pollen when they try to mate with the flower and take it to the next orchid where they are tricked again."

"There is no point translocating the orchid to areas that don't have the wasp – and it isn't common - so in 2014 we used surveys to identify two remaining orchid areas that still have thynnid wasps."

"We then worked with volunteers from the Australasian Native Orchid Society of Victoria to translocate almost 450 orchids to those sites over the last three years.

"It has been a success - we are seeing natural pollination and seed set at both sites," said Dr Reiter who is presenting at the national plant translocation workshop in Sydney this week.

"The success is due to many partners including Parks Victoria, Alcoa/ Portland Aluminium, Australian Network for Plant Conservation and enthusiastic community groups.

Australia's first plant translocation a huge success

Australia's first plant translocation for conservation reasons occurred in 1976, when botanists John Stuwe and Bob Parsons grew 50 Jumping-jack Wattle seedlings and planted them near Stawell, Victoria.

Conference presenter Dr Jennifer Silcock has revisited the site during a national plant translocation review and was delighted by the results.

"Forty years on the wattles at Lonsdale Nature Reserve have thrived - there are now over 110 wattles at the reserve – a great outcome," said Dr Silcock from the University of Queensland.

"Since then there have been almost 400 other plant species translocated, and as land clearing, weed invasion and other environmental changes continue, it will increase situations where species could become extinct unless conservation managers intervened.



Dr Jennifer Silcock is undertaking a national review of threatened plants. Photo Ilse Pickerd

"To identify the plants most at risk, we are developing a Red Hot list of Australia's most endangered plants. The Australian Government is backing the project through the National Environmental Science Programme.

"Translocations will play an important role in saving many of these species," said Dr Silcock.

Photos

All photos are available in <u>dropbox</u> for use associated with this story. Photographer must be credited.

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