

Even plants benefit from outsourcing

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Evolutionary Applications

The answer to successful revegetation of native flora is in sourcing genetically diverse seed not necessarily relying on remnant local native vegetation to provide seed. This review paper covers the appropriateness of using 'local' seed, how much seed and the types of populations that should be sampled, and the impact that over-harvesting might have on remnant populations.

The answer to successful revegetation of native flora is in sourcing genetically diverse seed not necessarily relying on remnant local native vegetation to provide seed.

"A common belief is that local native plants are the best source of seed for revegetation projects," says Dr Linda Broadhurst from CSIRO, Australia's national science agency.

"It has been presumed that local seed is adapted to local conditions and therefore it would provide the best results for restoration projects."

"However, the research shows that where vegetation loss is high and across large areas, 'local' seed sources are often small and isolated and can be severely inbred resulting in poor seed crops or low quality seed."

"This can lead to germination failure and poor seedling growth."

Land and water degradation resulting from vegetation clearance is a global problem. Effective restoration techniques are essential in reducing the damage and improving the environment.

In an effort to help, Dr Broadhurst and her colleagues have published a review on the issues associated with collecting seed for broadscale restoration projects in the new journal *Evolutionary Applications* (Volume 1, Issue 4).

The review covers the appropriateness of using 'local' seed, how much seed and the types of populations that should be sampled, and the impact that over-harvesting might have on remnant populations.

"The current emphasis on using local seed sources for revegetation will, in many cases, lead to poor restoration outcomes," says Dr Broadhurst.

"Our findings show that seed sourcing should concentrate less on collecting from local environments and more on capturing high quality and genetically diverse seed."

"This will ensure that restored populations have ample genetic diversity to respond to changing environments over the coming decades."

Journal link: www.evolutionaryapplications.org

Source: Wiley

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