

Scaling up restoration, scaling down costs: an examination of direct seeding and its role in landscape-scale restoration in the Great Southern, Western Australia.

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Abstract:

Greening Australia and other key partners in Gondwana Link have been undertaking broad-scale ecological restoration in the Great Southern Region of WA for over 15 years. Direct seeding has been used extensively and effectively at a large-scale for the majority of this restoration. Direct seeding has been a key enabler for ecological restoration because of its cost-effectiveness, and although other techniques such as tubestock planting still have a minor role to play, direct seeding is the main tool that Greening Australia now employs.

Direct seeding has many other advantages over traditional revegetation techniques (e.g. tubestock planting) including the ability of seed to germinate when conditions are right, and the fact that seeds, once sown, can germinate over multiple years. Owing to a model of continuous improvement, direct seeding practitioners can now establish plants successfully from seed in most soil types including typically difficult soils such as clays and deep sands, where tubestock was once a necessity.

In this presentation we share and discuss some of our recent experiences using direct seeding to implement thousands of hectares of native revegetation/restoration, working on dozens of private landholdings and three Greening Australia-owned properties, primarily funded via a number of major government revegetation grants. We will reflect on how the National Standards for the Practice of Ecological Restoration in Australia (SERA 2017) can be applied to this work. This includes some of the challenges of working at a landscape scale (100s to 1000s of hectares per year) and constraints associated with achieving genuine ecological restoration at this scale, and how the standards can be used for communicating messages about landscape-scale restoration.