

## Native Pasture Restoration in the Kimberley Rangelands, Western Australia

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### Abstract:

*The pastoral industry in the Kimberley region is an important economic contributor to Western Australia. However, as result of past land management practices and variable wet seasons, there has been a decline of the more desirable native pasture grasses resulting in a loss of feed-base productivity. To reverse this decline, research is being conducted to help restore important native pasture grasses in this region.*

*In the Kimberley region, access to native grass seed for restoration is limited as wild-harvest is opportunistic, typically un-mechanised and ripe seed collection sites can be difficult to access during the wet season. Establishing a Seed Production Area (SPA) close to existing all weather roads will allow access to seed at optimum harvesting time, and planting of single species on flat terrain will allow rapid and efficient collection of seed especially if using mechanical harvesters. Also, the use of fertiliser and irrigation could improve seed quality and increase seed production. This will improve the availability and reduce the cost of native grass seed for use in restoration of native grasses.*

*Six native grass species have been planted out on a small scale to trial a SPA. Plant growth and phenology was monitored and seed quality compared to wild-harvested seed. Preliminary results found irrigation results in extended flowering and hence seed production. Seed fill is equal to or significantly greater from SPA than wild-harvested seed. Also, seed yield and seed fill was increased in the SPA when grasses were cut before summer growth, and with increased irrigation.*