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Increasing productivity of karri regrowth stands by thinning and fertilising

BCS Ecosystem Science

Project Core Team

X X **Supervising Scientist** Lachie Mccaw
Data Custodian

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X X Completed and closed

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X X
Project Team granted
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Increasing productivity of karri regrowth stands by thinning and fertilising

L Mccaw, L Mccaw, J Geisel

Context

Thinning to concentrate growth on selected trees is an important component of the silviculture of regenerated karri forest and contributes to achievement of forest structure and productivity goals. Thinning also benefits forest protection by reducing the likely impacts of drought, and facilitating the re-introduction of prescribed fire into regrowth stands. This study quantifies the growth response of a variety of stands on different site types and contributes important information on long-term growth and stand development.

Aims

Provide information about tree and stand growth response to a range of silvicultural treatments that may be applied to even-aged stands of karri regrowth including: thinning from below; fertilising with macro-nutrients and trace elements: and coppice control.

Progress

Further re-measurement of the thinning experiment in 40-year old karri regrowth forest at Warren block was done in preparation for undertaking a second thinning.

Management implications

Growth response from thinning is factored into scheduled timber yields from the karri forest, and it is important that the magnitude of the response be validated by periodic measurements. Potential losses from *Armillaria* root disease also need to be quantified.

Future directions

This project has been closed, and has been incorporated into an updated project to study long-term stand dynamics of regrowth forest in relation to site productivity and climate (SPP 2011-020).