

Progress Report SP 2012-029

Long term response of jarrah forest understorey and tree health to fire regimes

Ecosystem Science

Project Core Team

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Project Team	granted
Program Leader	granted
Directorate	granted

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Context

This study is a long term strategic research project to better understand the effects of fire regimes, including prescribed fire, on the floristic composition of jarrah forests. This knowledge is important for developing and implementing ecologically appropriate fire regimes and for managing fire to reduce risk to the community, biodiversity and other environmental values.

Aims

- Understand and quantify the long-term effects of various fire regimes on the floristic composition of jarrah forests.
- Determine the long-term effects of various fire regimes on tree health and growth rate.

Progress

- Burning treatments were undertaken at the McCorkhill block experimental site in Autumn 2016.
- Data analysis has commenced and patterns of plant community response have been identified.
- Knowledge and understanding gained from this long term study has been incorporated into a fire ecology training program that will be delivered to employees involved in fire management planning and operations. Training was provided to participants in the Department's Fire Management Development Program in June 2016.

Management implications

Further data analysis is required to assess the long term effects of fire on floristic composition and richness, and implications for management. Being one of a few long term studies of its kind around the world, the findings of this research will be important for guiding fire management policy and planning for community protection and biodiversity conservation.

Future directions

- Prepare, analyse and report on data collected since 1986, and prepare a scientific paper for publication.
- Implement technology transfer program through formal and informal presentations and publications.