

## Project Plan SP 2012-029

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

Fire Science

### Project Core Team

Supervising Scientist	Valerie Densmore
Data Custodian	Valerie Densmore
Site Custodian	Neil Burrows

Project status as of Aug. 22, 2019, 8:21 a.m.

Approved and active

Document endorsements and approvals as of Aug. 22, 2019, 8:21 a.m.

Project Team	granted
Program Leader	granted
Directorate	granted
Biometrician	granted
Herbarium Curator	granted
Animal Ethics Committee	not required

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

## Biodiversity and Conservation Science Program

Fire Science

## Departmental Service

Service 9: Prescribed Burning and Fire Management

## Project Staff

Role	Person	Time allocation (FTE)
Supervising Scientist	Valerie Densmore	0.1
Technical Officer	Bruce Ward	0.1

## Related Science Projects

### Proposed period of the project

Nov. 12, 1986 – Dec. 12, 2029

## Relevance and Outcomes

### Background

Fire is a natural environmental factor shaping jarrah forest ecosystems. Forest fire management, including prescribed fire, is an integral part of conservation and land management to protect communities from damage by wildfire and to protect and maintain biodiversity and forest tree health. Understanding the long term effects of prescribed burning and other fire regimes, including long periods of fire exclusion, is important to inform managers of the most appropriate fire regimes to achieve multiple use objectives. While there have been many short term studies of the effects of fire on the biota, there are few long term studies. Long term studies are essential to understand the long term effects of various fires regimes.

### Aims

To understand and quantify the long-term effects of various fire regimes on species richness and composition of southern jarrah forest understorey assemblages.

To determine the effects of various fire regimes on tree health and productivity.

### Expected outcome

1. Ecologically-based fire management policies, plans and prescriptions that meet the Department of Parks and Wildlife's community protection, biodiversity conservation and forest health objectives.
2. Community support for the Department of Parks and Wildlife's forest fire management, especially the use of prescribed fire to achieve management objectives.

### Knowledge transfer

This knowledge will be used by fire management policy makers, regional and district fire coordinators and nature conservation staff to plan and implement appropriate fire regimes. Findings from this research will be transferred to policy, planning and operations staff, and communicated to the broader community, via workshops and other scientific forums, presentations at fire training courses, scientific publications and popular articles.

## Tasks and Milestones

December 2016: Almost 30 years of data will be cleaned, checked and analysed.

June 2017: Complete draft paper for peer review.

## References

## Study design

## Methodology

## Biometrician's Endorsement

granted

## Data management

## No. specimens

## Herbarium Curator's Endorsement

granted

## Animal Ethics Committee's Endorsement

not required

## Data management

## Budget

## Consolidated Funds

Source	Year 1	Year 2	Year 3
FTE Scientist			
FTE Technical			
Equipment			
Vehicle			
Travel			
Other			
Total			

## External Funds

Source	Year 1	Year 2	Year 3
Salaries, Wages, Overtime			
Overheads			
Equipment			
Vehicle			

Source	Year 1	Year 2	Year 3
Travel			
Other			
Total			