

Role of Indicators in Developing Appropriate Fire Regimes

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and put backdrop slide)*

TIP

For additional advice see
Dale Carnegie Training®
Presentation Guidelines.



Introduction

***Fire Management:** Aims to protect biodiversity, people and property.*

***Appropriate fire regime:** A practical regime of fire frequencies, seasons, intensity, scale and patchiness to achieve fire management aims.*

***Fire ecology:** Is complex and knowledge is incomplete.*

***Biophysical indicators:** Can be used to develop appropriate fire regimes*

Indicators of Appropriate Fire Regimes in Jarrah Forests (map of jarrah forest & slide of forest before this slide)

- Climatic
- Historic
- Biotic

TIP

Involve your audience with a strong, relevant opening.

Climatic Indicators - Jarrah Forests

- Mediterranean type (rainfall/temp graphs**Perth Sydney after this)
- 140-160 dry fuel days annually
- Annual summer drought
- Up to 30 lightning-caused wildfires annually (lightning maps** after this)
- *Region characterised as "fire prone"*

Historic Indicators - Jarrah Forests

- Extensive, frequent use of fire by Nyungars
- Fires in spring/summer/autumn
- Mostly low intensity, occasionally high intensity
- Balga trees show 3-4 year fire frequency graph**
- Riparian areas and low fuel loads burn less frequently

TIP

Questions by the facilitator capture attention and interest and lead to involvement and interaction.

Biotic Indicators (*flora*) - Jarrah Forests

- Identify fire sensitive taxa & vital attributes
- Ratio resprouters:seeders = 75:25 (upland)
- Higher proportion of seeders in moist habitats
- Thicket-forming species dependent on fire for regeneration (photo me)

TIP

Support the opinions and experiences of others with positive comments and positive attitude.

Biotic Indicators (*flora*) - Jarrah Forests

- Fire has little long term effect on species composition (graph **)
- Juvenile period <4 yrs (upland understorey) graph**
- Juvenile period <8 yrs (riparian)
- Litter fuel = 7-8 t/ha by 6

TIP

Recognize that diversity in a group is positive, adding strength and substance.

Biotic indicators (*fauna*) -Jarrah Forests

- Severity of fire impact proportional to fire size and intensity(graph woylie, phasco **)
- Some mammals prefer dense, mature vegetation, others prefer recently burnt (graph**)
- Infrequent (20-30 yrs) dry fires to regenerate habitat
- Mosaic of different times and seasons of fire optimises invertebrate diversity.

Using Indicators to Set Jarrah Forest Fire Regime (table **)

TIP

Close your presentation to
make a favorable, lasting
impression

An Appropriate Fire Regime For Jarrah (diagram ex landscape)