



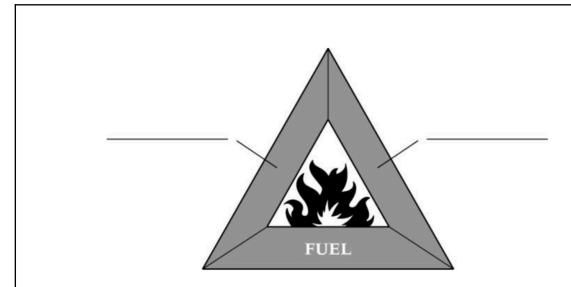
Science and Geography Stage 3 - WNPEEC Impact of Fire and Living Things' Response to Fire

Key inquiry questions for the day

- Science How do the structural and behavioural features of living things support survival?
- Geography How can the impact of bushfires on people and places be reduced?

PRE-EXCURSION WORK

Woodland bushfire introduction



1. Complete the missing words of the fire triangle

2. What things could provide heat to start a bushfire?			
•	•		
•	•		

3. What things could provide fuel to	o start a bushfire or keep it going?
•	•
•	•
4. Identify where the fire would get	oxygen from
5. What climate conditions make it	perfect for fire?
•	•
•	•
6. Plants have various ways to sur	rvive a bushfire. Research or as a class discuss
the various adaptations plants hav	ve to enable survival during and after a fire.
•	•
•	•
•	•
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7. As a bushfire advances and passes through an area, some animals have certain strategies that enable them to survive a fire.

For the animals listed below, describe the strategies they may use to survive a bushfire. Explain how the fire will impact upon their food, water and shelter.

Animal	Survival Strategies	Impact of Fire
Koala		
Goanna		
Native Bee		
Antechinus		
Wedge Tail Eagle		
Woodland Bat		



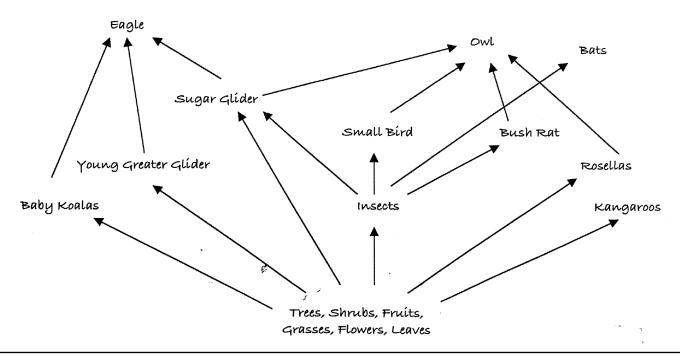






Changes following fire - fire and fauna

The diagram below shows a typical food web found in a woodland ecosystem.



7. An intense bushfire sweeps through the woodland killing some plant specie	es:
including tall eucalypt trees.	

List the animals you think could escape the bushfire.

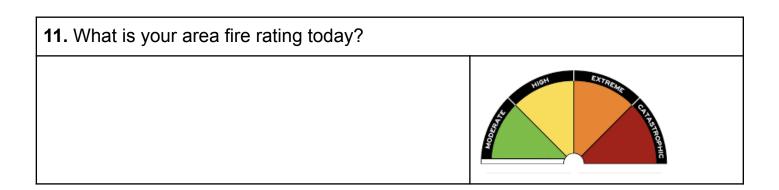
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•	•

8. A Greater Glider survives the bush	shfire. Why might it not survive in the sho	ort term
directly after the fire?		

9. After a fire, animals that live on the ground and under shrubs are more visible as they have nowhere to hide. Which animals in the food web would benefit from these new conditions?

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•	•

10. Draw your home and label what you can do to reduce the impact of bushfires on people and your place.



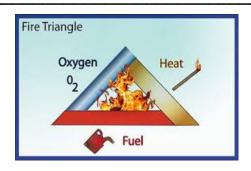
WNPEEC EXCURSION

1. Scientific inst	truments/tools used to measure	e fire conditions
Measurements	Instrument/ tool	
Date		
Time		
Temperature (°C)		ballandandandandandandandandandandandandanda
Wind speed (km/hr)		MATTER. DODO
Wind direction (°)		
Humidity (%)		
Fuel load kg/Ha		
Gradient (°)		

2. Warrumbungle fire rating investigation		
Measurements	School paddock	Road side
Date		
Time		
Temperature (°C)		
Wind Direction (°)		
Wind Speed (km/hr)		
Humidity (%)		
Fuel Load kg/Ha		
1.Gross weight (g/0.25m²) - bag weight = Net weight (g/0.25m²		
2.Net weight X 4 = Net waste (g/m²)		
3.Net weight (g/m²) ÷ 1000 = Net waste (kg/m²) 4.Net weight (kg/m²) X 10,000 = net weight (kg/Ha)		
5.Net weight (kg/Ha) ÷ 1000 = net weight (t/Ha)		
Gradient (°)		
YOUR FIRE RATING		

3. What location would offer more favourable conditions for a bushfire today?

4. Why?





5. Evidence of regeneration of living things in the Warrumbungle NP after the 2013 fire

(words and drawings)

(in the annual areasing)	
Plant regeneration	Animal occupation
Epicormic buds and basal buds Lichen on rocks Acacia (wattle) is now thick	Wild pigs eating tree roots Scats - pig, emu, roo, goat View - emu, roos, small birds (Apostle, cockatoo, currawong, brown thornbill), ants Digging - echidna, pigs, rabbit

what does your evidence tell you about the regenerative state of the	
arrumbungle National Park?	

7. What would else would increase the s	speed of regeneration?
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8. Gamilaroi Aboriginal Peoples cared for this area for many thousands of years. How may have they used fire here?

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9. What could we do to reduce the impact of a bushfire, like the 2013 fire?

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