Geography Alive: Bushfire hazards in Australia (Lesson 3)

Lesson 3: Bushfire attack and fire danger ratings

Content focus:

In this lesson students consider the nature of the threat bushfires pose to life and property. Students focus on the impacts of the fire-front, ember attack, radiant heat and wind in determining the severity of bushfires.

Resources:

- Worksheet 3a: Bushfire attack
- Worksheet 3b: Fire Danger Ratings
- Internet access:
 - Youtube video: Bush Fire Fact Fire danger. Know the signs.
 https://www.youtube.com/watch?v=cCCJHm2QKuQ&index=3&list=PLjkbg8HSLuoVxlQNrmdhsjOYSsEBHy_WJ
 - Fire Danger Ratings http://www.rfs.nsw.gov.au/fire-information/fdr-and-tobans?a=1421

Key inquiry questions:

- What elements of a bushfire are a threat to life and property?
- What role does ember attack play in the progress of a bushfire?
- Why does radiant heat represent such a threat to life and property?
- How do you respond when the Bushfire Danger Rating is 'severe' or 'catastrophic'?

Outcomes:

A student:

- demonstrates a knowledge and understanding of the ways in which the fire-front, ember attack, radiant heat and wind impact on the severity of bushfires.
- recognises the Bushfire
 Danger Rating indicator
 signs and demonstrates
 an understanding of how
 to respond in the case of
 'severe' and 'catastrophic'
 ratings.

Lesson sequence:

- Step 1: Students study the text and illustrations on Worksheet 3a, Bushfire Attack. Discuss with the students the concepts of 'running crown fire', ember attack, latent heat and the role of wind in fuelling bushfires. Students complete Activities 1–4.
- **Step 2:** Show students the Youtube video: Bush Fire Fact Fire danger. Know the signs. Ask them if they have seen a Fire Danger Rating sign in the local area or one of their family outings.
- Step 3: Students study the 'What should you do' listings on Worksheet 3a and note the advice for each level of the rating. Students complete Activities 1–3.
- Step 4: Show the students a selection of the following Youtube clips and, as a class, discuss the issues addressed in each presentation.

Other relevant Rural Fire Service short Youtube clips:

- Bush Fire Fact Don't give fire a chance
- · Bush Fire Fact Total Fire Ban
- Bush Fire Fact Stay informed
- Bush Fire Fact Don't give fire an opening