



<b>Lesson Two:</b>	<b>How does Oman’s climate affect flora?</b>		
<b>Aim:</b>	To gain an understanding of how plants adapt to, and why they occupy, different localities in Oman.		
<b>Specification Links:</b>	<p>GCSE Geography AQA 8035: 3.1.2.3 how plants adapt to physical conditions</p> <p>GCSE Geography CIE 0460: 2.5 the relationship of natural vegetation and climate</p> <p>GCSE Geography Edexcel A: 3.4 the interdependence of biotic and abiotic characteristics</p> <p>GCSE Geography Edexcel B: 7.1 local factors alter how biotic components of a biome interact</p> <p>GCSE Geography Eduqas A: 5.3.2 processes and relationships that link living parts with non-living parts</p> <p>GCSE Geography Eduqas B: 3.1.1 physical processes that link living and non-living components</p> <p>GCSE Geography OCR A J383: 2.1.1 interdependence of abiotic and biotic components</p> <p>GCSE Geography OCR B J384: 4.1 interdependence of climate and plants</p>		
<b>Key Vocabulary:</b>	flora adaptation	monsoon / Khareef interdependence	land cover
<b>Resources:</b>	<b>Learning Outcomes:</b>		
<p>PowerPoint: How does Oman’s climate affect flora</p> <p>Percentage land cover sheet</p> <p>Pop up map sheet</p> <p>Pop up photo sheet</p> <p>Boswellia question sheet</p>	<ul style="list-style-type: none"> <li>• To understand how Oman’s land cover varies across the country</li> <li>• To be able to calculate percentage land cover</li> <li>• To know how some plants adapt to monsoon conditions</li> <li>• To gain a greater understanding of the importance of the monsoon to people’s lives</li> </ul>		
<b>Lesson Introduction:</b>			
<p>Following learning on the broader climate of Oman, this lesson looks at the different natural land covers across the country and how different local climates create certain conditions for different plant life. In particular, students will study the southern monsoon (Khareef) and how this creates the right conditions for the Boswellia tree.</p>			
<b>Starter: (10 mins)</b>			

### Slide 2-7: What am I?

While progressing through the clues, students need to guess what comes from the tree pictured. The tree is called Boswellia and it is tapped for its resin which is then sold as frankincense.

### Main Activities (40 mins)

#### Slide 8-9: Oman's natural land cover

Teachers can explain to students the importance of using their mathematical skills in the GCSE examination. Using [Percentage land cover sheet](#), students can calculate the percentage land cover for each of the habitats listed. They should then comment on the effect these numbers might have on different species of plants and which areas they might expect to be associated with the greatest and lowest numbers of plant species.

#### Slide 10: Pop up maps

Students should cut out each of the pictures on the [Pop up photo sheet](#) and using their understanding of the different climatic and land cover areas of Oman, place them on the [Pop up map sheet](#) in the appropriate place. This may come with a discussion about what different plants need. Once they have checked their answers, these tabs can be glued into place.

#### Slide 11-14: Boswellia and its habitat

Students should read the information on the slide and then, on the [Boswellia question sheet](#), they should note through annotations the ways in which the tree is adapted to the environment around Salalah in particular. There is an option to complete an exam-style question. Students can swap responses and use the mark scheme to give their peer's work a level and a mark.

### Reflection: (5 mins)

#### Slide 15-17: Living with the Khareef

Students should imagine they are Mohammed and think about what it might be like to live in Salalah before, during and after the arrival of the Khareef. Students can collectively come up with lists of words to describe each time period and make them into a word cloud to represent each one.

### Extension & AS/A Level progression:

- Research into the cultural and historical significance of frankincense.
- Continue to study how animals of different regions are adapted to their local habitats

### Bibliography:

Boswellia tree photo from Viktor Manuela (reproduced under Creative Commons license)

Frankincense resin photo from [www.pixabay.com](http://www.pixabay.com)

Salalah trees photo from Wajahat Mahmood; Flooded street scene photo from Silvio Taverna; Onions at market photo from Reinhard Silwar; 'Mohammed' photo from David Ogden; Empty quarter photo from Irenic Rhonda; Cornulaca plant photos from بويدر; Al Hajar mountains photo from Arian Zwegers; Mountain juniper photo from Jim Morefield; Dhofar in fog photo from Juozas Salna; Frankincense farm photo from Chris Price (all reproduced under the Creative Commons license)