



## **Alice Holt Forest Rainforest Trail Secondary School Teacher Resource**

This resource contains suggestions for activities and study work to enhance and extend the learning of pupils visiting the trail. It focuses on the contrasts between English (and other temperate) forests and the Amazon. Some of the suggestions assume that pupils have some prior knowledge of the Amazon. Some of the activities can be done prior to the visit, others while following the trail, and some need to be done as follow up at school or as homework. This resource includes learning activities for students in Key Stage 3. Some of the suggestions are sufficiently challenging to form the basis of Key Stage 4 verbal and written discussion work.

### ***Internet references:***

***The Sky Rainforest Rescue Campaign*** <https://rainforestrescue.sky.com>

***The Amazon Rainforest Trail at Alice Holt Forest***

<https://rainforestrescue.sky.com> <https://rainforestrescue.sky.com/what-you-can-do/activities-in-your-area/discovery-trail-alice-holt>

### ***Information on forests in the UK, educational opportunities and learning resources***

[www.forestry.gov.uk](http://www.forestry.gov.uk)

[www.forestry.gov.uk/england-learning](http://www.forestry.gov.uk/england-learning)

### ***Climate change information and resources***

[www.forestry.gov.uk/england-learning](http://www.forestry.gov.uk/england-learning) and click on '***Forests for the Future***' and '***Climate change information pack***' in the right hand column. Forests for the Future has been created for upper primary students but contains useful information for older pupils.

***Sustainable forest management*** [www.woodforgood.com](http://www.woodforgood.com) ;  
[www.forestry.gov.uk/timber](http://www.forestry.gov.uk/timber); [www.fsc.org](http://www.fsc.org)

## **Board 1 (Introduction)**

### **Why are all forests important?**

Answers should include reference to at least some of the following:  
Timber resources, wildlife habitats, recreation for people, jobs and economic benefits.

### **Why, in particular, are rainforests important?**

Answers should include reference to at least some of the following as well as some of the answers above:  
animal habitats, homes and livelihood for indigenous people, mitigation of climate change effects, forest products, medicinal plants, scientific knowledge, undiscovered species of plants and animals, importance of global biodiversity.

## **Board 2**

Listen to the sounds of the Amazon and then spend a few minutes listening carefully to the sounds around you. What can you learn about this forest from listening? Do you hear creatures you can't see? What other sounds are there – human, machine etc? What sounds other than animal sounds would you expect to hear in the rainforest? (e.g. rain, people, massive trucks, chainsaws)

Find out as much as you can about an Amazon animal. Is it threatened? If so, in what way is it threatened and why?

Name as many threatened Amazon animals as you can. Explain why and in what way animals are threatened in the Amazon.

Find out how many animals in Britain are threatened. In what ways are they threatened? Name some of them and find out more about one.

List 15 Amazon plants and animals and classify them according to whether they are Primary Producers, Primary Consumers, Secondary or Tertiary Consumers.

Find out what is meant by the terms ecosystem, community and niche. How do these terms apply to the plants and animals you've listed?

Explain ways in which the animals you've listed are adapted to living in the Amazon. Give some examples of British woodland animals and their adaptations.

Consider the role of climate change in relation to the survival of animals in the rainforest and in temperate climates.

Consider the effects of deforestation on the flora and fauna of the rainforest. Find out about examples of deforestation in other parts of the world.

What effect would deforestation in Britain have on wildlife?... on people?

### **Board 3**

Find out how big the Amazon Forest is. How many British Isles would fit into it?

How long is the longest river in England? Which one is it? How much longer is the Amazon?

Find out who owns Alice Holt Forest.

Find out who owns the Amazon forest. Is it more than one person? Is it companies? Is it the indigenous people? Is all of it actually owned by anyone?

Why are huge areas of rainforest being cut down and not replanted? Who's fault is it? Should it be stopped?

Study the role of governments, multi-national and national businesses, and markets (e.g. consumer demand for hardwood, beef and soya) in relation to the destruction of the Amazon Rainforest. What do you think should be done and what do you think is possible? How would your suggestions be implemented (laws, education, export bans etc?)

How effective do you think laws and regulations would be in reducing deforestation and the export of non FSC, illegally produced timber, endangered animals etc.?

How have indigenous peoples been affected by deforestation and subsequent land uses in the Amazon? (socially, economically, emotionally including loss of traditional livelihood and homes). Is there any evidence is there to suggest they've been able to adapt to changes successfully? Should traditional ways of life be protected? If so, how can this be achieved?

Who owns Alice Holt Forest and the other forests managed by the Forestry Commission? Collectively these forests are known as the Public Forest Estate. That should give you a clue!

### **Board 4**

Find out how Alice Holt Forest and other forests managed by the Forestry Commission contribute to the green economy (i.e. the rural economy – jobs in and associated with the forest, sales of timber and timber products, imports v. exports of timber...)

Consider how animals living in the Amazon rainforest and animals in temperate forests like Alice Holt are adapted to their habitats and lifestyles (include communities and niches for the more able pupils). Study in detail the adaptations of four animals from each type of forest. For each region choose one from the forest floor or underground, one from the canopy, one from a

zone between these and one from an aquatic environment (pond, stream or river).

How does the biodiversity of the Amazon Rainforest compare with that of temperate forests? To what extent has man's intervention influenced this? Is man's intervention needed to increase the biodiversity of either or both of these forest types and reverse any decline in this or should humans just leave forests to grow naturally? (For UK forests consider the implications for people's health and well being associated with visiting forests. For the Amazon consider the implication for the indigenous population and the economy)

Consider how plants are adapted to the conditions in which they live. Choose four from the Amazon rainforest and four from temperate forests. For each region choose one from the forest floor, one from the canopy, one from a zone between these and one from an aquatic environment (pond, stream or river).

Investigate the role of climate change in the future of forests in the Amazon basin and in temperate regions. How will it affect trees and other plants and the animals that depend upon them? How will deforestation affect the rate and effects of climate change on the world?

### **Board 5**

Look at the forest products shown on the board. Can you think of any other products that come from trees in this country and around the world? What products come from trees in British forests?

Use the internet and books to find out how the following British forest plants were used in the past as medicines (and some of them still today): Willow, St. John's Wort, Selfheal, Woundwort, Dock leaves. What medicinal plants do we know of that come from the rainforest?

Find out what timber from different species of tree and trees of different sizes is used for e.g. small sized softwood is often used to make paper, pinewood is used for day to day furniture, oak for more expensive durable products. Species to consider include beech, oak, pine, Douglas fir.

How does the way the rainforest is managed differ from the way in which Alice Holt and the other forests managed by the Forestry Commission are managed e.g. what happens after trees are cut down?

Why is it important when buying timber products to buy things with the FSC logo on them?

Compare and contrast Amazon products and production methods with those of temperate forests. Describe the nature and importance of three rainforest products and explain whether or not they are being produced sustainably.

List as many rainforest resources as you can which have not yet been fully exploited? Which of these should be exploited and how can this be done sustainably? Which should be left untouched?

What are the economic arguments for and against production of timber and other products from the rainforests? What do you think? Does the developed world need these products?

What do you think about the production of soya, palm oil and beef on deforested land within the Amazon rainforest?

### **To finish**

What have you discovered about the Amazon rainforest on this trail and in your research? What do you like best about the rainforest? Do you think it's important that it isn't all cut down?

WWF and Sky are working hard to make sure there will always be an Amazon rainforest by telling people about it and having people working there to help it survive. Do you want the rainforests to survive? How could you help look after it? (e.g. raising money to pay for projects, telling others about the rainforests). What **will** you do?

What have you discovered about Alice Holt forest? What do you like best about it? What should the Forestry Commission do to make Alice Holt an even better forest?

Have your opinions of rainforests and temperate forests changed in any way since you started the trail? If so, in what ways?