

Forests for people: the International Year of Forests 2011

Natasha Ziebell, University of Melbourne, Victoria



Figure 1: *Forest scene*

Source: Food and Agriculture Organization of the United Nations; Gábor Olajos

The United Nations declared 2010 as the International Year of Biodiversity: The Story of Life. This story now makes a seamless transition into the International Year of Forests in 2011. The word “forest” can conjure up images of the magnificent array of flora and fauna that might be found there and the beautiful vistas many people enjoy. Forests have captured the imagination of many authors, poets and songwriters who have recorded stories about the natural and human history or the legend of forests. The aim for this year is not only to increase awareness of biodiversity, sustainability and conservation of forests, but also to focus specifically on people. This year is also an opportunity to celebrate the magnificent forests found all over the world.

The key goals for this year are to:

- reverse the loss of forest cover worldwide through sustainable forest management (SFM)
- enhance forest-based economic, social and environmental benefits
- increase significantly the area of sustainably managed forests and
- reverse the decline in official development assistance for SFM and mobilise increased financial resources for implementation of SFM.

The following unit of work focusses on the social, economic and environmental factors affecting forests, understanding the abundance of life found in forests and exploring the concepts of conservation and sustainable management and sustainable development of forests. Prior knowledge about biodiversity is assumed. For a unit of work focussing on biodiversity, contact the Global Education Project, Victoria, and refer to the unit of work in *Interaction* Vol. 38 March 2010.

Professional Development sessions for teachers

The Global Education Project staff at the GTAV will assist teachers with information and resources relating to a number of global issues. If you would like some whole staff or teaching team PD focussing on Global Perspectives, a particular issue/unit of work or on *Ollie Saves the Planet*, please contact the Global Education Project on (03) 9824 8318.

Level 4

Key concepts Conservation, sustainability, interdependence	
Understandings Forests provide a habitat for biodiversity and support interdependent relationships. Humans rely on forests for the provision of a range of environmental goods and services. Forests contribute to social development and poverty alleviation. Forests are essential in maintaining a stable global environment.	Essential questions What are the features of forest habitats? What interdependent relationships exist within a forest? What types of environmental goods and services are provided by forests? How do forests help alleviate poverty? How do the choices we make impact upon the earth's environment?
Global Perspectives Sustainable futures: Sustainable futures is about learning to respect, value and preserve the environment and to assess, care for and restore the state of our planet. Interdependence: Interdependence describes the relationship of mutual dependence between all elements and life forms.	

VELS

Strand	Domain	Dimension
Discipline-based learning	Geography	Geographical knowledge and understanding
Standard At Level 4, students identify and describe significant natural processes. They compare the various ways that humans have used and affected the environment. Students recommend ways of protecting environmentally sensitive areas in a sustainable way. They provide examples and evidence based upon their inquiries. They use geographic language to identify and describe the human and physical characteristics of local and global environments depicted by different kinds of maps, diagrams, photographs and satellite images		

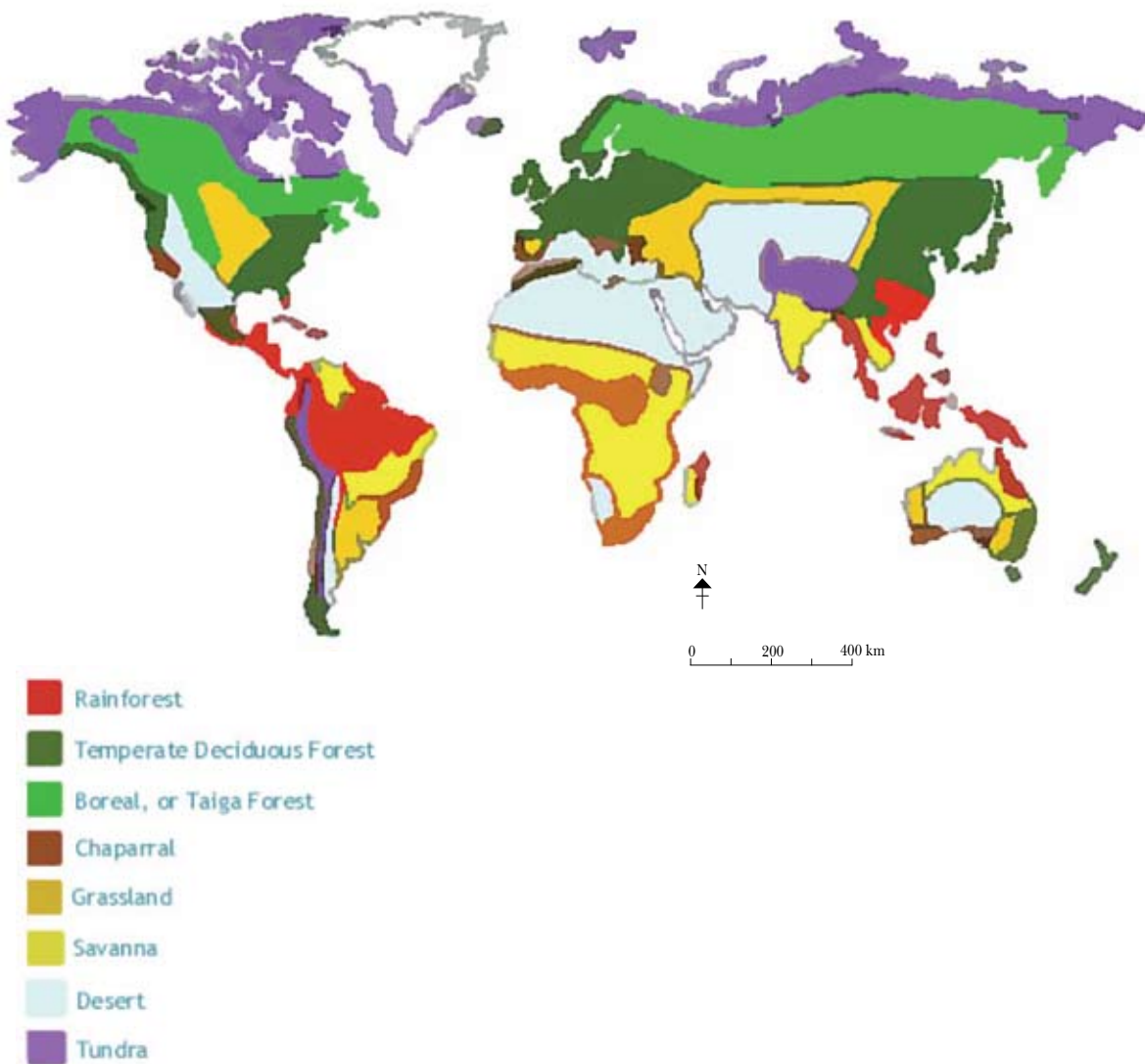
Skills

Strand	Domain	Dimension
Interdisciplinary learning	Thinking processes	Reflection, evaluation and metacognition
Standard Students organise their ideas and use appropriate language to explain their thinking. They identify and provide reasons for their point of view, and justify changes in their thinking.		

Tuning in

1. **Forest art:** ask students to draw an image or representation of a forest. Provide a range of materials such as pastels, newspaper, crepe paper, charcoal and so on. Ask students to write a short piece explaining the decisions they had to make when creating their artwork, such as the theme and materials used.
2. **Mind map:** using the artwork as a stimulus, create a mind map about forests.
3. **Forest photo gallery:** show students images of different types of forests. Use the *See, Think, Wonder* routine from Visible Thinking. Ask students to record the answers to the following questions:
 - a. What do you **see**?
 - b. What does it make you **think**?
 - c. What does it make you **wonder**?
4. **Cubic Foot:** watch a clip about the biodiversity in a one cubic foot sample taken from a Tropical Cloud Forest in Monteverde, Costa Rica: <http://ngm.nationalgeographic.com/2010/02/cubic-foot/liittschwager-photography#/video/>

Use four bendable straws to create a square frame. Students head outdoors and use the square to frame a piece of the local environment. Record all the different living and non-living things they have found within their frame. Create a concept map to see how each component is linked to another. Students may like to take magnifying glasses with them.



www.worldbiomes.com/biomes_map.htm

Figure 2: World biomes

Expert groups

In small groups, students explore the biomes of Rainforest, Temperate Deciduous Forest, Boreal (Taiga) Forest. Students research the following information:

1. Key features of the forest.
2. Information about the forest layers.
3. Forest climate.
4. Flora that might typically be found in the forest.
5. Food webs showing the interdependence of living things found in the forest.
6. Location of where the forests are situated.

Sorting out

Expert groups create posters and present the information to the rest of the class.

Going further

Students will need to be able to access a range of resources relating to forests. Students plan their own inquiries based upon their area of interest. Students identify key questions that they want answered, how they will find out the information and the ways in which they can present it to the rest of the class.

Topics for further investigation

- a. **Biodiversity within forests:** explore the amazing biodiversity found in the world’s forests. Forests contain up to 80 per cent of the world’s biodiversity. Research the diversity of ecosystems and species. Identify vulnerable, rare, endangered and extinct animals.
- b. **The importance of forests:** forests regulate our climate and help prevent drought, erosion and flooding. Find out more about the impact of forests on the greenhouse effect, or how forests control water.
- c. **Forest people:** approximately 300 million people worldwide have made their homes in forests. Find out about how the forests provide them with food and medicines. What impact does the modern world have upon these traditional cultures?
- d. **Forest goods and services:** 30 per cent of forests are used for the production of wood and other goods. What impact does logging and agriculture have on old growth forests? Many of the world’s poorest people live near forests. More information on the role of poverty in deforestation can be found at <http://kids.mongabay.com/elementary/506.html>

Drawing conclusions and reflection

1. Students complete the “Why do Forests Matter?” diamond ranking activity from the Global Education Project’s “Looking at Forests” resource. This is a free resource that can be obtained by calling GTAV on (03) 9824 8318.
2. Students revisit the mind maps they created in the “Tuning in” phase of the unit. Rework or create new mind maps based on the information they now know.

Taking action

Students may wish to take action on one of the key aspects that were focussed on during the “Going further” stage. For example, major loss of rainforests in Malaysia and Indonesia is attributed to palm oil plantations. Students can create “Don’t Palm Us Off” conservation mash ups to share from <http://wild.zoo.org.au/mashups/#>