



Multi Media Task 7. A biodiversity melting pot in Northern NSW

Student Outcomes • Understand that threatened and endangered plant and animal species are protected in native forests

- Understand that tree harvesting can only occur in specified areas of native forests

Internet task: Using the internet, listen and watch the Forest Learning video 'Going Bush – A biodiversity melting pot in Northern NSW' at <http://www.forestlearning.edu.au/Resources/Going-Bush-Biodiversity> (6:14 minutes duration). Answer the following questions

(a) Why is the Northern NSW forest region considered unique in Australia?

(b) Approximately how many species of endangered plant and animal species are listed in this Northern NSW region? _____

(c) How many animal species are reported to be threatened per year (annum)? And how many plant species? _____

(d) How are endangered plant and animal species protected in native forests?

(e) Explain the survey method used to trap the 'Forest Bat'



(f) Using the internet, explore further information on the roles bats play in forest ecosystems. Discuss your findings



Diagram: Bat feeding on flower nectar

(g) How have native forests in Northern NSW become multi-aged?

(h) What are the major uses for the wood harvested from Northern NSW forests?

(i) What criteria are used in selecting blackbutt (*Eucalyptus pilularis*) trees for power poles?

(j) Discuss the meaning of a 'multi-use' forest

(k) Explain the process of natural forest regeneration

ANSWERS – A biodiversity melting pot in Northern NSW

- (a) It is unique because forests are a mix of tropical rainforests from the north and temperate dry forests from the south that support a large number and diverse mix of plants and animals
- (b) 300
- (c) 4000 – 5000 threatened animal species per year; and 10,000 threatened plant species per year
- (d) A rigorous licensing system with stringent rules ensures habitats of endangered species are protected and these areas of forests are not harvested. Ecologists use surveys to identify animal and plant species, population numbers, and location of habitats
- (e) A 'harp trap' is used to catch the 'forest bat'. It is placed in the more open spaces or road ways of forests. During the night bats fly into the fine wires/lines in the 'clear zone' of the harp trap, then fall into the material bag at the base where they are trapped, and then counted and released the next day
- (f) Fruit and nectar feeding bats play very important roles by spreading seeds (dispersal) and pollinating flowers. Insectivorous bats consume large numbers of insects. These all help in natural forest regeneration
- (g) Through continuous selective harvesting over the past 100 years
- (h) High-end grade timber goes into poles, veneer, bridge girders, and appearance grade saw logs that can be further processed for furniture and flooring
- (i) Straight trunk and minimal defects from branching
- (j) Multi-use forests are used for various purposes including biodiversity conservation, recreation and production (i.e. where trees are harvested for the wood resource). Multiple uses can occur in the one zone, or a particular use designated to certain areas. This depends on findings from ecological studies, location of habitats of rare and endangered species, state and territory regulations, and how planners use this information to develop rules for harvesting
- (k) Natural forest regeneration is where nature takes its course to regrow a forest. No planting takes place



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