ENVIRONMENT ISSUES: Protection of Ecosystems

Ecosystems rely on all components or parts of the system in order to function - including plants, animals, insects and even humans. This balance of different forms of life is needed in order to keep an ecosystem stable.

A food chain describes how all parts of an ecosystem fit together. It starts with a plant, and then the insect that eats that plant, the animal that eats that insect, and so on. Food webs link multiple food chains, and show in a more complex way that losing one 'component' can affect many food chains. Refer to fact sheet **3.2 Environment Issues - Protection of Ecosystems**, for more information on what can affect an ecosystem.

Activity 1

Research the food chain of an ecosystem to see how its parts are interconnected, and how each level can affect the rest. Start with a green plant, which could be in a meadow, forest or your garden, and find out what eats this - what animal/insect depends on this plant for food? Then keep extending the chain. How many levels of the food chain can you find? Include at least five levels.

Once you have researched your food chain, consider what factors could affect this ecosystem? Use those outlined in the fact sheet as a guide. Discuss the following:

1.　What could harm this ecosystem now and in the future?

2.　Is there anything that could be done to prevent harm?

3.　What effect do you think the introduction of new species would have on this ecosystem? Consider one good and one bad example (i.e. one that would help and one that would damage your food chain).

Activity 2

Investigate the effects of a well-known disaster on an ecosystem. You could choose an environmental disaster, such as the tsunami in Asia in 2005, or a man-made disaster such as an oil spill. Write a report about your findings, and ensure you cover the following areas:

1.　What was the disaster and what caused it?

2.　How was the ecosystem affected? (Consider at least three points)

3.　What does the ecosystem look like now? How has it changed?

4.　Could this have been prevented? How?