***Consumption and Resource Management***

Natural ecosystems are valuable resources. The main resource is wood and wood fibre. In Canada, approximately 60% of the original forest has been cut at least once.

Forest harvesting methods fall into 3 categories:

1. ***Clear-cutting*** – the removal of all or most of the trees in a given area. This method is economical and efficient. It is intended to recreate the pattern produced by a forest fire. Regeneration can occur naturally or artificially. It accounts for 90% of harvested trees in Canada.
2. ***Shelterwood cutting*** – mature trees are harvested in a series of two or more cuts. This permits regeneration under the shelter of remaining trees. Regeneration can be natural or artificial.
3. ***Selective cutting*** – the forest is managed as an uneven aged system. Foresters periodically come and harvest selected trees. This is the most costly type of cutting, but it has the least impact on the ecosystem.

***Ecological Issues***

Natural forests sustain themselves without being managed. It is difficult to manage forests to meet commercial demands while maintaining ecological values.

Clear cutting is the most profitable harvesting method, but nutrients are lost from the soil and erosion increases. The sediments enter the stream harm fish spawning areas and the nutrients increase the growth of algae.

What do you think happens to biodiversity?

**Wildlife Management**

Managed hunts are used to control populations. The loss of wolves in many parts of Ontario has resulted in large deer populations in some regions. As the number of deer increases, they deplete their natural food supply and feed on agricultural crops. The only natural controls on the populations are starvation and disease. In such cases, a controlled hunt will bring the population down to a more sustainable size.