

Unit A: Introduction to Forestry

Lesson 1: Defining Forests



Terms

- ◆ Commercial forestry
- ◆ Forest
- ◆ Forestry
- ◆ Log
- ◆ Native forest
- ◆ Old-growth forest
- ◆ Pulpwood
- ◆ Regrowth forest
- ◆ Silviculture
- ◆ Tree farm

What is a forest?

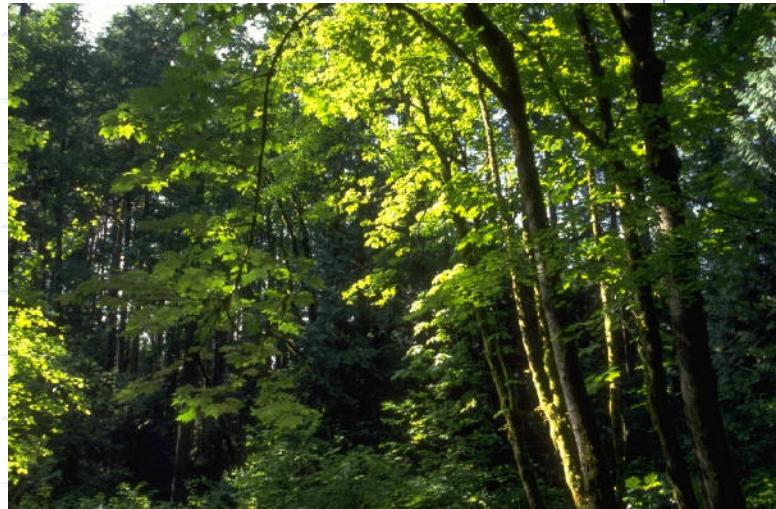
- ◆ A forest is a living, complexly interrelated community of trees and associated plants and animals.
- It is an ever-changing community.

What is a forest?

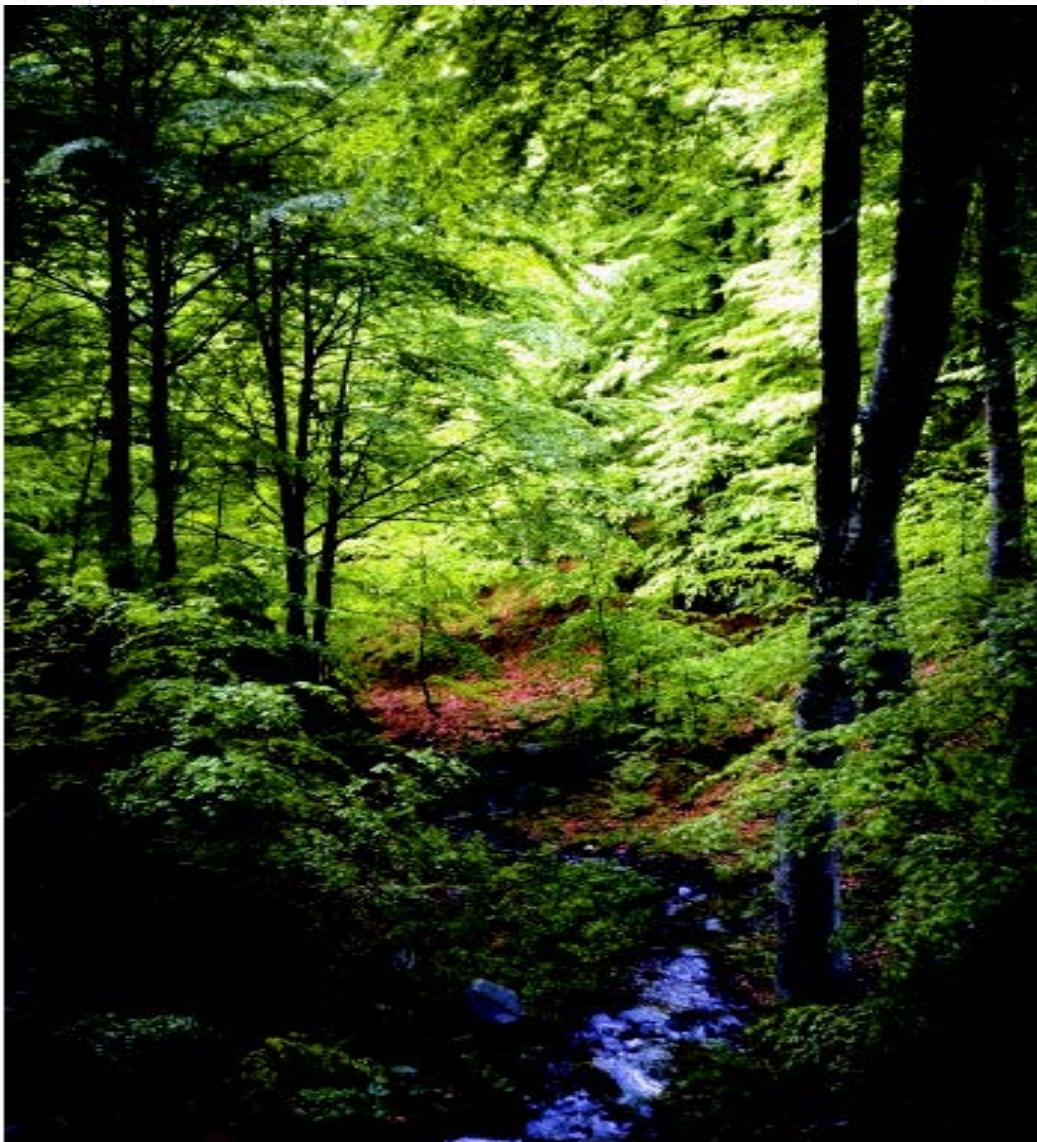
- ◆ Plants dominate the land area.
 - Animal wildlife may live in association with the forest community.
- ◆ Forests will live indefinitely on a given area of land unless seriously disturbed by people or altered by catastrophic events.

What is a forest?

- ◆ Forests contribute to the stability of nature and consequently benefit many forms of life, including human beings.
- ◆ The study of forests and associated communities is known as forestry.



Forest – living community of trees, plants, and animals.
Forestry – study of forests and associated communities.



What is the importance of a forest?

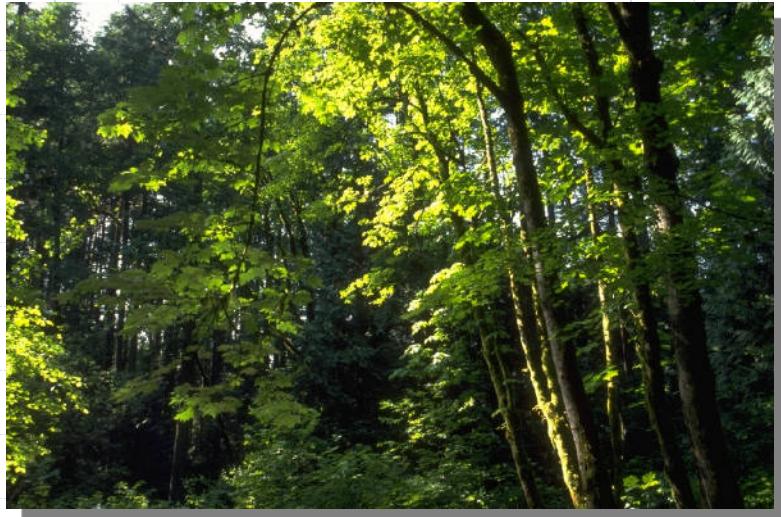
- ◆ Forests are a very important part of the environment.
- ◆ Forests cover about one-third of the earth's surface.
- ◆ Afghanistan has approximately 1,351,000 hectares of forests.

What is the importance of a forest?

- ◆ The art of producing and tending a forest is called silviculture.
- ◆ The relationship between genetics and environmental influences must be understood for silviculture to be effectively practiced.

What are the types of forests?

- ◆ Forests once covered many of the world's continents.
- ◆ This vast natural resource promoted the growth of many countries.



What are the types of forests?

- ◆ There are several types of forests.
- ◆ A native forest is one in which the species are voluntarily growing and are naturally present in the area.
 - Native forests often have a variety of species and provide wildlife habitat.

What are the types of forests?

- ◆ The majority of the forests in Afghanistan have been cut one or more times.
- ◆ This area is known as re-growth forest because if given enough time, it re-grows approximately every quarter century after cutting.

What are the types of forests?

- ◆ An uncut forest is known as an old-growth forest.



What are the types of forests?

- ◆ A tree farm is an area that has been planted to select and improve tree species.
- ◆ Undesirable native species are not allowed to grow on tree farms.
- ◆ Practices are used to protect the trees and promote rapid, desirable growth.

What are the types of forests?

- ◆ Regular harvest schedules are followed and usually result in higher wood production.
- ◆ Commercial forestry is caring for a forest to improve the quality and quantity of wood when it is marketed.

What are the uses a forest provides?

- ◆ Forests have many uses. Products from the trees that grow in forests are used in many ways.
- ◆ The uses of forests are far greater than just the trees.

What are the uses a forest provides?

- ◆ Economic benefits are the commercial uses made of forests.
Raw materials are used for manufacturing useful products.
 - A log is a segment of the main stem, or trunk, of a tree that is suitable for sawing into lumber.
 - Pulpwood is the wood that is used to make paper and similar products.

What are the uses a forest provides?

- ◆ Forests provide a large number of other products including fence posts, maple syrup, nuts, berries, and many specialty wood materials.



What are the uses a forest provides?

- ◆ Forests provide a number of important benefits to the environment.
- ◆ Forests influence local climate.
 - Trees can cool small areas in warm weather and reduce wind movement throughout the year.

What are the uses a forest provides?

- ◆ Forests conserve moisture.
- ◆ Trees reduce the loss of water to runoff and help retain snow as it is melting; maintaining groundwater supplies and reducing the chance of flooding.

What are the uses a forest provides?

- ◆ Forests provide habitat for wildlife.
- ◆ Many trees produce nuts or berries that are used as food by wildlife.
- ◆ Some wildlife species use leaves, holes in trees, and other places as nesting or bedding areas.

What are the uses a forest provides?

- ◆ Forests can be used for pollutant removal and detection.
 - Trees remove some pollutants from the air.
 - Trees reduce particulate in the air by holding it on leaf surfaces.
- ◆ Trees are used for noise reduction.
 - Trees are often planted along roads to reduce the noise from passing vehicles.

What are the uses a forest provides?

- ◆ Forest provide recreational activities.
- ◆ People enjoy hiking in forests and observing tree growth and wildlife.

Forest Uses

Each year a tree captures an average of 11.8 kilograms of carbon dioxide from the Earth's atmosphere.



Review / Summary

- ◆ What is a forest?
- ◆ Explain the importance of forests.
- ◆ Identify the types of forests
- ◆ Describe the uses of forests.