## **Forestry**

Forestry is the science, art, and craft of creating, managing, using, conserving, and repairing <u>forests</u> and associated resources, in a sustainable manner, to meet desired goals, needs, and values for human benefit. Forestry is practiced in <u>plantations</u> and natural <u>stands</u>. The challenge of forestry is to create systems that are socially accepted while sustaining the resource and any other resources that might be affected. The forest science has elements that belong to the biological, physical, social, political and managerial sciences.

Modern forestry generally embraces a broad range of concerns, in what is known as multipleuse management, including the provision of <u>timber</u>, fuel wood, <u>wildlife habitat</u>, natural <u>water</u> <u>quality management</u>, <u>recreation</u>, landscape and community protection, employment, aesthetically appealing <u>landscapes</u>, <u>biodiversity management</u>, <u>watershed management</u>, <u>erosion control</u>, and preserving forests as '<u>sinks'</u> for <u>atmospheric carbon dioxide</u>. A practitioner of forestry is known as a <u>forester</u>.

Forest ecosystems have come to be seen as the most important component of the biosphere, [4] and forestry has emerged as a vital applied science, craft, and technology.

Forestry is an important economic segment in various industrial countries. For example, in Germany, forests cover nearly a third of the land area, <sup>[5]</sup> wood is the most important <u>renewable</u> <u>resource</u>, and forestry supports more than a million jobs and about €170 billion in yearly turnover. <sup>[6]</sup>

## **Course Organization**

Prior to the course weekend, units will be provided with; an agenda, Goals and objectives, a list of required items, and the recommended prerequisites.

This course is designed to run over one day. The starting and ending times may be flexible, but generally the course will start at **9:30 am** and be completed about 4:00 pm on Saturday. It may be completed in one day if the participants do the prerequisites.

Groups participating in this course and other CWK courses are expected to abide by the Outdoor Code. As an American, I will do my best to – **Be Clean** in my outdoor manners, **Be Careful** with fire, **Be Considerate** in the outdoors, and **Be conservation-minded**.

Participants are given worksheets on which to record answers and write reports on the activities in which they participate.

The following lessons and activities are included in the course: The instructor asks the students what forestry is.

- 1. Discuss the definition of forestry. The students will write their definition/description of forestry on their worksheets.
- 2. Identify & discuss;
  - a. the characteristics of a leaf, twig, cone or fruit.
  - b. The habitat where these shrubs / trees are found.
  - c. The important ways they are used by humans
  - d. If they are native or have been introduced to the area.
- 3. The participants will learn the characteristics of at least ten (10) trees. List several ways the specific species can be used.

Find and examine at least two (2) types of animal used damage on trees. Identify / record the damage in their worksheet. Explain the cause and effect of the damage to the trees.

- 4. Describe the contributions forests make to:
  - a. Economy
  - b. Recreation, social well-being
  - c. Soil protection and fertility
  - d. Clean water
  - e. Clean air
  - f. Wildlife, fisheries, habitats
  - g. Threatened / Endangered species of plants and animals
- 5. Describe what forest management means for the following:
  - a. Multiple tree management
  - b. Sustainable forest management
  - c. Even-aged, uneven aged management
  - d. Intermediate cuttings
  - e. Role of prescribed burning and related management practices
- 6. Describe:
  - a. The consequences to the forest from wildlife, absence of fire, insects, trees, Diseases, and pollution, overgrazing, deer and other wildlife.
  - b. What can be done to reduce "a".
  - c. What would you do if you discovered a forest fire? How would a professional control it?
- 7. Visit a forest. Write or tell about a forester's occupation