FORESTRY

“Enhancing our youths’ competitive edge through merit badges”
Requirements

1. Prepare a field notebook, make a collection, and identify 15 species of trees, wild shrubs, or vines in a local forested area. Write a description in which you identify and discuss the following:
   a. The characteristics of leaf, twig, cone, or fruiting bodies
   b. The habitat in which these trees, shrubs, or vines are found
   c. The important ways each tree, shrub, or vine is used by humans or wildlife and whether the species is native or was introduced to the area. If it is not native, explain whether it is considered invasive or potentially invasive.

2. Do ONE of the following:
   a. Collect and identify wood samples of 10 species of trees. List several ways the wood of each species can be used.
   b. Find and examine three stumps, logs, or core samples that show variations in the growth rate of their ring patterns. In the field notebook you prepared for requirement 1, describe the location or origin of each example (including elevation, aspect, slope, and the position on the slope), and discuss possible reasons for the variations in growth rate. Photograph or sketch each example.
   c. Find and examine two types of animal, insect, or damage on trees. In the field notebook you prepared for requirement 1, identify the damage, explain how the damage was caused, and describe the effects of the damage on the trees. Photograph or sketch each example.
3. Do the following:
   a. Describe the contributions forests make to:
      (1) Our economy in the form of products
      (2) Our social well-being, including recreation
      (3) Soil protection and increased fertility
      (4) Clean water
      (5) Clean air (carbon cycling, sequestration)
      (6) Wildlife habitat
      (7) Fisheries habitat
      (8) Threatened and endangered species of plants
          and animals
   b. Tell which watershed or other source your community
      relies on for its water supply.

4. Describe what forest management means, including
   the following:
   a. Multiple-use management
   b. Sustainable forest management
   c. Even-aged and uneven-aged management and the
      silvicultural systems associated with each
   d. Intermediate cuttings
   e. The role of prescribed burning and related forest-
      management practices

5. With your parent’s and counselor’s approval, do ONE of
   the following:
   a. Visit a managed public or private forest area with the
      manager or a forester who is familiar with it. Write a
      brief report describing the type of forest, the management
      objectives, and the forestry techniques used to achieve
      the objectives.
   b. With a knowledgeable individual, visit a logging operation
      or wood-using manufacturing plant. Write a brief report
      describing the following:
      (1) The species and size of trees being harvested or used
          and the location of the harvest area or manufacturer
(2) The origin of the forest or stands of trees being utilized (e.g., planted or natural)

(3) The forest’s successional stage. What is its future?

(4) Where the trees are coming from (land ownership) or where they are going (type of mill or processing plant)

(5) The products that are made from the trees

(6) How the products are made and used

(7) How waste materials from the logging operation or manufacturing plant are disposed of or utilized

c. Take part in a forest-fire prevention campaign in cooperation with your local fire warden, state wildfire agency, forester, or counselor. Write a brief report describing the campaign, how it will help prevent wildfires, and your part in it.

6. In your camp, local recreation area (park or equivalent), or neighborhood, inventory the trees that may be a hazard to structures or people. Make a list by area (campsite, road, trail, street, etc.). Note the species and hazardous condition, and suggest a remedy (removal or trimming). Make your list available to the proper authority or agency.

7. Do the following:

a. Describe the consequences to forests that result from FIVE of the following elements: wildfire, absence of fire, destructive insects, loss of pollinating insect population, tree diseases, air pollution, overgrazing, deer or other wildlife overpopulation, improper harvest, and urbanization.

b. Explain what can be done to reduce the consequences you discussed in 7a.

c. Describe what you should do if you discover a forest fire and how a professional firefighting crew might control it. Name your state or local wildfire control agency.

8. Visit one or more local foresters and write a brief report about the person (or persons). Or, write about a forester’s occupation including the education, qualifications, career opportunities, and duties related to forestry.
Forestry Resources

Scouting Literature

Books

Organizations and Websites
Alliance for Community Trees
Telephone: 202-291-8733
Website: http://actrees.org
American Forest and Paper Association
Toll-free telephone: 800-878-8878
Website: http://www.afandpa.org
Arbor Day Foundation
Toll-free telephone: 888-448-7337
Website: http://www.arborday.org
eNature.com
Website: http://www.enature.com
Environmental Protection Agency
Telephone: 202-260-2090
Website: http://www.epa.gov
Identification Keys
Website: http://www.backyardnature.net/keys.htm


Visit the information page at http://www.backyardnature.net/keys.htm for more information.
National Association of State Foresters
Telephone: 202-624-5415
Website: http://www.stateforesters.org

Natural Resources Conservation Service
Website: http://www.nrcs.usda.gov

Society of American Foresters
Telephone: 301-897-8720
Website: http://www.safnet.org

U.S. Department of Agriculture Forest Service
Telephone: 202-205-8333
Website: http://www.fs.fed.us

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