



Forestry

Merit Badge Workbook



This workbook can help you but you still need to read the merit badge pamphlet.

This Workbook can help you organize your thoughts as you prepare to meet with your merit badge counselor.

You still must satisfy your counselor that you can demonstrate each skill and have learned the information.

You should use the work space provided for each requirement to keep track of which requirements have been completed, and to make notes for discussing the item with your counselor, not for providing full and complete answers.

If a requirement says that you must take an action using words such as "discuss", "show", "tell", "explain", "demonstrate", "identify", etc, that is what you must do.

Merit Badge Counselors may not require the use of this or any similar workbooks.

No one may add or subtract from the official requirements found in Scouts BSA Requirements (Pub. 33216).

The requirements were last issued or revised in 2019 • This workbook was updated in March 2019.

Scout's Name: _____

Unit: _____

Counselor's Name: _____

Counselor's Phone No.: _____

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about this workbook to: Workbooks@USScouts.Org
Comments or suggestions for changes to the requirements for the merit badge should be sent to: Merit.Badge@Scouting.Org

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.

(See the Sample Notebook Page at the end of this workbook)

2. Do ONE of the following:

- c a. Collect and identify wood samples of 10 species of trees. List several ways the wood of each species can be used. *(See the Sample Notebook Page at the end of this workbook)*
- c 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 c. Find and examine two types of animal, insect, or disease damage to 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.

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3. Do the following:

a. Describe 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 silvicultural systems associated with each type.

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:

- c a. Visit a managed public or private forest area with its manager or a forester familiar with it. Write a brief report describing the type of forest, the management objectives, and the forestry techniques used to achieve the objectives.
- c b. Take a trip to a logging operation or wood-using industrial plant and write a brief report describing:
 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.

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.

Wildfire:

Absence of fire:

Destructive Insects:

Loss of pollinating insect population:

Tree diseases:

Air pollution:

Overgrazing:

Deer or other wildlife overpopulation:

c Improper harvest:

c 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.

What to do:

How a professional firefighting crew might control it.

Name your state or local wildfire control agency.

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c 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.

When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from <http://usscouts.org/advance/docs/GTA-Excerpts-meritbadges.pdf>. You can download a complete copy of the *Guide to Advancement* from <http://www.scouting.org/filestore/pdf/33088.pdf>.

SAMPLE for Req. 2A: Field Notebook Collection Identifying 10 Wood Samples

Attach samples here

Species

Uses:

Attach samples here

Species

Uses:
