



Forestry Merit Badge Workbook

SCOUTMASTER BUCKY

Scouts participating in a Scoutmaster Bucky merit badge opportunity, whether online or in person, should consider using the Forestry merit badge pamphlet for discovery and knowledge, along with the class preparation pages for clarifications, insights, and expectations.

<https://scoutmasterbucky.com/merit-badges/forestry/forestry-pamphlet.pdf>

<https://scoutmasterbucky.com/merit-badges/forestry/forestry-cpp.pdf>

Consider utilizing the [Scoutmaster Bucky Forestry Field Notebook](#) for easier completion.

REQUIREMENT 5 REQUIRES COUNSELOR APPROVAL.

REQUIREMENT 5 REQUIRES PARENT / GUARDIAN APPROVAL.

REQUIREMENT 5c REQUIRES A FORESTRY / FIRE PROFESSIONAL TO CONFIRM PARTICIPATION.

REQUIREMENT 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:

- The characteristics of leaf, twig, cone, or fruiting bodies
- The habitat in which these trees, shrubs, or vines are found.
- 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.

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DO ONE OF THE FOLLOWING (2A, 2B, or 2C) FOR REQUIREMENT 2

REQUIREMENT 2a: Collect and identify wood samples of 10 species of trees. List several ways the wood of each species can be used.

SPECIES #1:

Wood Species Name / Type:

Ways this wood is used:



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SPECIES #2:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #3:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #4:

Wood Species Name / Type:

Ways this wood is used:



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SPECIES #5:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #6:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #7:

Wood Species Name / Type:

Ways this wood is used:



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SPECIES #8:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #8:

Wood Species Name / Type:

Ways this wood is used:

SPECIES #9:

Wood Species Name / Type:

Ways this wood is used:



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SPECIES #10:

Wood Species Name / Type:

Ways this wood is used:

REQUIREMENT 2b:

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.

Consider utilizing the [Scoutmaster Bucky Forestry Field Notebook](#) for easier completion.

EXAMPLE #1:

Notes:



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EXAMPLE #2:

Notes:

EXAMPLE #3:

Notes:



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REQUIREMENT 2c:

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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EXAMPLE #1:

Notes:

EXAMPLE #2:

Notes:



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REQUIREMENT 3a1: Describe the contributions forests make to our economy in the form of products.

Notes:

REQUIREMENT 3a2: Describe the contributions forests make to our social well-being, including recreation.

Notes:



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REQUIREMENT 3a3: Describe the contributions forests make to soil protection and increased fertility.

Notes:

REQUIREMENT 3a4: Describe the contributions forests make to clean water.

Notes:



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REQUIREMENT 3a5: Describe the contributions forests make to clean air (carbon cycling, sequestration).

Notes:

REQUIREMENT 3a6: Describe the contributions forests make to wildlife habitat.

Notes:



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REQUIREMENT 3a7: Describe the contributions forests make to fisheries habitat.

Notes:

REQUIREMENT 3a8: Describe the contributions forests make to threatened and endangered species of plants and animals.

Notes:



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REQUIREMENT 3b: Tell which watershed or other source your community relies on for its water supply.

Notes:

REQUIREMENT 4: Describe what forest management means.

Notes:



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REQUIREMENT 4a: Describe what multiple-use management means.

Notes:

REQUIREMENT 4b: Describe what sustainable forest management means.

Notes:



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REQUIREMENT 4c: Describe what even-aged and uneven-aged management means, and the silvicultural systems associated with each.

Notes:

REQUIREMENT 4d: Describe what intermediate cuttings means.

Notes:



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REQUIREMENT 4e: Describe the role of prescribed burning and related forest management practices.

Notes:

DO ONE OF THE FOLLOWING (5A, 5B, or 5C) FOR REQUIREMENT 5

REQUIREMENT 5: With your parent or guardian's and counselor's approval, do ONE of the following:

PARENT/GUARDIAN APPROVAL: IS REQUIRED.

Parent's / Guardian's Name

Phone or Email

Parent's / Guardian's Signature

Date ☐ *approved*

COUNSELOR APPROVAL: IS REQUIRED.

Counselor's Name

Phone or Email

Counselor's Signature

Date ☐ *approved*



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REQUIREMENT 5a:

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.

Forest Area Visited:

Date, Time, and Location of Visit:

Type of Forest:

Management Objectives:

Forestry Techniques to Achieve these Objectives:



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REQUIREMENT 5b: 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.

Logging Operation / Manufacturing Plant:

Date, Time, and Location of Visit:

5b1 – Species and size of trees being harvested:

5b1 – Location of the harvest area or manufacturer:

5b2 – Origin of trees and whether planted or natural:



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5b2 – What is the succession plan:

5b3 – What is the future for that area:

5b4 – Where are the trees coming from (land ownership):

5b4 – Where are the trees going (type of mill or processing plant):



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5b5 – Products that are made from the trees:

5b6 – How the products are made and used:

5b7 – How waste materials from operations or manufacturing are disposed of or utilized:



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REQUIREMENT 5c: Take part in a forest-fire prevention campaign in cooperation with your local fire warden, state wildfire agency, forester, or counselor.

Forest Fire Prevention Campaign:

Organization in cooperation with:

FORESTRY / FIRE PROFESSIONAL PARTICIPATION CONFIRMATION: IS REQUIRED.

Campaign Representative's Name

Phone or Email

Campaign Representative's Signature

Date ☐ participated

REQUIREMENT 5c: Take part in a forest-fire prevention campaign and write a brief report describing the campaign, how it will help prevent wildfires, and your part in it.

Describe the Campaign:



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How the Campaign will Help Prevent Wildfires:

Your Part in the Campaign:



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REQUIREMENT 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.

Tree	Species	Hazard	Area	Remedy Suggestion
Tree 1				
Tree 2				
Tree 3				
Tree 4				
Tree 5				
Tree 6				
Tree 7				
Tree 8				
Tree 9				
Tree 10				
Tree 11				
Tree 12				
Tree 13				
Tree 14				
Tree 15				
Tree 16				



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REQUIREMENT 7a: 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, urbanization.

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

WILDFIRE:

Consequences to forests from...:

What can be done to reduce consequences:

ABSENCE OF FIRE:

Consequences to forests from...:

What can be done to reduce consequences:



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DESTRUCTIVE INSECTS:

Consequences to forests from...:

What can be done to reduce consequences:

LOSS OF POLLINATING INSECT POPULATION:

Consequences to forests from...:

What can be done to reduce consequences:



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TREE DISEASE:

Consequences to forests from...:

What can be done to reduce consequences:

AIR POLLUTION:

Consequences to forests from...:

What can be done to reduce consequences:



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OVERGRAZING:

Consequences to forests from....:

What can be done to reduce consequences:

DEER OR OTHER WILDLIFE OVERPOPULATION:

Consequences to forests from....:

What can be done to reduce consequences:



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IMPROPER HARVEST:

Consequences to forests from...:

What can be done to reduce consequences:

URBANIZATION:

Consequences to forests from...:

What can be done to reduce consequences:



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REQUIREMENT 7c: Describe what you should do if you discover a forest fire.

Notes:

REQUIREMENT 7c: Describe how a professional firefighting crew might control a forest fire.

Notes:

REQUIREMENT 7c: Name your state or local wildfire control agency.

Notes:



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DO ONE OF THE FOLLOWING FOR REQUIREMENT 8

REQUIREMENT 8: Visit one or more local foresters and write a brief report about the person (or persons).

FORESTER #1:

Local Forester's Name:

Date and Location of Visit:

Notes:

FORESTER #2:

Local Forester's Name:

Date and Location of Visit:

Notes:



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FORESTER #3:

Local Forester's Name:

Date and Location of Visit:

Notes:

FORESTER #4:

Local Forester's Name:

Date and Location of Visit:

Notes:

FORESTER #5:

Local Forester's Name:

Date and Location of Visit:

Notes:

OR



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REQUIREMENT 8:

Write about a forester's occupation including the education, qualifications, career opportunities, and duties related to forestry.

Forester's Occupation:

Education Requirements:

Qualification Requirements:

Career Opportunities:

Duties Related to Forestry: