



# Forestry

Scouts BSA · Nature

Name

Started

Completed

Forestry is about understanding forests, from single trees to whole watersheds, and how people care for them. You'll identify trees, study wood, and see forest management in action. It's a great badge for anyone who loves spending time in the woods.

## Requirements

Every official requirement, in plain language. Check the official wording when you sign off ([scouting.org/merit-badges/forestry/](https://scouting.org/merit-badges/forestry/)). Tips and examples are ideas, not extra requirements.

- ☐ **1** Keep a field notebook and a collection, and identify 15 different trees, wild shrubs, or vines in a nearby forest. Write about each, covering the points below:

**Tip:** Bring a field guide and notebook on hikes. Sketch leaves and bark, and note where you found each species.

**Example:** A notebook page can be simple: a leaf sketch or rubbing, a bark description, the tree's common and scientific name, where you found it, and one fact, like "red maple, wet spot by the creek, red stems even in summer."

- ☐ **1a** What its leaves, twigs, cones, or fruiting bodies look like

- ☐ **1b** The habitat where it grows

- ☐ **1c** Key ways people or wildlife use it, and whether it's native or introduced (if not native, explain whether it's invasive or could become invasive)

## 2 Wood, growth rings, or tree damage: Choose 1 of 3

**Tips for this section:** Look at a tree stump or log slice and count the growth rings. Notice which years look wide or narrow.

**Example for this section:** Find three cut stumps or logs and count the rings. Mark stretches of narrow rings and guess what happened those years, like a dry summer or crowding. In your notebook, note where each one was, like a sunny south-facing slope or a shady creek bottom, and sketch or photograph each.

- ☐ **2a** Collect and identify wood samples from 10 tree species and list several uses for each species' wood

- ☐ **2b** Examine three stumps, logs, or core samples whose rings show changes in growth rate. In your requirement 1 notebook, note where each came from (elevation, aspect, slope, slope position), discuss why growth varied, and photograph or sketch each

- ☐ **2c** Examine two kinds of tree damage from animals, insects, or disease. In your requirement 1 notebook, identify each, explain its cause and its effects on the trees, and photograph or sketch each

## 3 What forests give us

**Tips for this section:** Think about what forests give us, like wood, clean water, wildlife habitat, and places to play. Find out where your town's water comes from.

**Example for this section:** Trace your water: rain falls on a forested hillside, soaks into the soil, feeds a creek, flows to the reservoir, and comes out of your faucet. Explain how cutting all the trees on that hill could change the water.

- ☐ **3a** Describe what forests contribute to each of these:

- ☐ **3a1** The economy, through forest products

- ☐ **3a2** Social well-being, including recreation

- ☐ **3a3** Protecting soil and making it more fertile

- ☐ **3a4** Clean water

- ☐ **3a5** Clean air (carbon cycling and sequestration)

- ☐ **3a6** Habitat for wildlife

- ☐ **3a7** Habitat for fish

- ☐ **3a8** Threatened and endangered plants and animals

- ☐ **3b** Name the watershed or other source your community gets its water from

- ☐ **4** Describe what forest management means, covering each of these:

**Tip:** Ask a forester or park ranger which management practices they use and why.

**Example:** Explain each practice like a forester would, for example a thinning (an intermediate cutting) that removes crowded trees so the rest grow stronger, and a prescribed burn that clears brush so a wildfire is less likely to spread.

- ☐ **4a** Multiple-use management

- ☐ **4b** Sustainable forest management

- ☐ **4c** Even-aged versus uneven-aged management, and the silvicultural system that goes with each

- ☐ **4d** Intermediate cuttings

- ☐ **4e** What prescribed burning and related practices do in forest management

**5 Forest visit or fire prevention campaign: Choose 1 of 3**

**Tips for this section:** Ask your state forestry agency about visits to a managed forest. Stay well back from active logging with your guide.

- ☐ **5a** With parent or guardian and counselor approval, tour a managed public or private forest with its manager or a forester who knows it. Write a short report on the forest type, management goals, and techniques used to reach them

- ☐ **5b** With parent or guardian and counselor approval, go with someone knowledgeable to a wood-using plant or to a current or past logging site. Write a short report covering:

- ☐ **5b1** Which species and sizes of trees are cut or used

- ☐ **5b2** Where the stands came from, such as planted or natural

- ☐ **5b3** The forest's successional stage and future, and for a past operation, the planted or natural regrowth happening now

- ☐ **5b4** Who owns the land the trees come from, or what kind of mill or plant they go to

- ☐ **5b5** What products are made from the trees

- ☐ **5b6** How those products are made and used

- ☐ **5b7** How waste from the operation or plant is (or was) used or disposed of

- ☐ **5c** With parent or guardian and counselor approval, help with a forest-fire prevention campaign alongside your fire warden, state wildfire agency, a forester, or your counselor. Write a short report on the campaign, how it prevents wildfires, and your role

## 6 Hazard trees: Choose 1 of 2

**Tips for this section:** Walk a campsite, trail, or street with an adult and look for trees with dead limbs, cracks, or a heavy lean that could fall on people or buildings.

**Example for this section:** Walk a campsite with your counselor or a forester and list trees that could be dangerous, like a dead limb over a tent pad or a leaning pine with a cracked trunk. For each, note the species, the hazard, and whether to trim or remove it, then give the list to the camp ranger.

- ☐ **6a** At your camp, a local park or recreation area, or your neighborhood, list trees in one area (campsite, road, trail, street) that could endanger people or buildings. Note species, the hazard, and a fix (trim or remove), and give the list to the right agency

- ☐ **6b** At your camp, a local park or recreation area, or your neighborhood, review a professional's hazard tree report for the area, then visit those trees and see the results of the pruning or removal it called for

## 7 Forest threats and fire

**Tips for this section:** Learn about insects, disease, and fire in forests near you and what people do to prevent damage.

- ☐ **7a** Describe how FIVE of these affect forests: wildfire, lack of fire, harmful insects, loss of pollinators, tree diseases, air pollution, overgrazing, too many deer or other wildlife, poor harvesting, and urbanization

- ☐ **7b** Explain what can be done to lessen the effects you described in 7a

- ☐ **7c** Describe what to do if you find a forest fire and how a professional crew might bring it under control. Name the wildfire control agency for your state or area

- ☐ **8** Write a short report about one or more local foresters after visiting them, OR write about the forester's job, including education, qualifications, career opportunities, and duties

**Tip:** Contact a forester through your state forestry agency or a local land trust and ask about their career.

**Example:** If you write about careers, compare two: a forester who plans timber sales and tree planting, and a forestry technician who marks trees, measures plots, and works on fire crews. Include training and what a typical day looks like.