

Logging is cutting, processing, and moving trees outside the forest, usually to a sawmill or lumber yard.

Silviculture is the practice of growing and cultivating forest crops, specifically timber production. The focus is the control, establishment, and management of forest stands.

A forest **stand** is a community of trees with features that distinguish it from adjacent communities.

Forestry is creating, managing, planting, using, conserving, and repairing forests and woodlands, at a scale broader scale than stand-level silviculture.

Clear-cutting is a method of harvesting that removes essentially all standing trees in a selected area.

Selective logging vs selection cutting: These are confusing. Cutting trees with the highest value and leaving malformed or diseased or lower value trees, is referred to as high grading or sometimes selective logging. Selection cutting is the practice of managing stands by harvesting a proportion of trees, but I've also seen this called selective logging.

Rotation refers to the lifespan of a stand of timber, from seedling to final harvest. When to harvest depends on species, local conditions, and economic return. Rotation ages vary from 20-30 years for aspen and loblolly pine to 100 years or longer for ponderosa pine, for example.[ii] Long rotations or delaying logging can increase carbon storage and improve sustained timber yield.[iii]

Thinning is the selective removal of trees, primarily to improve the growth rate or health of the remaining trees.

A **controlled burn or prescribed burn** is intentionally setting a fire, for forest management, ecological restoration, land clearing, or wildfire fuel management. Pile burning is piling up and burning woody debris or slash.

Salvage logging is logging trees in forest areas damaged by wildfire, flood, wind, disease, insect infestation, or other natural disturbance, primarily to recover economic value that would otherwise be lost. Controversies remain about whether salvage logging benefits or harms forest health and function and whether salvage logging of damaged trees in protected areas is appropriate.

Old-growth forest or primary forest is natural forest that has developed over a long period of time without significant human disturbance. Old-growth forests that have never been logged may be called virgin or first-growth forests.

The Food and Agriculture Organization of the United Nations defines primary or old-growth forests as naturally regenerated forests of native tree species, where there are no clearly visible indications of human activities and the ecological processes are not significantly disturbed [iv]

[i] Wikipedia entries on Forests of the United States, Logging, Silviculture, Forest stand, Forestry, Selection cutting, Thinning, Controlled burn, Salvage logging, and Old-growth forest, accessed June 4, 2025.

[ii] How often can you harvest timber? Z Lowry, Jul 2022 (<https://thetimberlandinvestor.com/how-often-can-you-harvest-timber/>)

[iii] Yes, long rotations can yield real climate gains for Cascadia. K Anderson, Mar 2022

(<https://www.sightline.org/2022/03/17/yes-long-rotations-can-yield-real-climate-gains-for-cascadia/>)

[iv] The State of the World's Forests 2022 (https://openknowledge.fao.org/server/api/core/bitstreams/8f8f2820-6df4-4746-9295-e9356148f8a2/content/CA8642EN.html#chapter-2_2)