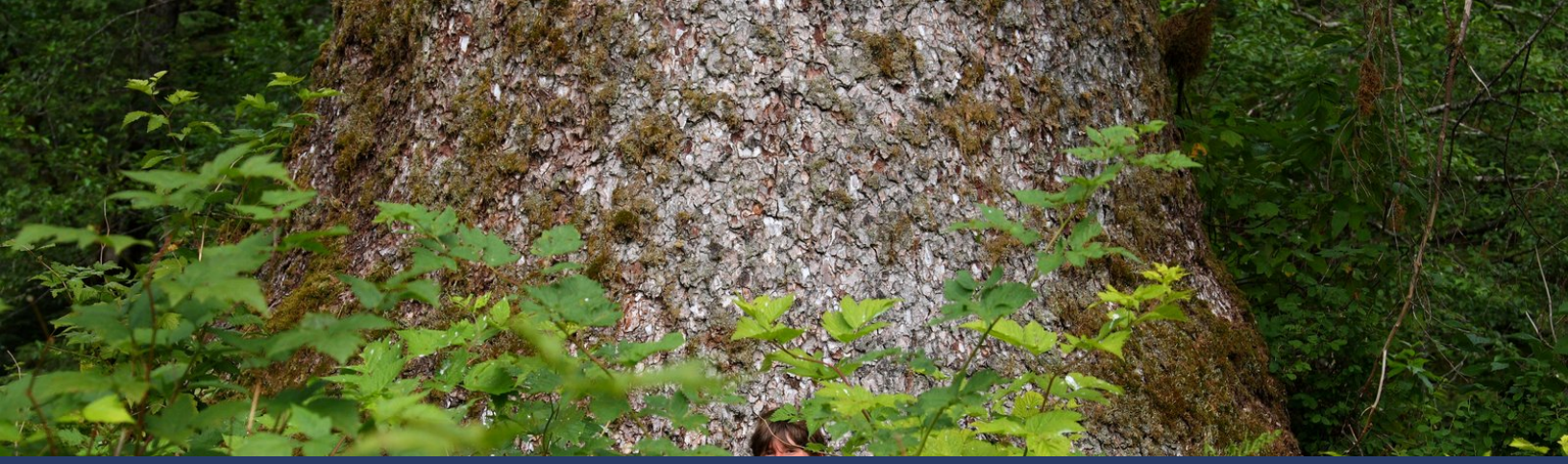


Forestry Terminology

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LAST MODIFIED: 12TH AUGUST 2019
CREATED: JAN. 19, 2018

Ground Truth Trekking

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Forestry Terminology

Certain forestry terms can be deceiving: a “productive” forest does not necessarily grow fast, a “commercial” forest is not necessarily marketable, and “old growth” (http://en.wikipedia.org/wiki/Old-growth_forest) trees are not necessarily large. This article explains a few of these terms.



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BIG TREE — Prime logging material, if not for an inaccessible location — Get Photo (/photos/big-tree/)

What is a “Productive” forest?

A “productive” is any forest which is capable of producing 20 cubic feet or more of biomass per year. This does not constitute a commercially viable timber harvest for many regions and tree species.

The “productive” old growth stands of the Tongass vary from less than 10,000 board-feet/acre and to more than 200,000 plus board feet per acre. Major areas of the Tongass, though classified as “productive” and forested by old growth trees with an average age of greater than 150 years, are not commercially viable. Tree size, lumber quality, physical accessibility, and the expense of transporting the wood to market all factor into timber value. Total baseline productivity does not necessarily correlate to timber of commercial value.

What are “Lowland Old Growth” and “Volume Class 7”?

Lowland old growth typically consists of the largest and the most accessible old growth, growing in valley bottoms and low-lying coastal areas. Much of the old growth in the popular imagination - verdant valley bottoms filled with immense, pillar-like trees - is lowland old growth.

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The truly “giant trees” are really only a tiny subset of old growth, known as Volume Class 7, which is the largest trees in the world. The famous Redwood and Giant Sequioa groves in the United States are Volume Class 7. Volume Class 7 refers to a timber density of greater than 50,000-board feet/acre, and the largest stands may exceed 100,000 feet/acre. Volume Class 6 refers (http://ak.audubon.org/sites/default/files/documents/audubon_s730-hr1408_high-grading_white_paper_-_oct2011_final.pdf) to a timber density of 30,000 to 50,000 board feet/acre. These archetypical “groves of giants” thrive in riparian lowlands with excellent growing conditions. Due to their high timber value, these stands have been logged to extinction throughout most of the world. In the Tongass, logging pressure is focused intensely on this lowland old growth, which contains the vast majority of Volume Class 6 and 7 stands. Continuous road construction is necessary to extend logging access into the riparian areas which host these large trees. While not all Volume Class 6 and 7 is lowland, these giant trees are predominantly found in lowlands, which typicaly provide the best growing conditiosn.

The original acreage of very large trees in the Tongass is not known, due to the lack of historical surveys and the uncontrolled nature of early logging. During this time, very large trees were preferentially targeted, and the most accessible stocks were depleted.

Figures for original Volume Class 7 and 6 trees on the Tongass are somewhat speculative, since there were no original timber surveys. Some cited estimates place the depletion rate of

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Volume Class 7 in the Tongass at 70%, which would suggest an original Volume Class 7 acreage in the range of 300,000 acres. Current Volume Class 7 acreage is estimated (http://ak.audubon.org/tongass-national-forest-0) at 82,000 acres, with an additional 418,000 acres of Volume Class 6.

Further Reading

> USDA: New Findings About Old Growth Forests (http://www.fs.fed.us/pnw/pubs/science-update-4.pdf)

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