GROWING SPACE RATIO AS RELATED TO FORM AND DEVELOPMENT OF WESTERN WHITE PINE

A Thesis

Presented in partial fulfillment of the requirements for the

Degree of Master of Science in Forestry in the

School of Forestry

Of the

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By

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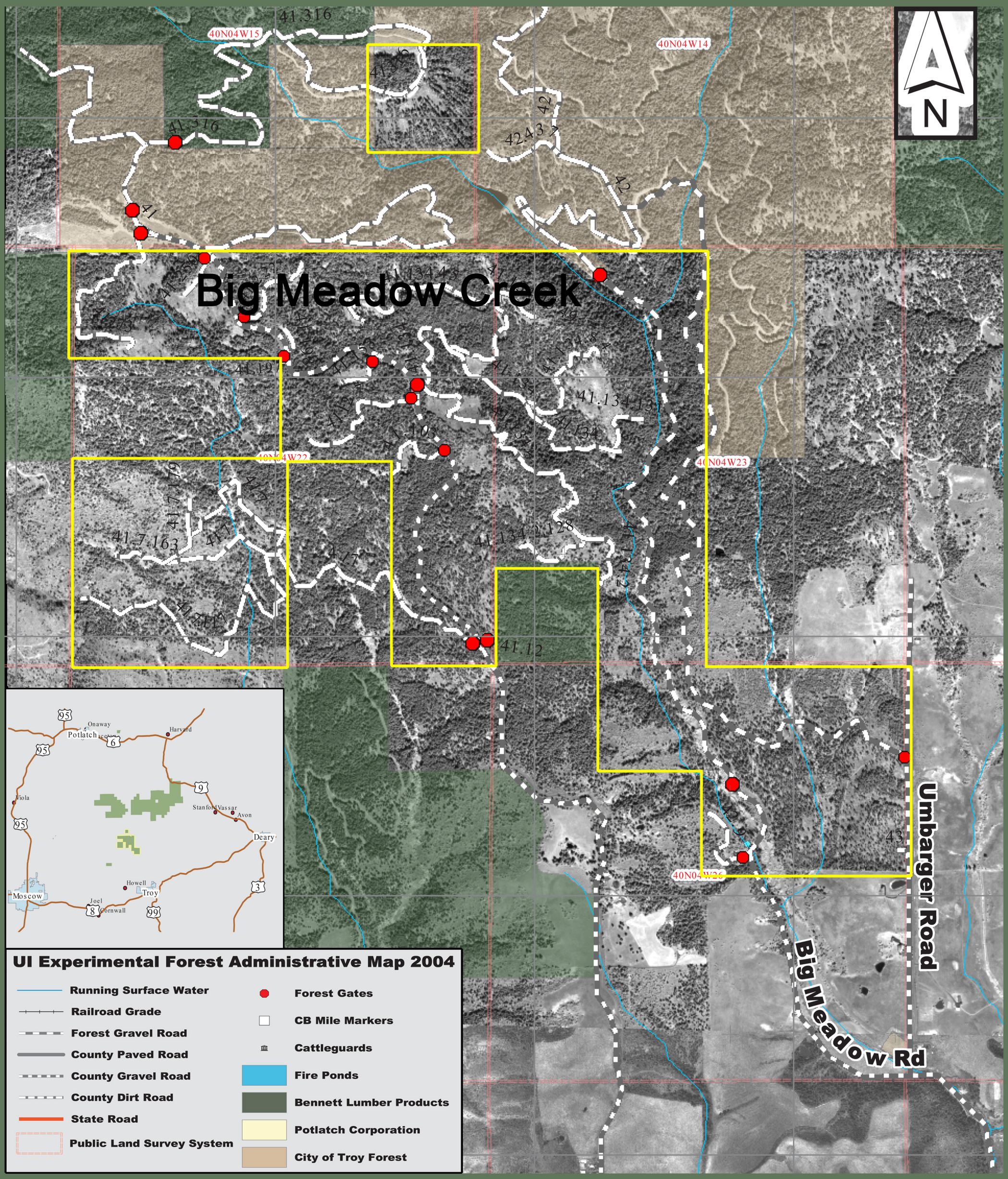
SUMMARY AND CONCLUSIONS

The amount of growing space available to a tree has an important bearing on its form and development throughout life. Regulation of relative growing space through thinnings is the primary means the forester uses to control form and rate of growth so that the resulting product will yield the greatest financial return. Little specific information is available as to the growing space requirements of western white pine when growing in less than fully-stocked stands. Still less is know about how the species develop under varying conditions of relative growing space.

Study Site

Meadow Creek, located ten miles north of Troy, Idaho. Trees measured were located near the bottom of a west facing slope in a small, steep draw. The white pine were scattered singly or in small groups in openings of an older stand of western red cedar and grand fir. Occurring with the white pine and replacing it in many of the openings were groups of grand fir and Doug fir. These and the pine were in about the same age class, fifty years old. The general effect was dense uneven aged stand of mixed species in which the white pine occurred as a codependent of the younger age class in openings of the older stand. As a result there was a considerable variation in the degree of competition encountered by the individual western white pine trees, although the majority had attained a dominant or co-dominant position in the younger stand. Site index was computed to be 81.

Big Meadow Creek



UI Experimental Forest Administrative Map 2004

- Running Surface Water
- Railroad Grade
- Forest Gravel Road
- County Paved Road
- County Gravel Road
- County Dirt Road
- State Road
- Public Land Survey System
- Forest Gates
- CB Mile Markers
- Cattleguards
- Fire Ponds
- Bennett Lumber Products
- Potlatch Corporation
- City of Troy Forest

Feet

0 850 1,700 3,400 5,100 6,800

1 inch equals 0.25 miles

520 260 0 520 1,040 1,560

Meters

Location of Complete Research:

Author & Title: Arnold, Dale L.
Growing Space Ratio as Related to Form and Development of Western White Pine

University of Idaho Library:

Call Number- SD397.P55A75

College of Natural Resources:

Department- Forest Resources

Other Sources: