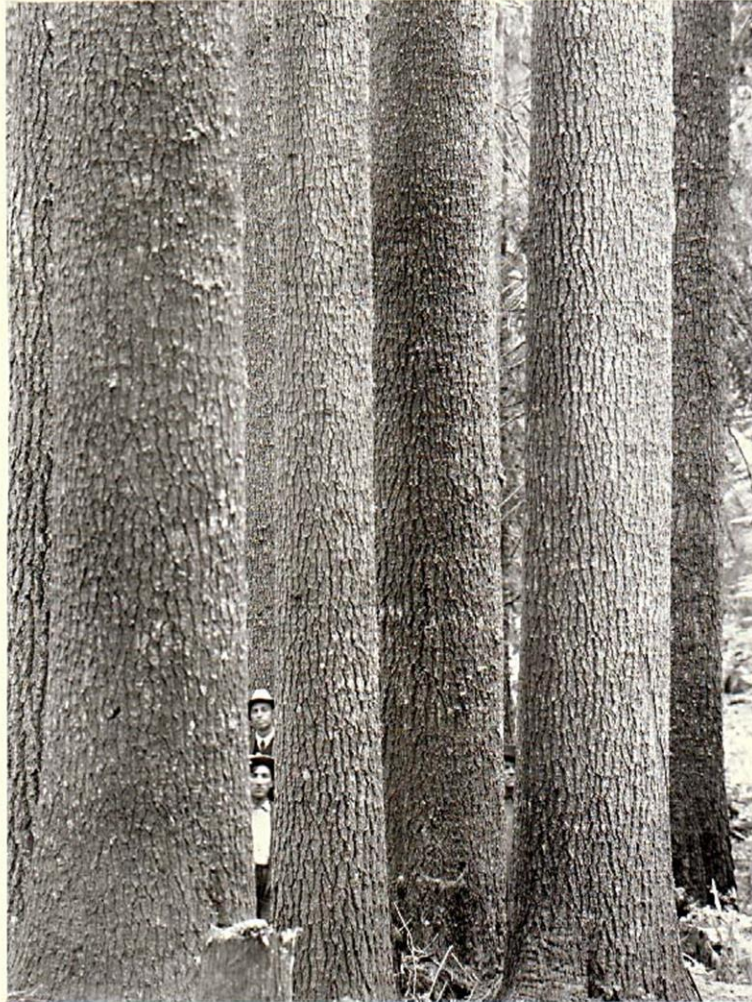


Western White Pine – Where Should We Grow It?



FK-38



(Images of the Past)

Group of Fine Homes, Potlatch, Idaho.

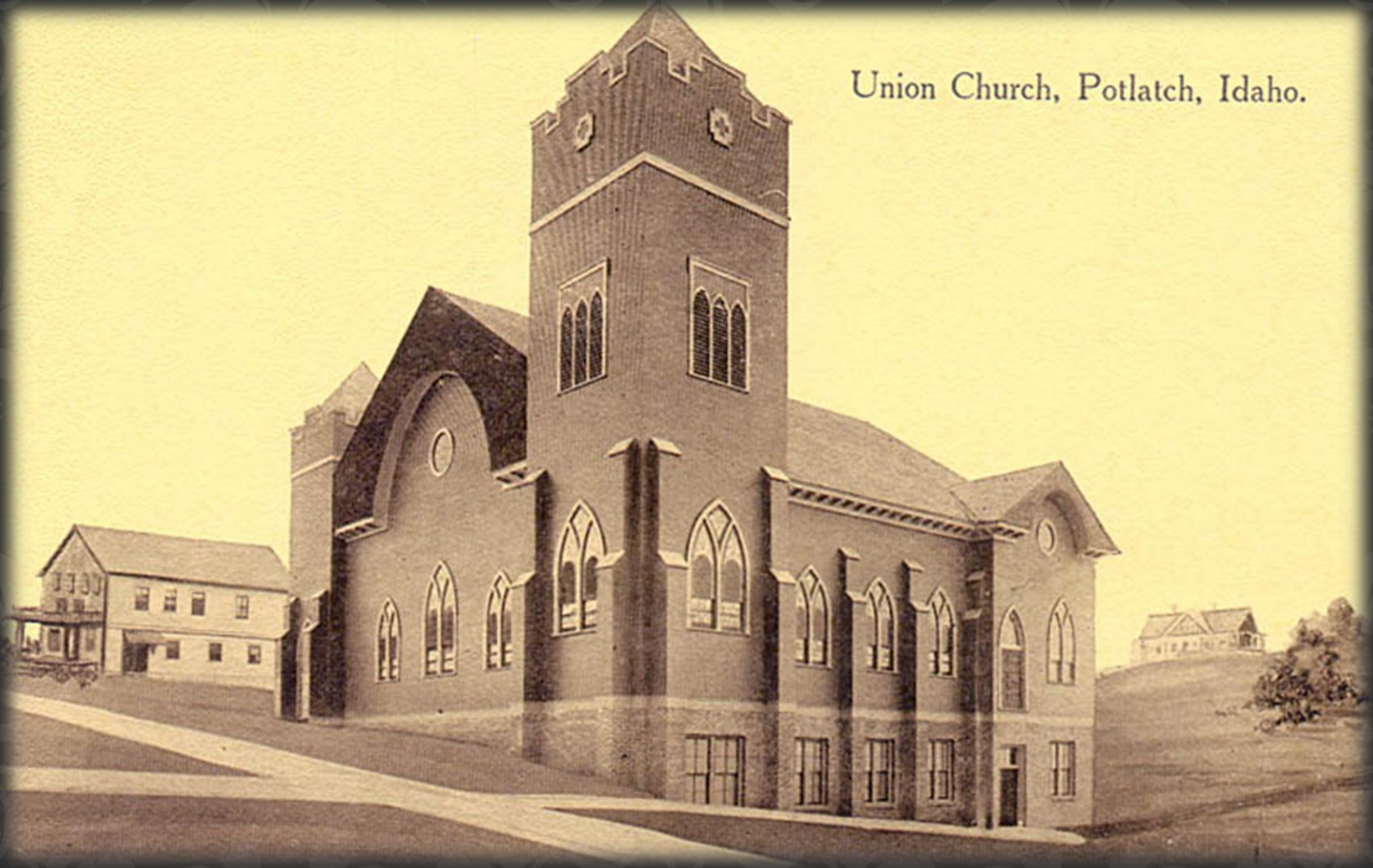


E. G. KROPP CO. MILWAUKEE



(Images of the Past)

Union Church, Potlatch, Idaho.





(Images of the Past)

Largest Known White Pine Tree, Property of Potlatch Lumber Company
Potlatch, Idaho



Entered according to act of Congress, 1912, by G. B. Joslin



Lumber Jacks at the Death of the White Pine King
December 12, 1911

Entered according to act of Congress, 1912, by G. B. Joslin

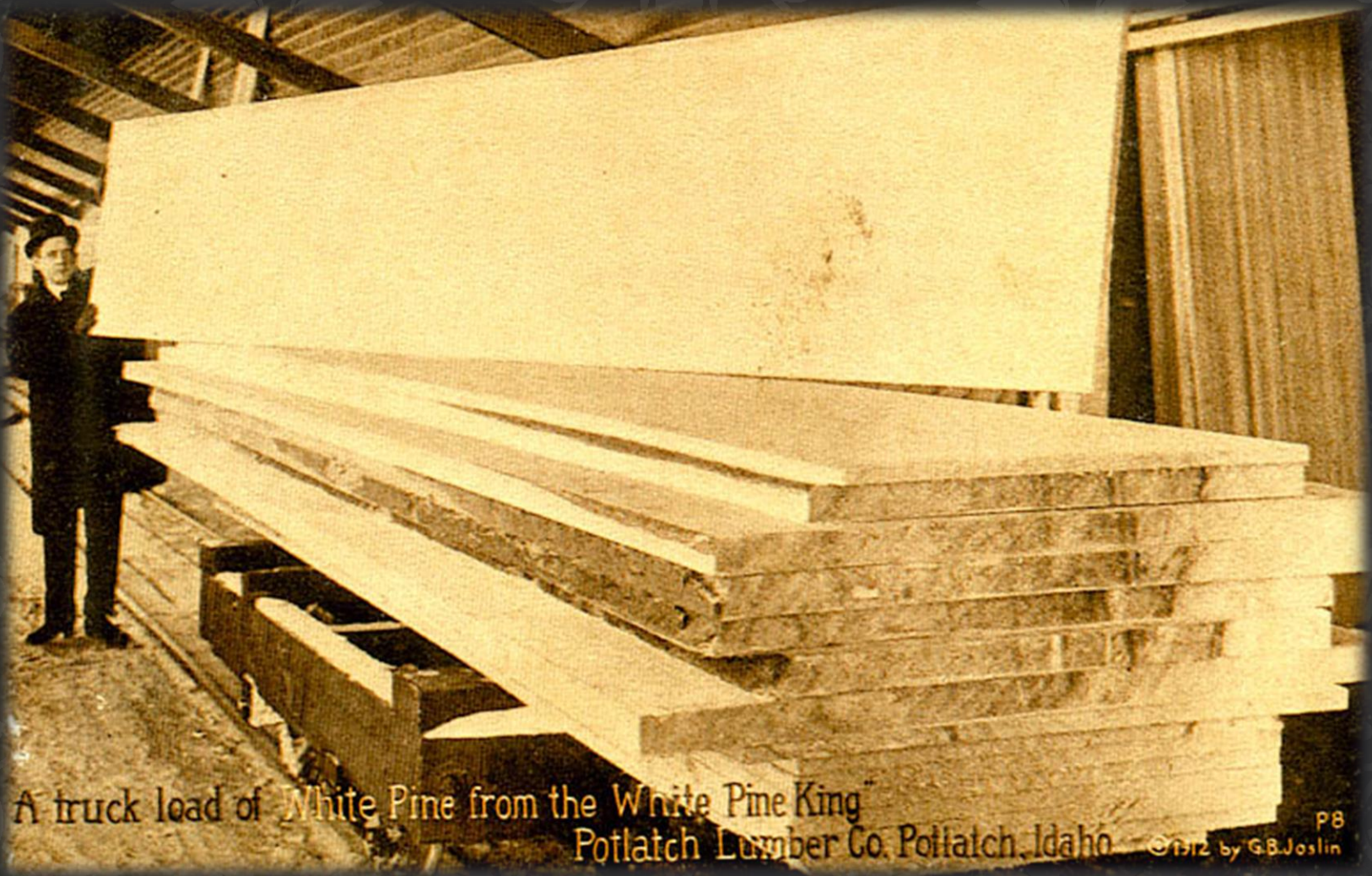


The White Pine King, Felled for Commercial Use, Dec. 12, 1911
Length 207 Feet, Scales 28,900, Average Diameter of Butt
Six Feet and Nine Inches, Age of Tree 425 Years.
Entered according to act of Congress, 1912, by G. B. Joslin

Quality Logs (Top Cut,) Scale 16,170 Feet, Cut From Largest Known
White Pine Tree by Potlatch Lumber Company, Potlatch, Idaho



Entered according to act of Congress, 1912, by G. B. Joslin



A truck load of "White Pine from the White Pine King"
Potlatch Lumber Co. Potlatch, Idaho

p8

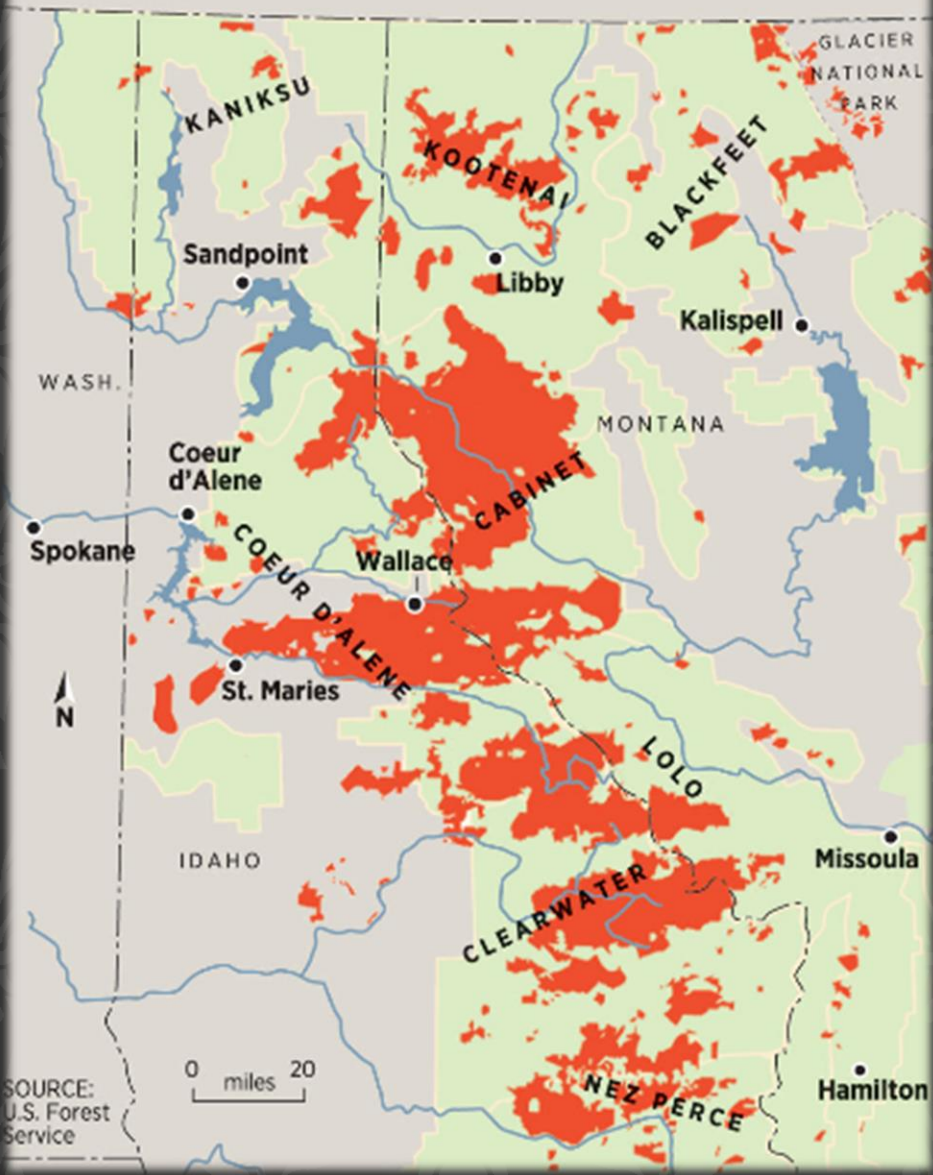
©1912 by G.B. Joslin



(Images of the Past)

1910 fire

■ Area burned ■ National forests in 1910



SOURCE:
U.S. Forest
Service

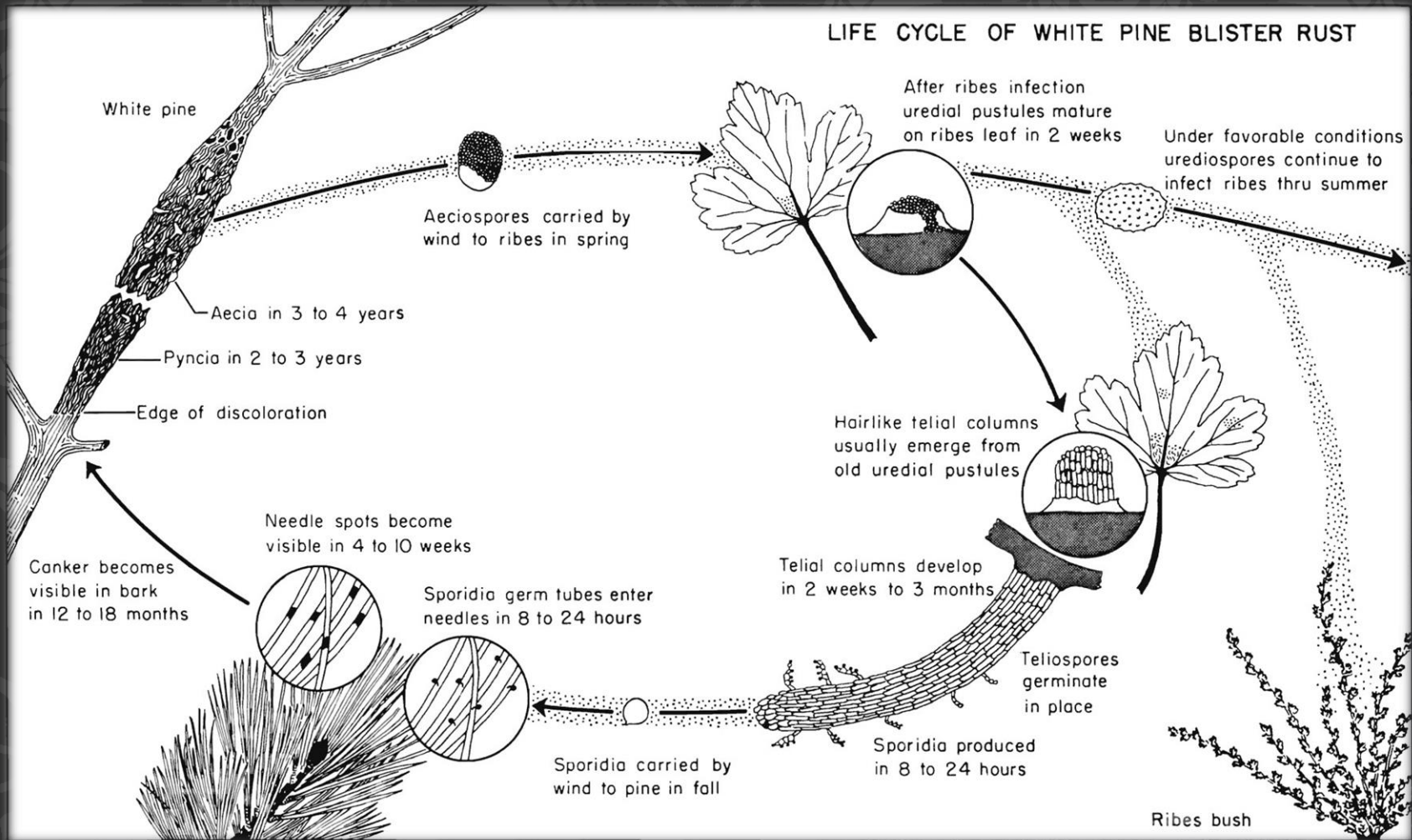
White Pine Blister Rust

(From: Schwandt et al. 2010).



Life Cycle of White Pine Blister Rust

(From: Miller et al. 1959).

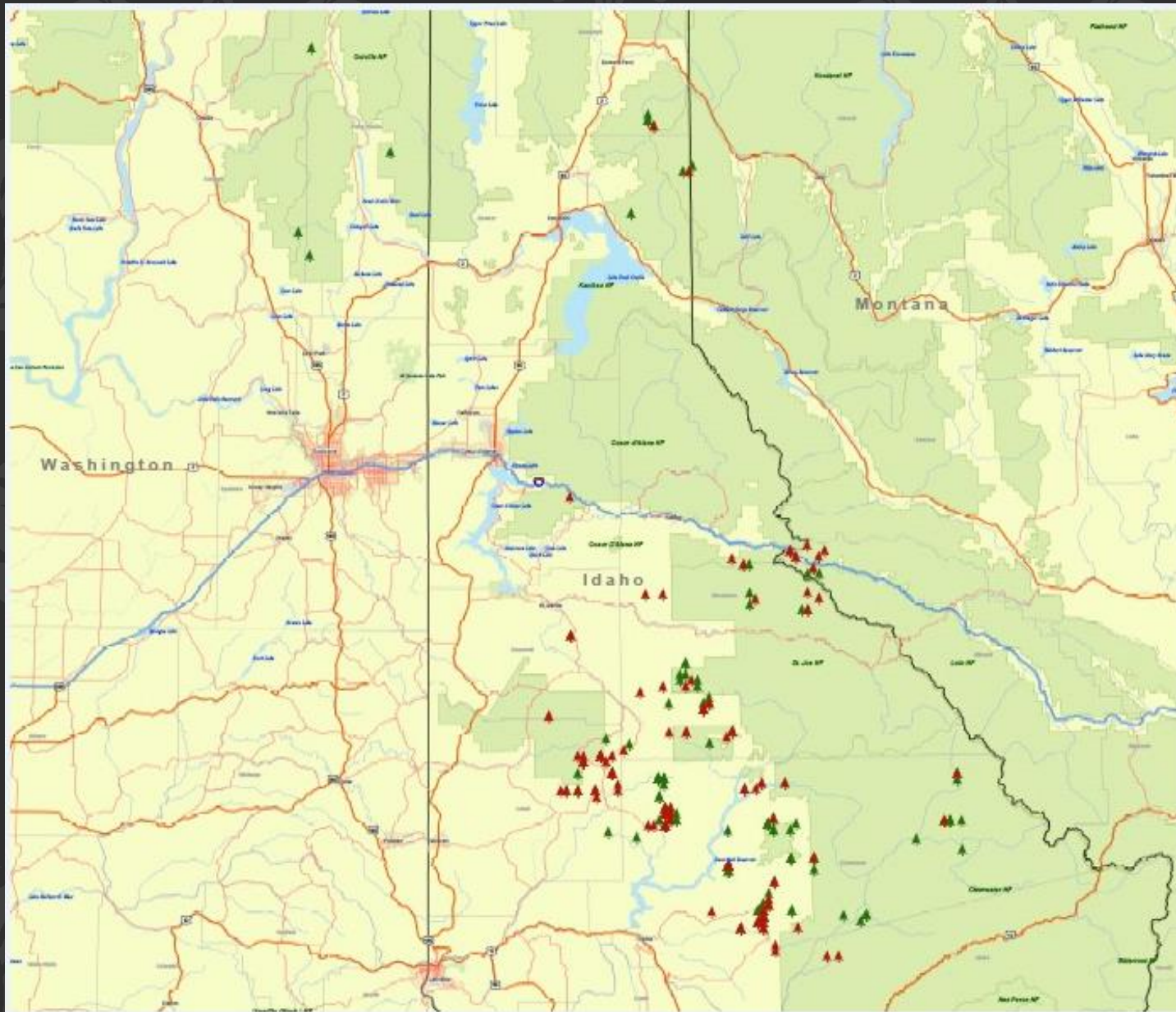




(Return of the Giants)



(Return of the Giants)



(Mary F. Mahalovich)

United States
Department of
Agriculture

Forest Service

Intermountain
Forest and Range
Experiment Station
Ogden, UT 84401

General Technical
Report INT-146

June 1983



Blister Rust Resistant Western White Pine for the Inland Empire:

The Story of the First 25 Years of the Research and Development Program

Richard T. Bingham

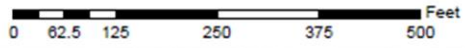
WESTERN WHITE PINE BREEDING PROGRAM

2 Million acres were targeted for conversion to resistant western white pine plantations.

Seed orchards were developed with the intention of producing 6 million seedlings per year.

USFS planned to create 15,000 to 20,000 acres of resistant western white pine plantations per year.

Bingham White Pine Seed Orchard



North Expansion

Existing Seed Orchard

South Expansion

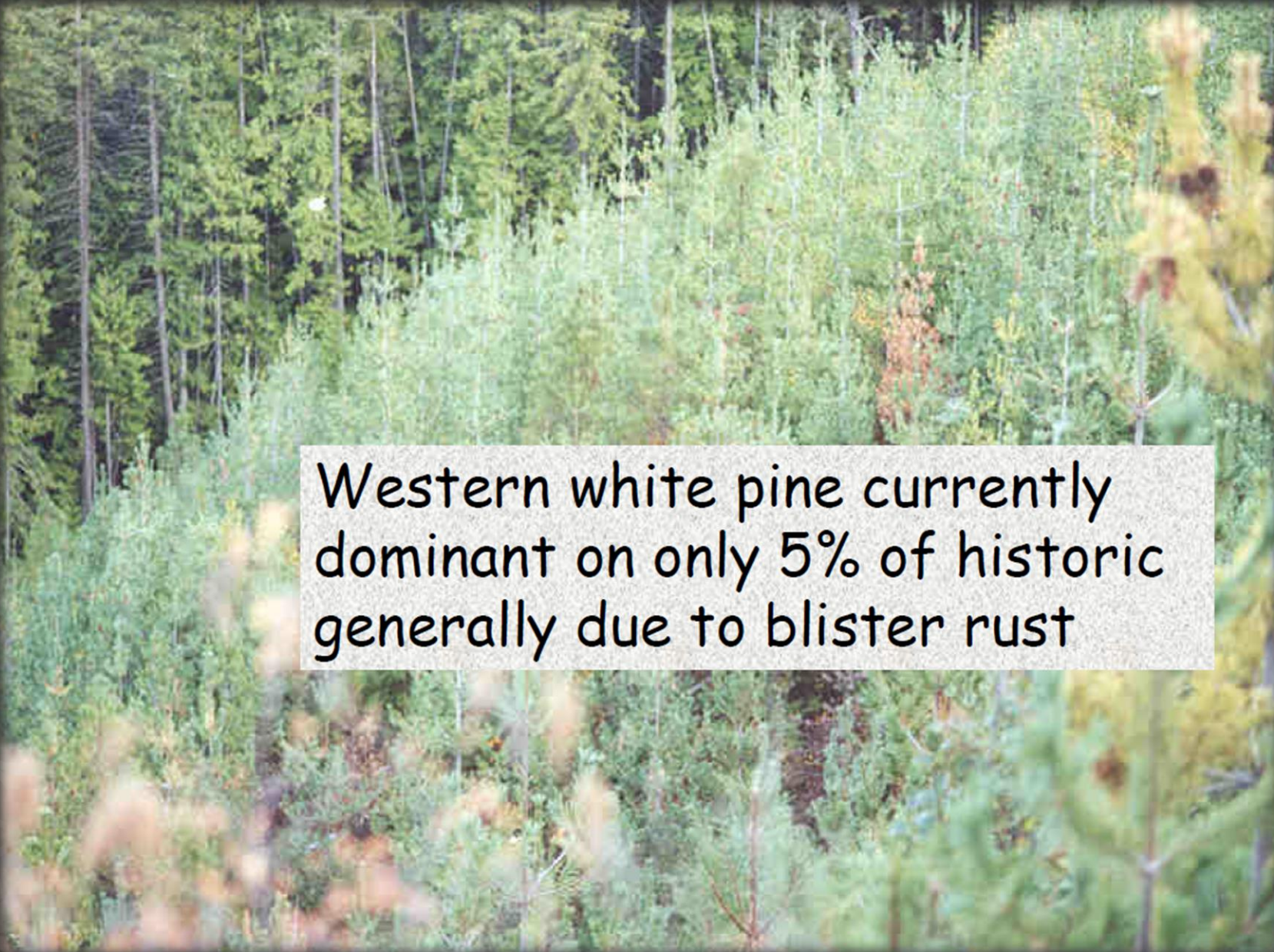


POLE BLIGHT

A disease resulting from a drought from 1916 to 1940 that caused serious mortality to western white pine from 1935 to 1960.

In prolonged periods of drought, pole blight, a physiological disorder, can occur in stands of the 40- to 100-year class.

At present, the disease is not a major cause of mortality in western white pine stands.



Western white pine currently dominant on only 5% of historic generally due to blister rust

(Sandy Kegley)



Native Range of Western White Pine

Silvics of North America – Agricultural Handbook 654

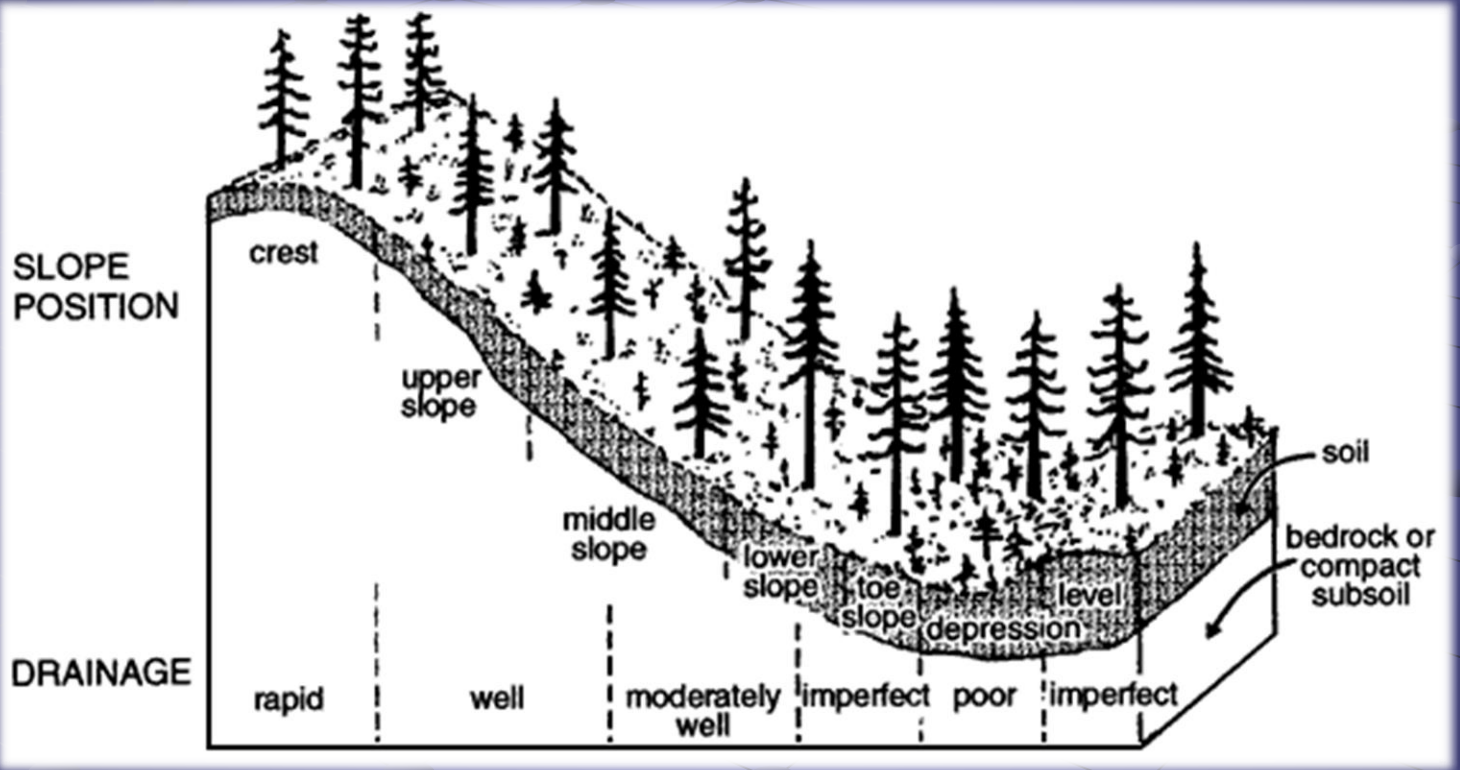


- The native range of western white pine.

*“Western white pine attains
its greatest size and
reaches its best stand and
commercial development in
the Inland Empire”.*

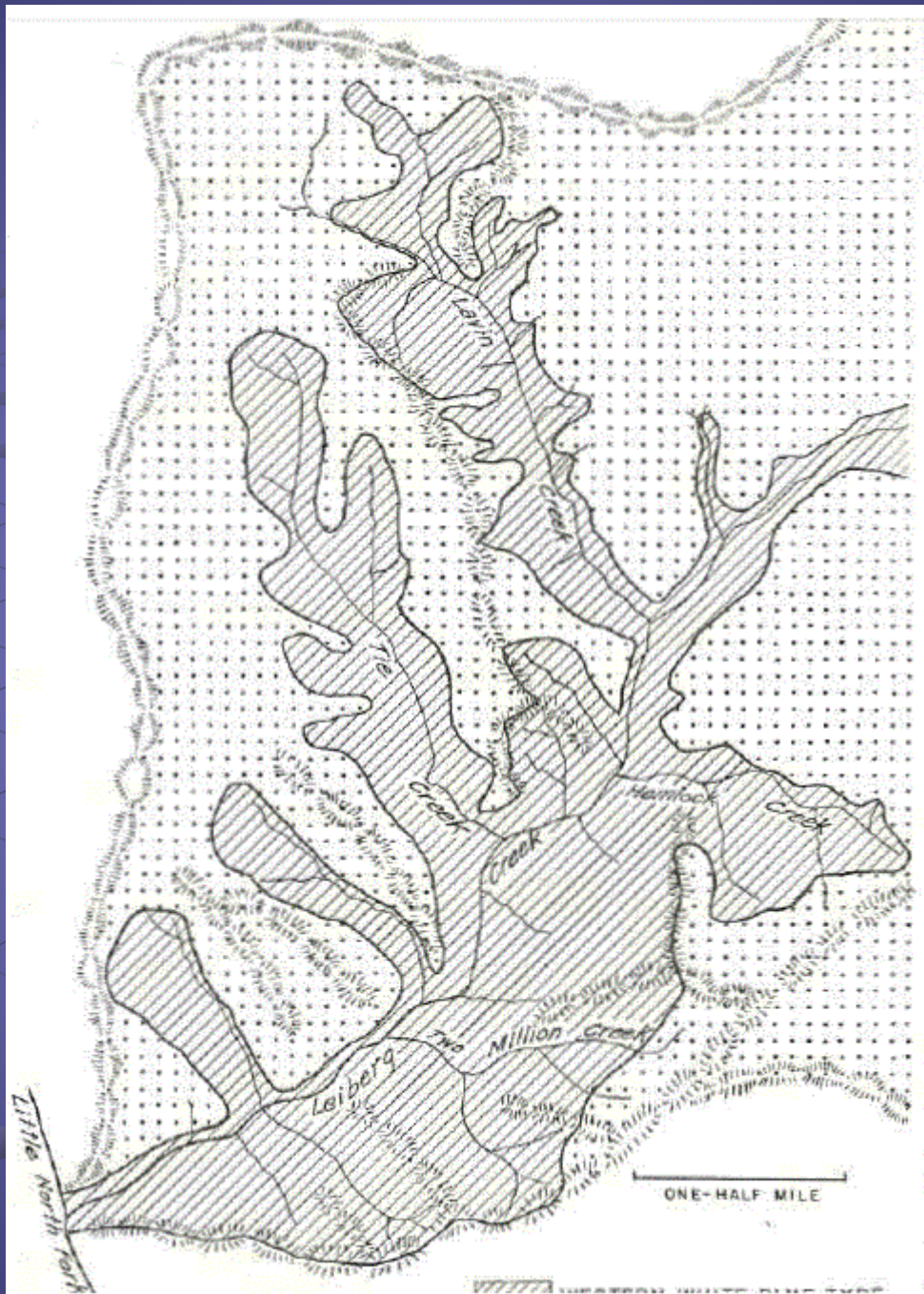
“The climate of the Inland Empire in the western white pine range is influenced by the Pacific Ocean”.

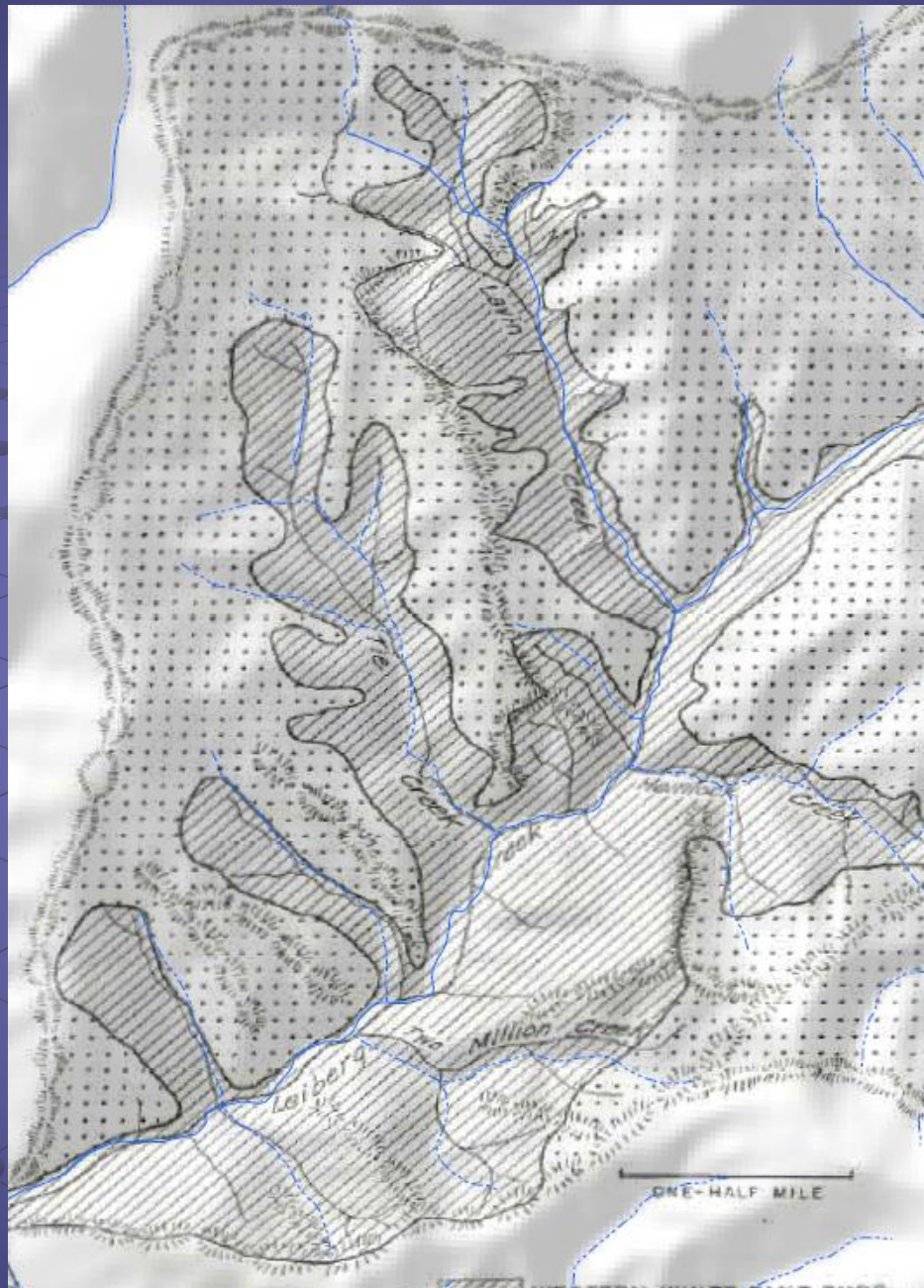
“The summers are dry, the majority of the precipitation occurring during the fall and winter”.

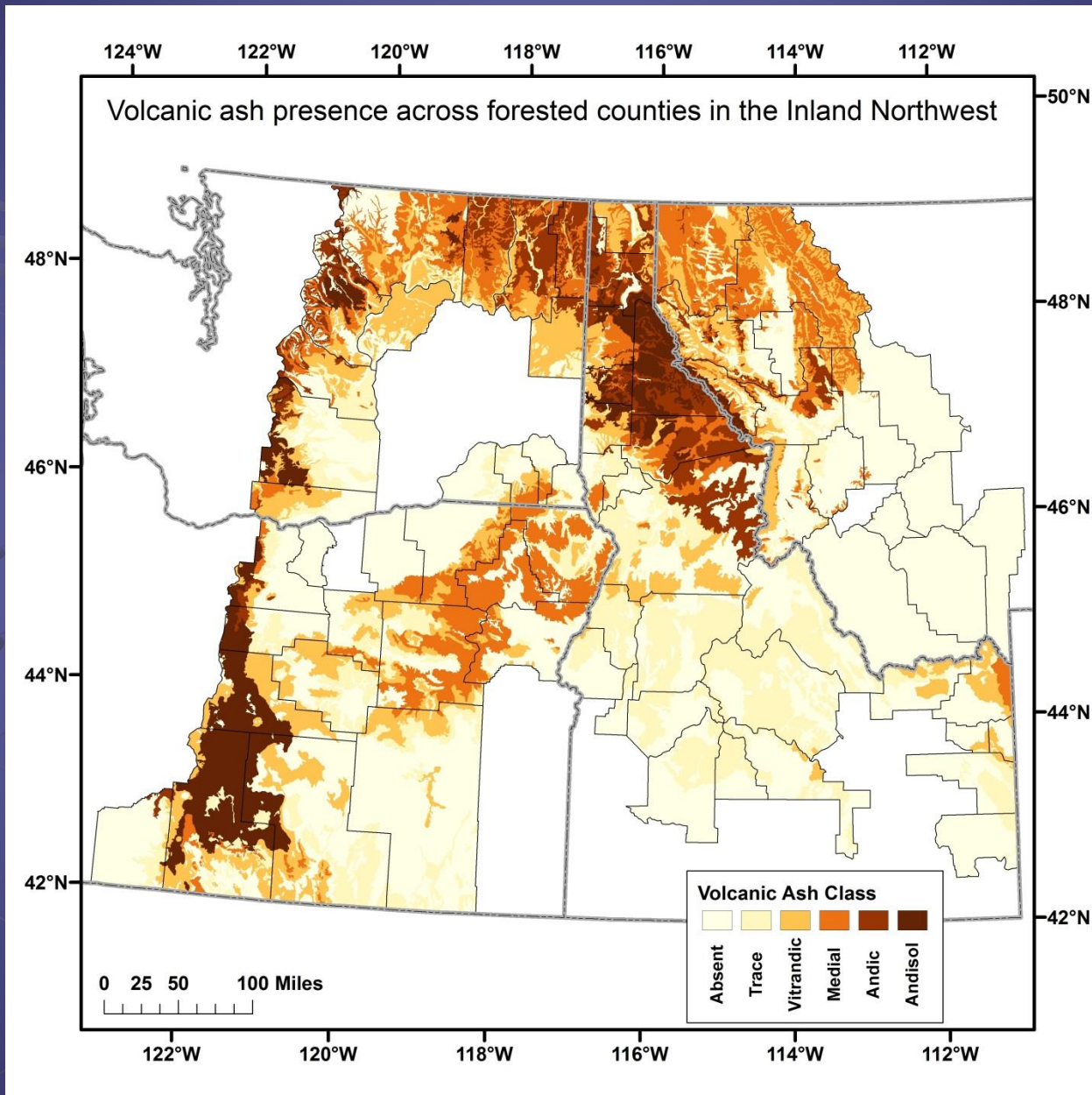


“Western white pine can grow on a variety of slopes and aspects but is most common along moist creek bottoms, lower benches, and northerly slopes”.

“The most extensive bodies of western white pine are found in the wide river bottoms, less steep lower slopes, and in the more gently rolling country of the Priest, Coeur d'Alene, St. Joe, and Clearwater River basins”.



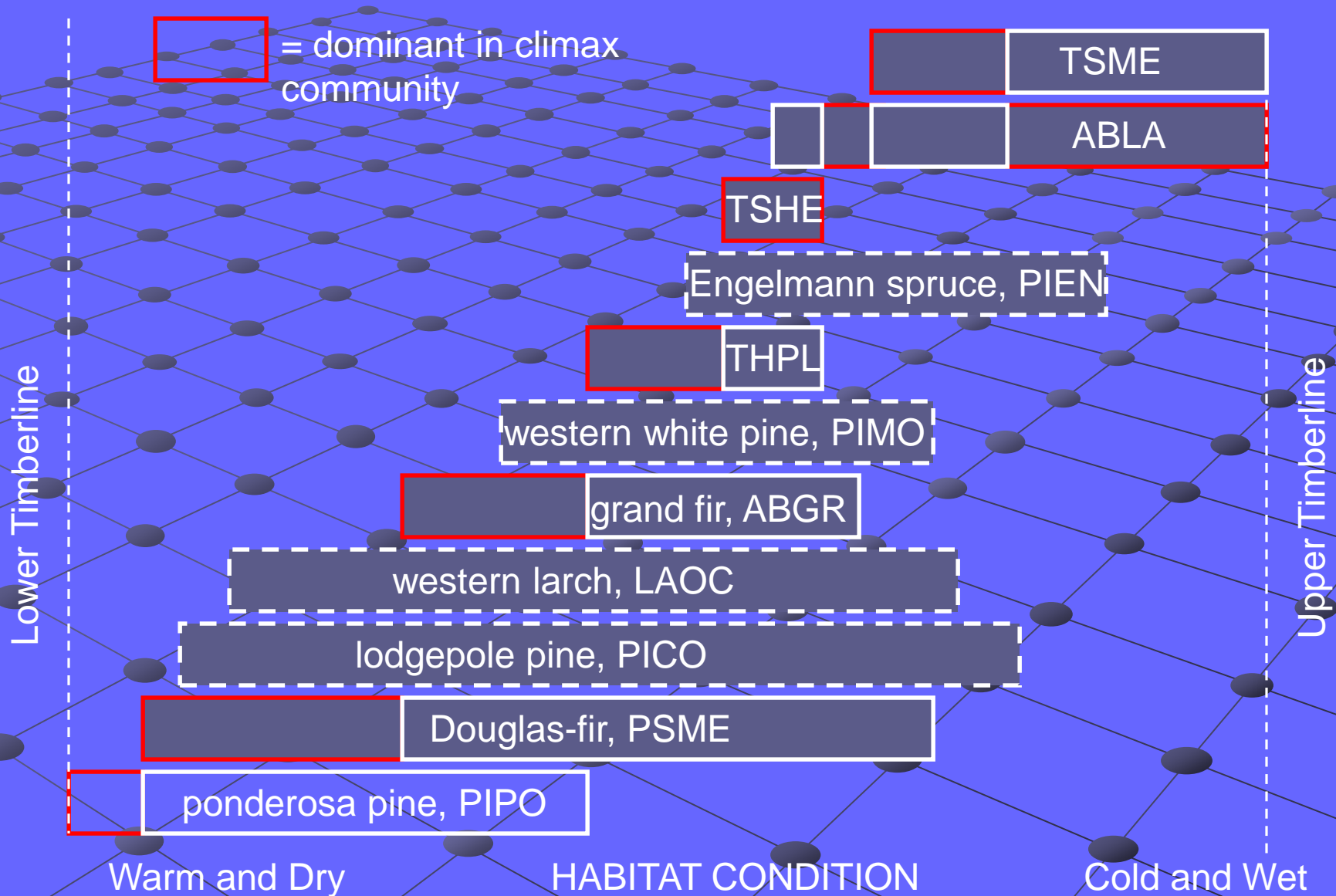




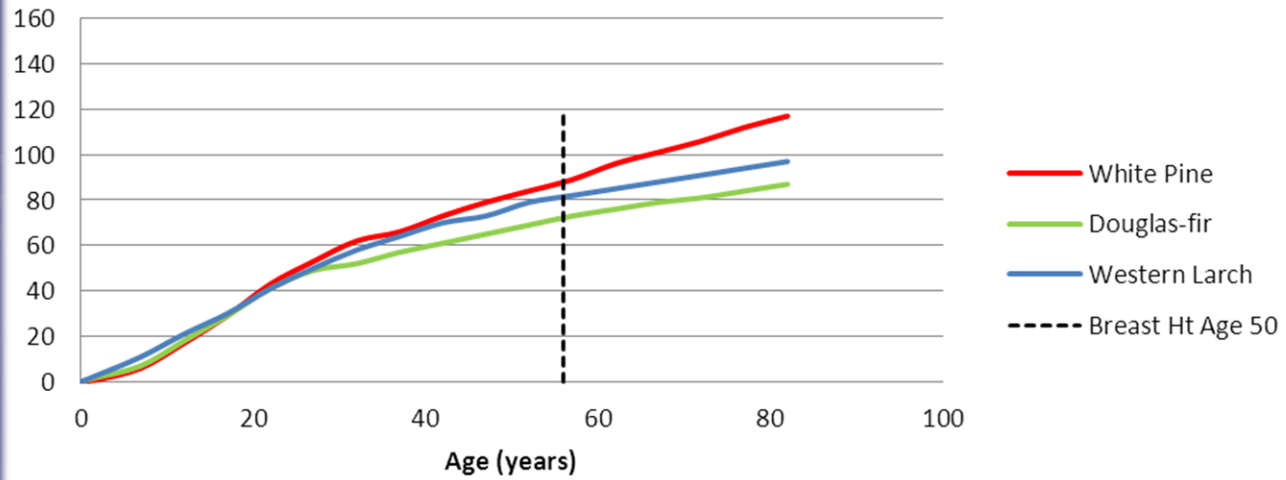
(Mark Kimsey)

“The boundaries of the western white pine range in the Inland Empire are limited at the lower elevations by deficient moisture and at the upper elevations by cold temperatures”.

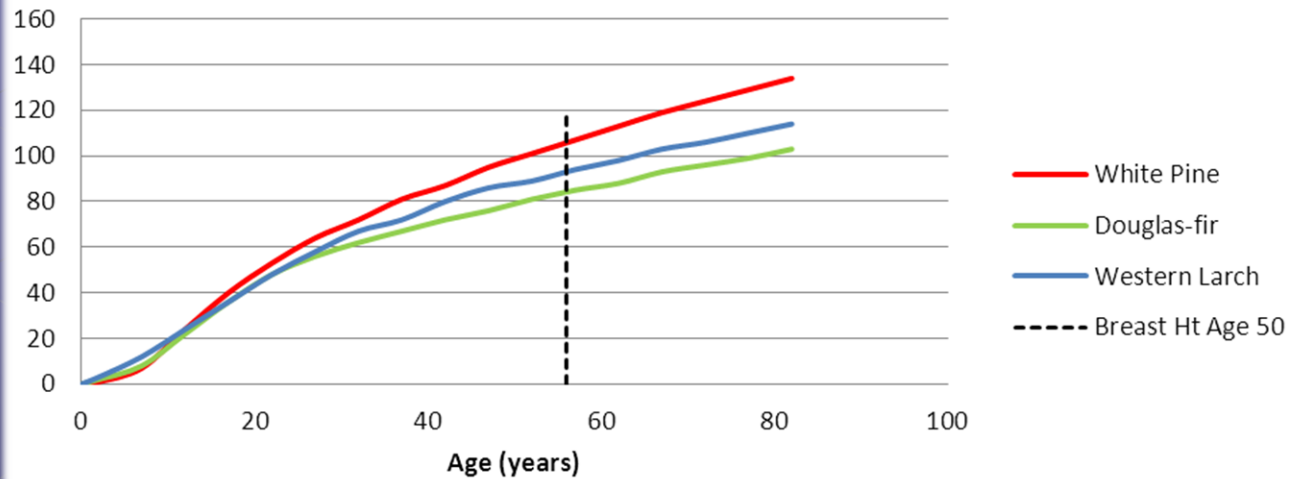
Relative Ecological Position and Extent of Occurrence in the Inland Northwest



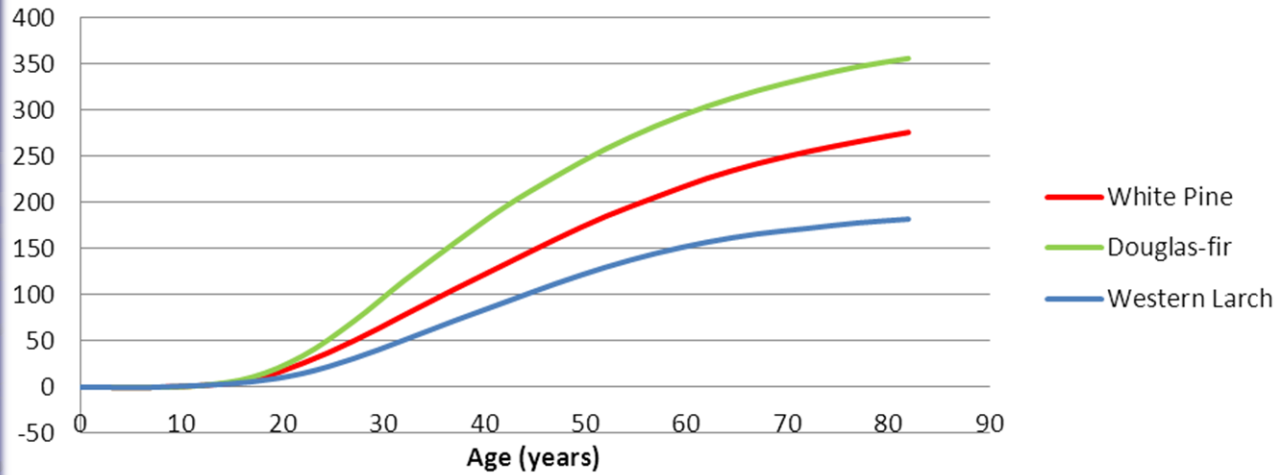
Top Height (ft) - WRC series



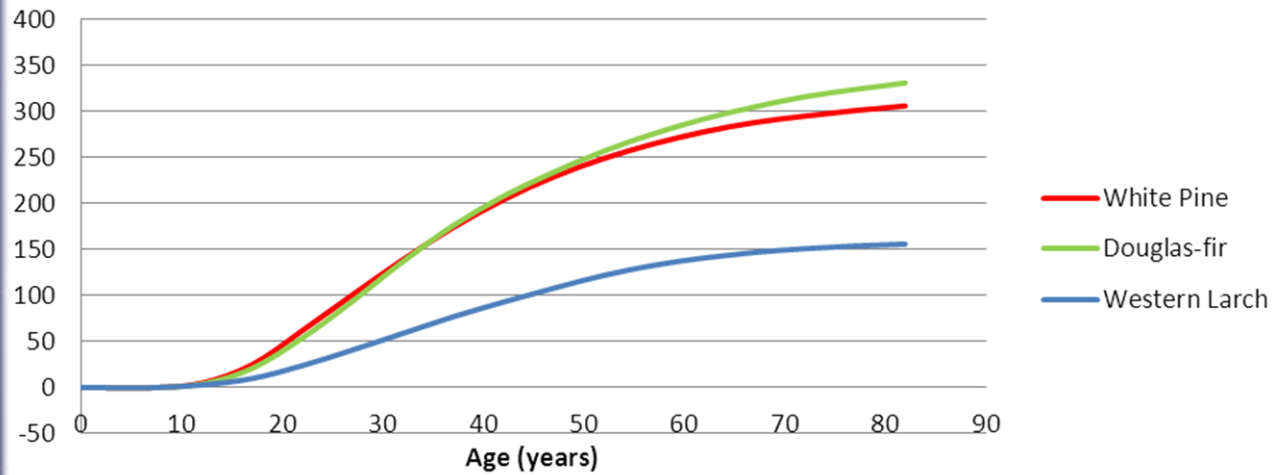
Top Height (ft) - WH series



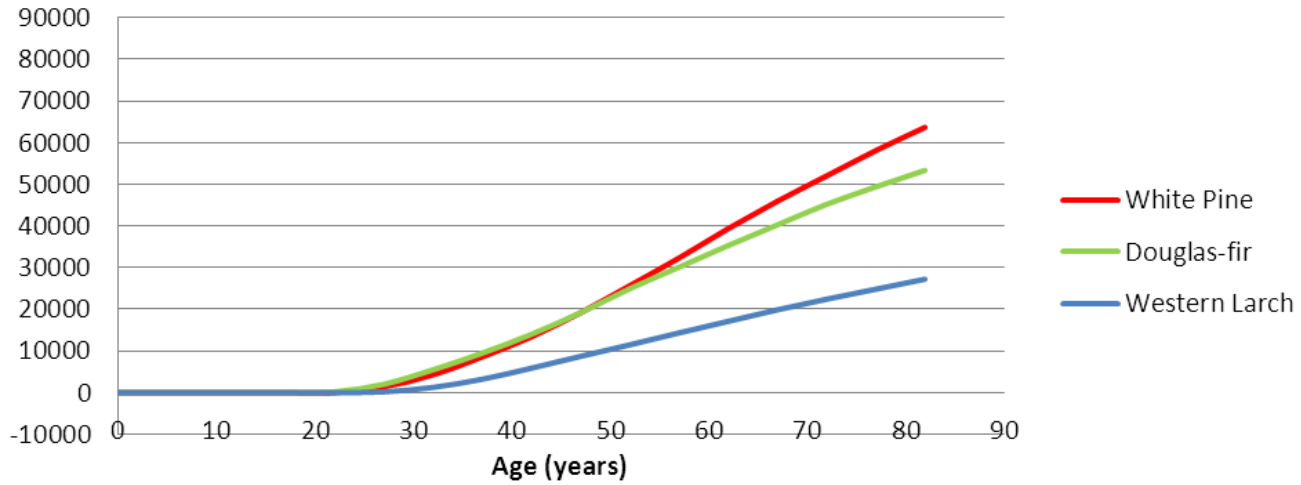
Basal Area per Acre -WRC series



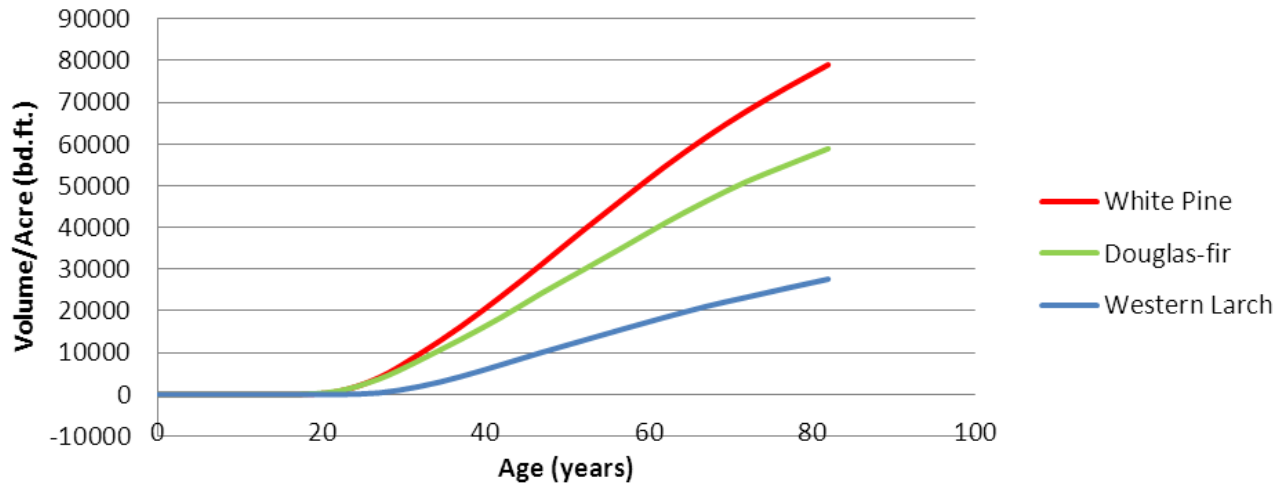
Basal Area per Acre -WH series



Board Ft. Vol/Acre - WRC series



Board Ft. Vol/Acre - WH series



Where Should We Plant Western White Pine?

- Favor white pine on high quality sites in low blister rust risk areas.*
- Plant them in soils that retain moisture better throughout the growing season (ash cap soils).*
- Plant them in terrains that retain moisture better throughout the growing season (northerly aspects).*
- Plant them in wide river bottoms, less steep lower slopes, and in the more gently rolling hills.*
- Be cautious when growing white pine on the dry end of its habitat.*

References

- *White Pine in the American West: A Vanishing Species. RMRS-GTR-35 1999.*
- *Return of the Giants. Univ. of Idaho Section Bulletin 72, 2001.*
- *Images of the Past. Potlatch Corporation Historical Photographs.*
- *Forest Habitat Types of Northern Idaho. GTR INT- 236.*