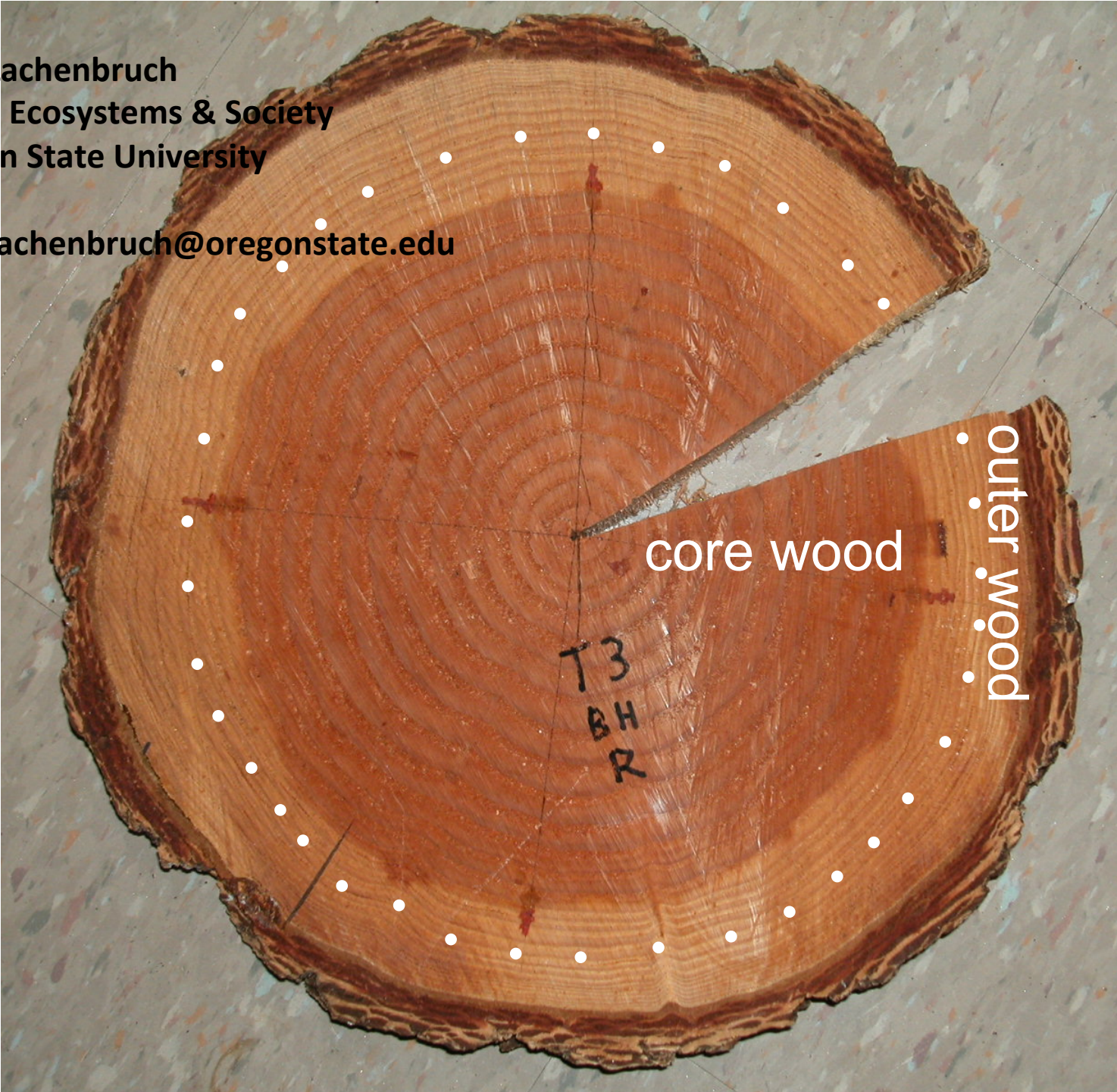


Barb Lachenbruch  
Forest Ecosystems & Society  
Oregon State University

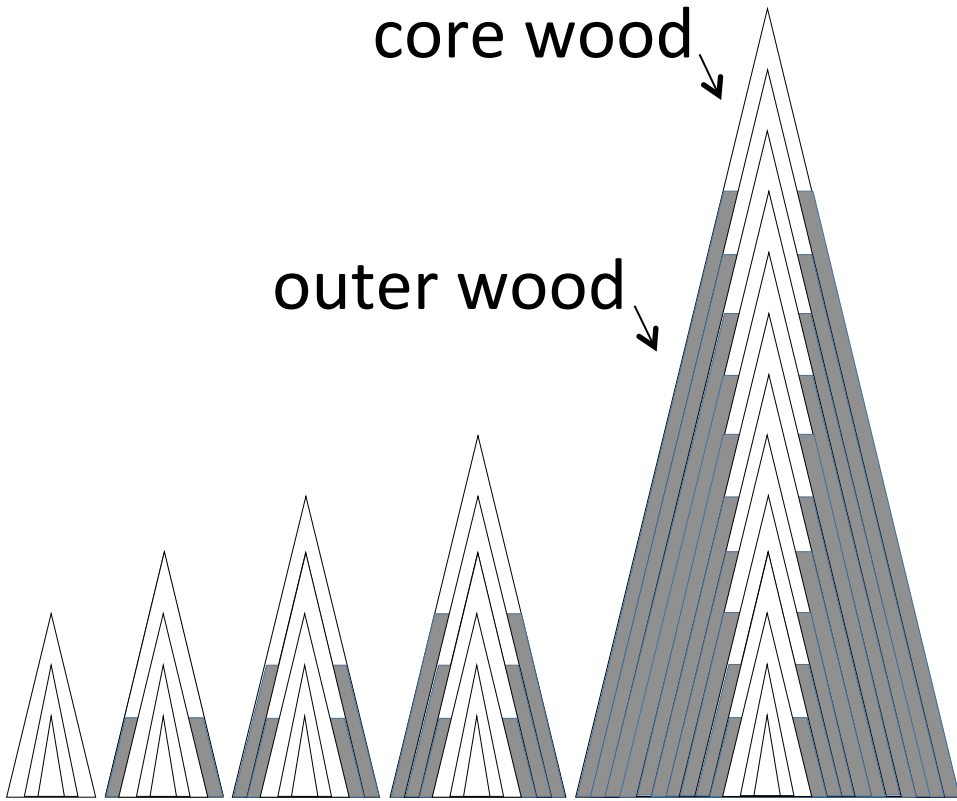
Barb.lachenbruch@oregonstate.edu



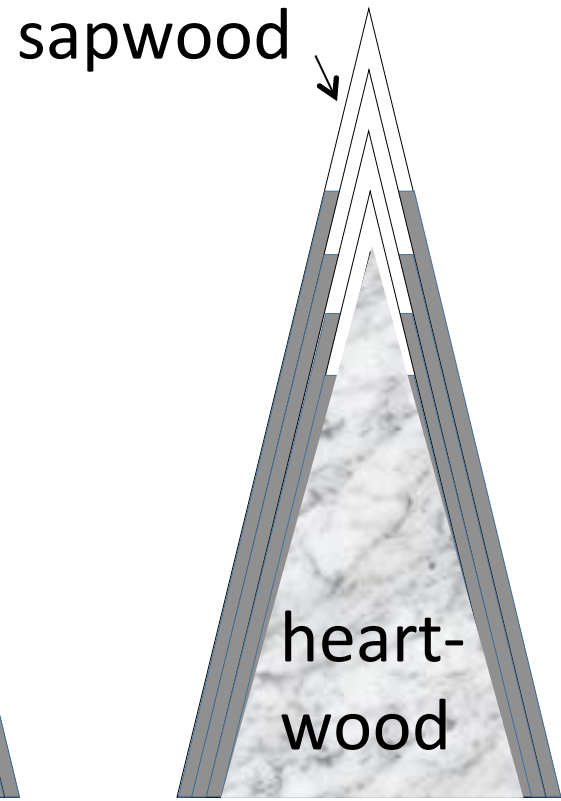
core wood

outer wood

T3  
BH  
R



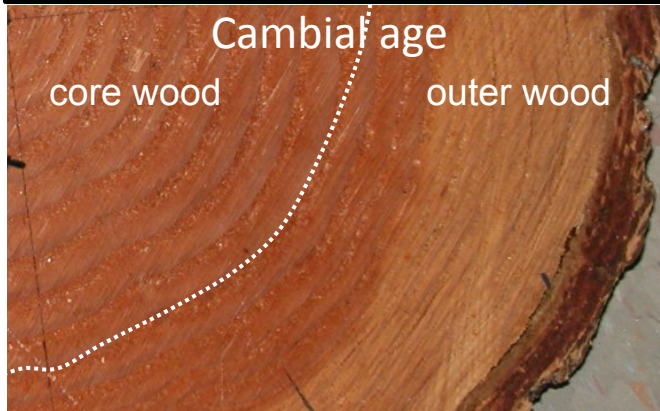
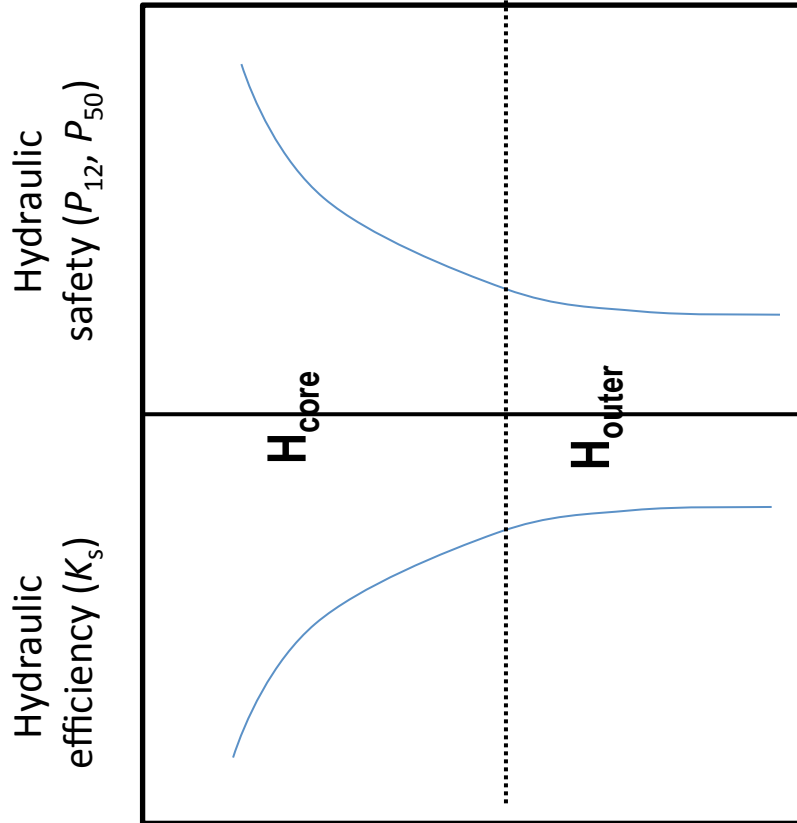
Development of  
typical radial pattern  
of conifer stem



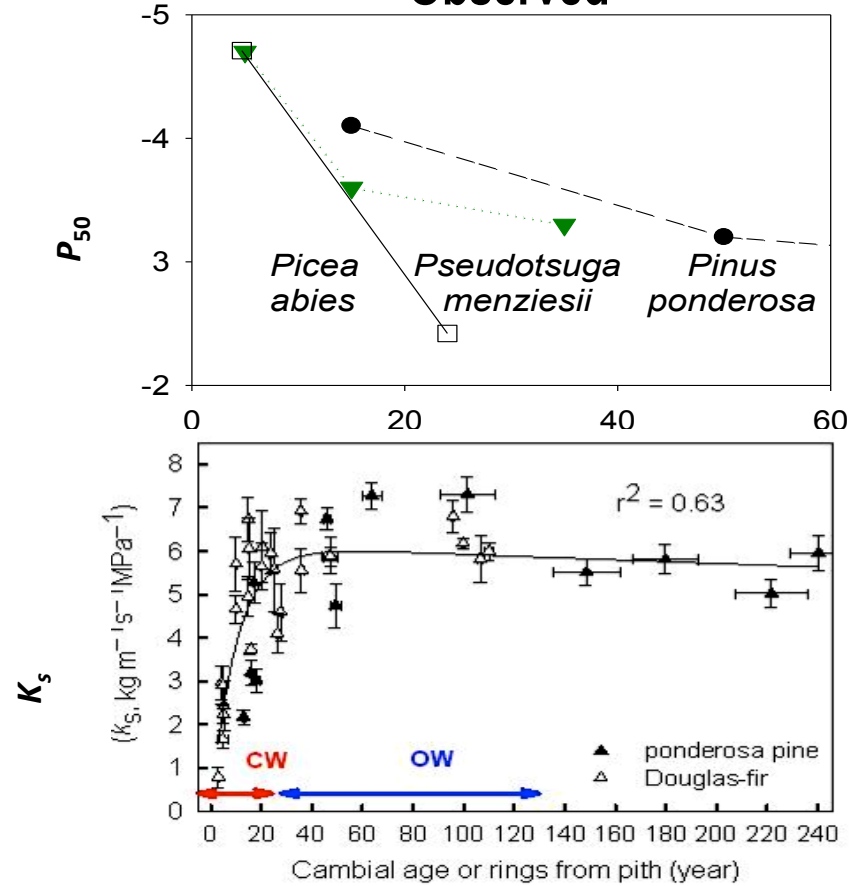
Sapwood  
and  
heartwood

# Hydraulic Variation Along the Radius

Predicted



Observed

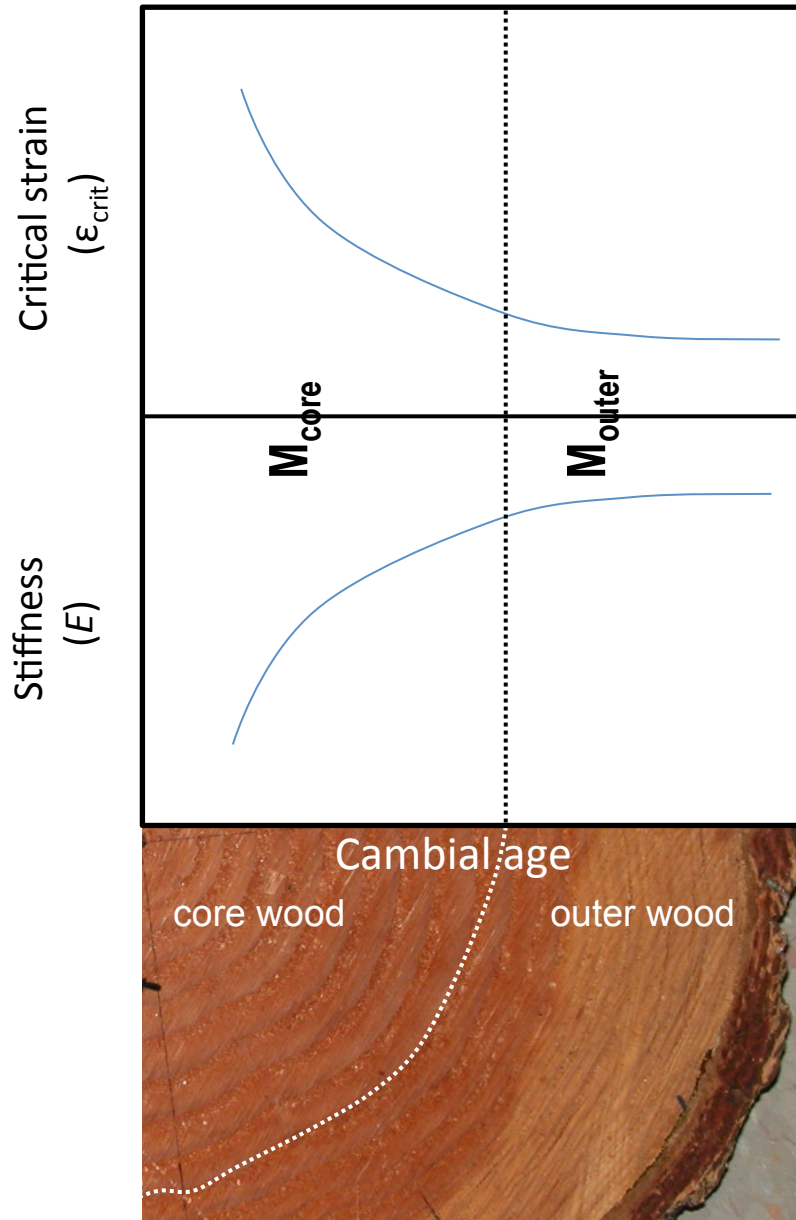


Data from Rosner et al. 2007, 2008; Domec et al. 2009; Domec et al. unpub.;

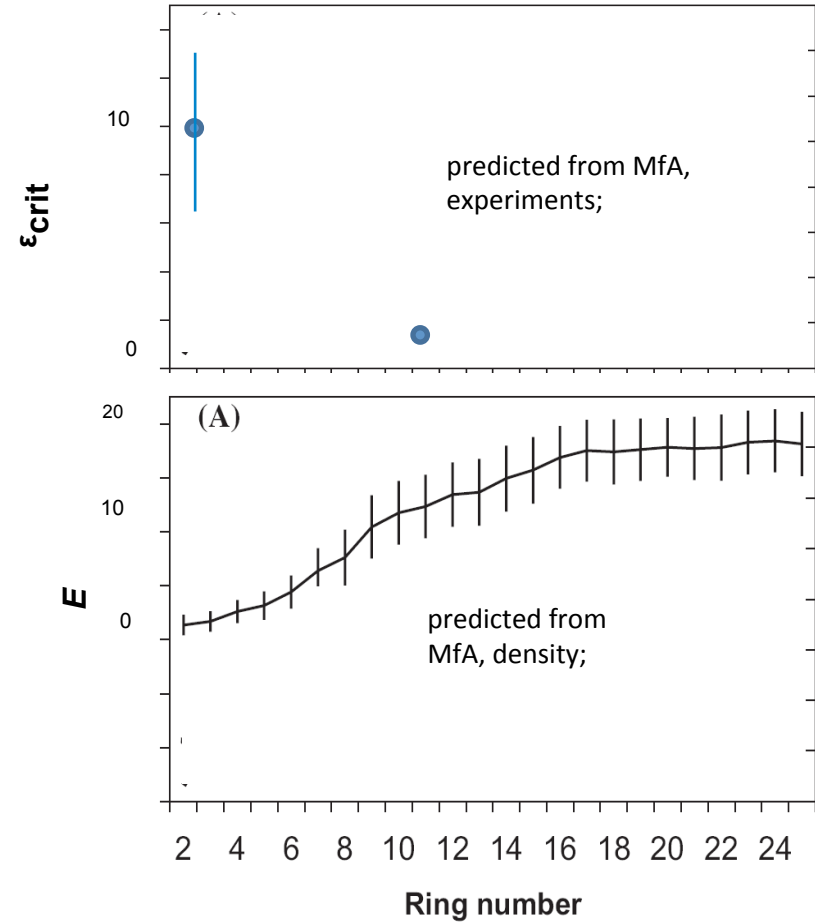


# Mechanical Variation Along the Radius

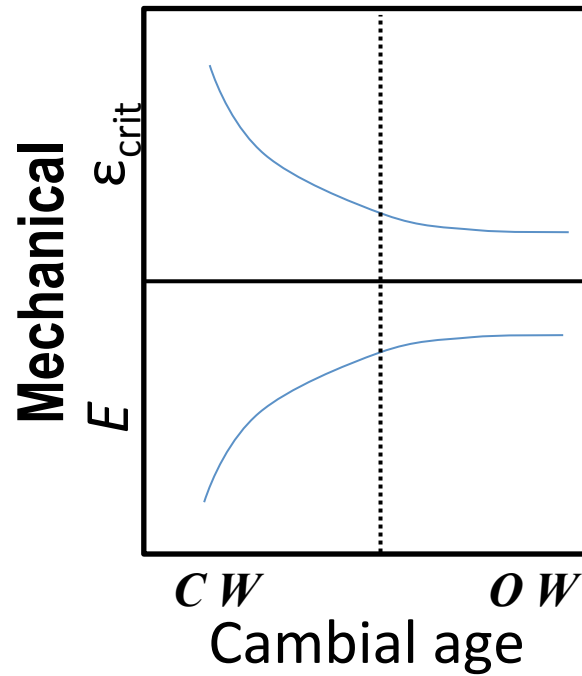
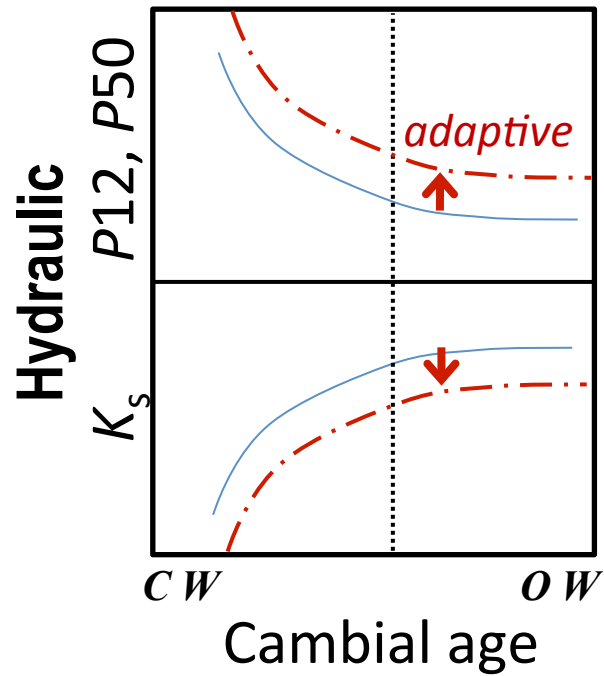
Predicted



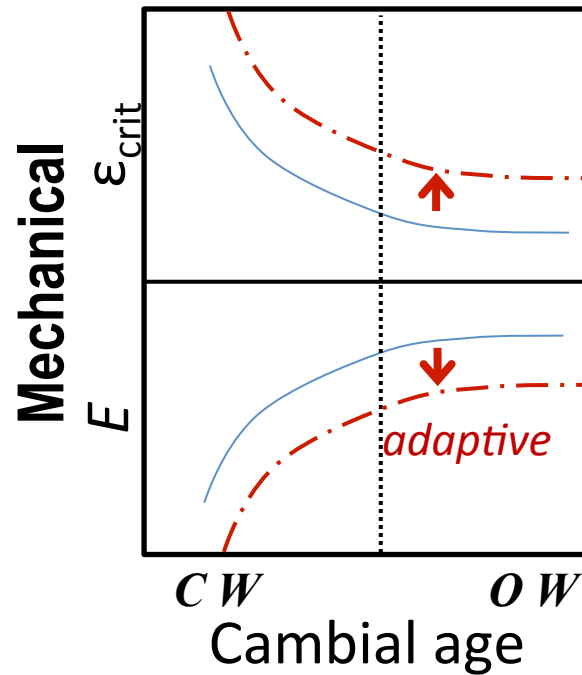
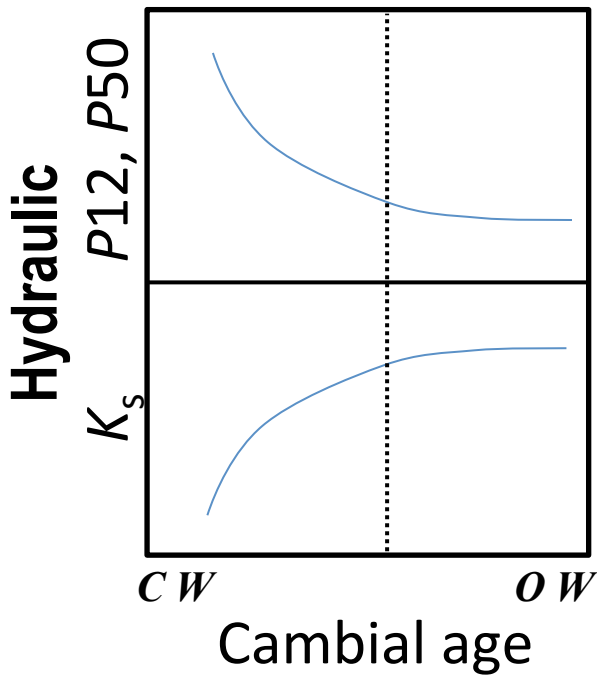
Observed



Data from Reiterer et al. 1999; Dungey et al. 2006.



***Fertilized Trees***  
**VS.**  
***Unfertilized Trees***



***Branches***  
**VS.**  
***Boles***

I want to study resin canals  
in Douglas-fir and other western conifers,  
kind of like this!

IAWA Bulletin n.s., Vol. 11 (3), 1990: 227–238

**RESIN CANALS IN PINUS TAEDA  
LONGITUDINAL CANAL LENGTHS AND INTERCONNECTIONS  
BETWEEN LONGITUDINAL AND RADIAL CANALS\***

by

**C.A. LaPasha and E.A. Wheeler**

Department of Wood and Paper Science, Box 8005, North Carolina State University,  
Raleigh, N.C. 27695-8005, U. S. A