

Life History Strategies

Key concepts:

Adaptive Strategy

Life History

STAGE
Seed
Juvenile
Adult

FUNCTION

Allocation (trade offs)

Succession

Microenvironment

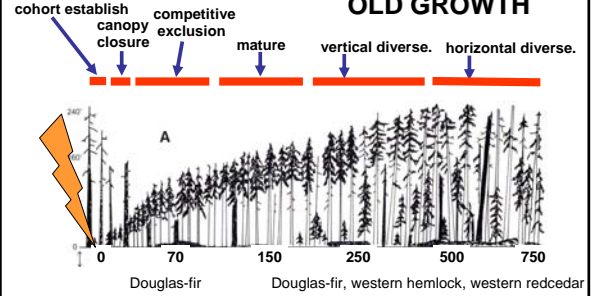
Reproductive relationships

So, what do these things predict?

Forest succession (Franklin *et al.* 2000)

Western Hemlock Zone

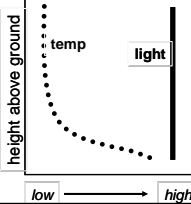
OLD GROWTH



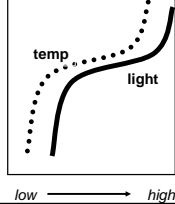
MICROCLIMATE: LIGHT AND TEMPERATURE



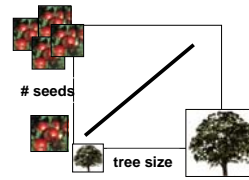
EARLY SUCCESSIONAL



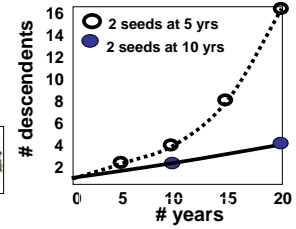
LATE SUCCESSIONAL



REPRODUCTIVE RELATIONSHIPS



Reproductive output is proportional to tree size



Age of first reproduction strongly influences population growth rates

PREDICTIONS

TRAITS	EARLY SUCCESSIONAL	LATE SUCCESSIONAL
Seed size		
Seed number		
Seed defensive chemicals		
Juvenile growth rate		
Age of 1 st reproduction		
Frequency of seed production (yearly, sporadic)		
Crown architecture		
Leaf size, number		
Leaf placement		

wood hardness