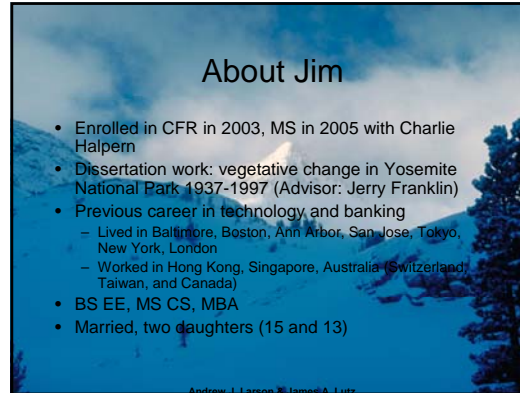




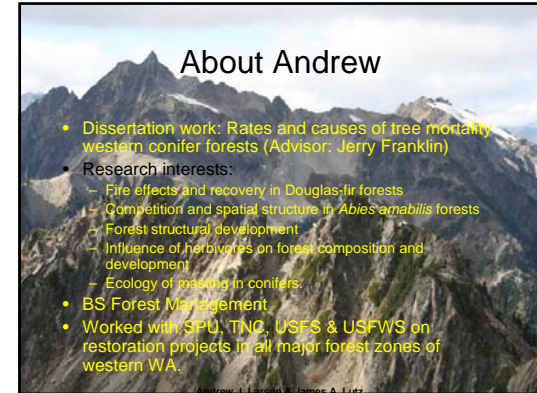
CFR 501
Forest Community Ecology

Instructors: Andrew Larson & Jim Lutz
Web site: <http://courses.washington.edu/cfr501>
Email: cfr501@u.washington.edu



About Jim

- Enrolled in CFR in 2003, MS in 2005 with Charlie Halpern
- Dissertation work: vegetative change in Yosemite National Park 1937-1997 (Advisor: Jerry Franklin)
- Previous career in technology and banking
 - Lived in Baltimore, Boston, Ann Arbor, San Jose, Tokyo, New York, London
 - Worked in Hong Kong, Singapore, Australia (Switzerland, Taiwan, and Canada)
- BS EE, MS CS, MBA
- Married, two daughters (15 and 13)



About Andrew

- Dissertation work: Rates and causes of tree mortality western conifer forests (Advisor: Jerry Franklin)
- Research interests:
 - Fire effects and recovery in Douglas-fir forests
 - Competition and spatial structure in *Abies amabilis* forests
 - Forest structural development
 - Influence of herbivores on forest composition and development
 - Ecology of mortality in conifers
- BS Forest Management
- Worked with SPU, TNC, USFS & USFWS on restoration projects in all major forest zones of western WA.



BASIC COURSE QUESTIONS:

Why are these species here? – What numbers, sizes and ages that we see?

How will this mix of species change over time?

“Here and Now” – What is the spatial and temporal extent?



Context

- Pacific Northwest
- Pacific Slope of North America
- North America
- Forest Ecosystems
- How broadly can we generalize?



Themes

INTERACTIONS:

- Unexpected behavior
- Limitations to study (and understanding)

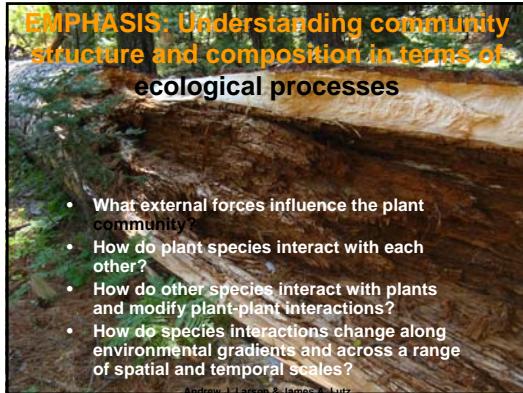
MIX OF STOCHASTIC AND DETERMINISTIC PROCESSES:

- How predictable are systems?

SCALE IS IMPORTANT:

- Ability to identify cause depends on temporal and spatial scale of observation
- Causes vary across scales

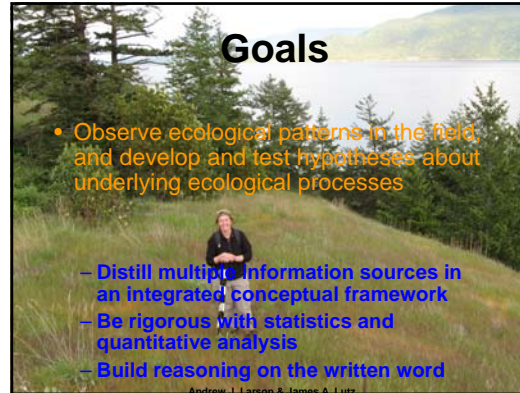
THE CHALLENGE OF INVESTIGATION



EMPHASIS: Understanding community structure and composition in terms of ecological processes

- What external forces influence the plant community?
- How do plant species interact with each other?
- How do other species interact with plants and modify plant-plant interactions?
- How do species interactions change along environmental gradients and across a range of spatial and temporal scales?

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Goals

- Observe ecological patterns in the field, and develop and test hypotheses about underlying ecological processes
- Distill multiple information sources in an integrated conceptual framework
- Be rigorous with statistics and quantitative analysis
- Build reasoning on the written word

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Learning Mechanisms

- Field trips
- Readings
- Discussions
- Assignments
- Lectures
- Guest lectures

Evaluation Mechanisms

- Discussion Questions (3)
- Field data analyses (2)
- Final (1)

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Field trips

- A common context for discussion
- Sites broadly representative of western forest ecosystems
- Experience with data collection and its limitations

Readings

- A mixture of recent research and classics
- There is a lot of reading!

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Discussions

- Small groups
- Critically examine and unify lectures, papers, field data

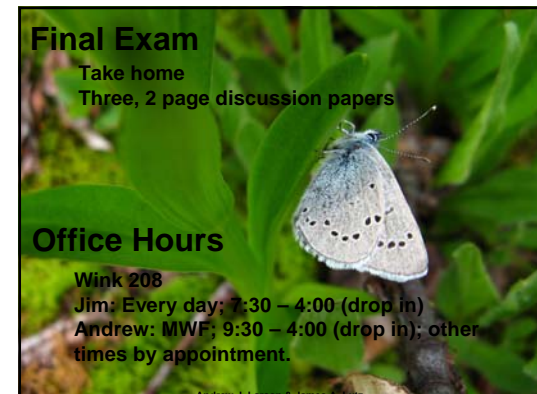
Assignments

- Written assignments will be selected from discussion questions
- Individual work

Lectures

- Complement readings, sometimes out-of-phase

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Final Exam

- Take home
- Three, 2 page discussion papers

Office Hours

- Wink 208
- Jim: Every day; 7:30 – 4:00 (drop in)
- Andrew: MWF; 9:30 – 4:00 (drop in); other times by appointment.

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