Forests Through Time and Space: January 5, 2005
Quiz and Study Questions for Week 1, Winter Quarter

Quiz Questions

These questions are due in class on January 10, when we will collect and evaluate them (20 points total), as last quarter. Type your answers. Do not discuss your answers with anyone once you have begun working on them.

1. Compare and contrast the economic and ecological costs and benefits of slash and burn (swidden) agriculture with monocropping in modern tropical regions that have recently been converted from forest. Give specific examples of each type of agriculture, and the ways that it fails and succeeds.

2. List and explain in detail four specific edge effects that occur at boundaries of tropical forests. Knowing these, how might your design of protected areas be affected?

Study Questions

Due January 10, when we will be discussing your answers in class. These do not need to be typed, and you will not be handing them in now (but they will go into your portfolio for us to assess at the end of the term).

1. Describe two common plantation crops, their degree of success in rainforest soils and climate, their sustainability, and their effect on local economies and peoples.

2. List four causes of habitat fragmentation in tropical forests, and four general effects of habitat fragmentation.

3. What research would you conduct in order to answer the following question: How close do reserves need to be to one another to effectively be contiguous forest? Include at least one hypothesis, some predictions, and a test.

4. Give two hypotheses for why a particular (tropical) species might be able to successfully invade another tropical habitat. What are predictions of each of these hypotheses, and how would you test them?

5. What does the evidence on temperature change predict regarding how forests will be affected if global temperatures continue to rise? Does your answer affect the truth or falsehood of the following statement: "Global temperatures are rising and there will be impacts on forests worldwide."?

6. What do the 18 hotspots described by Wilson (pp 259-269) have in common? What distinguishes them from one another?