Silvics
Homework Exercise 1
(due Fri 9 May)

Silvics is the specialized branch of forest ecology dealing with the biological characteristics of individual trees and groups of them. Silvics includes how trees reproduce and grow, the ways in which the physical environment influences their physiology, and how they in turn modify the physical environment that supports them. In general, silvics translates scientific knowledge about trees into practical information about their habitat or site requirements for successful reproduction and growth of forest stands and the species that comprise them.

Your challenge:
Choose two species, one conifer and one angiosperm, from the groupings below. For your species, *summarize* their silvics by *briefly* describing their habitat (typical climate, soils and topography where it's found), their reproduction and early growth, growth and yield, rooting habit, tolerance, reaction to competition, and agents that damage them. Use the following URL to gather your information: http://www.na.fs.fed.us/spfo/pubs/silvics_manual/table_of_contents.htm.

Feel free to use other ***academically credible*** sources (Wikipedia doesn't cut it folks!) and remember to cite all sources of information.

Try to emphasize any unique features (as identified in the silvics manual) and information pertinent to Washington, Oregon, California. Do NOT merely copy and paste the information into your report; *digest* and *distill* it (i.e. what are the broader implications of the specific silvics?). Try to limit your silvical descriptions to two pages each (but no less than 1.5 pages) for your species (no more than four pages total for the assignment).

Conifers (a.k.a. softwoods)	**Angiosperms (a.k.a. hardwoods)**
1. Douglas-fir (*Pseudotsuga menziesii*)	Red alder (*Alnus rubra*)
2. Western hemlock (*Tsuga heterophylla*)	Bigleaf maple (*Acer macrophylla*)
3. West. redcedar (*Thuja plicata*)	Black cottonwood (*Populus trichocarpa*)
4. Ponderosa pine (*Pinus ponderosa*)	Pacific madrone (*Arbutus menziesii*)
5. Grand fir (*Abies grandis*)	Paper birch (*Betula papyrifera*)
6. Noble fir (*Abies procera*)	Oregon ash (*Fraxinus latifolia*)
7. Pacific silver fir (*Abies amabilis*)	Quaking aspen (*Populus tremuloides*)
8. Sitka spruce (*Picea sitchensis*)	Oregon white oak (*Quercus garryana*)
9. West. white pine (*Pinus monticola*)	Tanoak (*Lithocarpus densiflorus*)
10.West. larch (*Larix occidentalis*)	California black oak (*Quercus kelloggii*)
11.Sugar pine (*Pinus monticola*)	Giant chinkapin (*Castanopsis chrysophylla*)
12.Incense cedar (*Libocedrus decurrens*)	California-Laurel (*Umbellularia californica*)
13.Lodgepole pine (*Pinus contorta*)	Canyon live oak (*Quercus chrysolepsis*)