

Additional Course Information
Biology 3325-001/5325-001: Plant Ecology
Fall 2009

Additional (Optional) Reading

Barbour, M.G. et al. 1999. *Terrestrial Plant Ecology*. Benjamin Cummings, Reading, MA, USA.

Crawley, M.J. (ed.) 1997. *Plant Ecology*. Blackwell Publishing, Malden, MA, USA.

Grime, J.P. 2002. *Plant Strategies, Vegetation Processes and Ecosystem Processes*. Wiley & Sons, New York.

Harper, J. L. 1977. *Population Biology of Plants*. Academic Press, Boston.

Keddy, P.A. 2007. *Plants and Vegetation: Origins, Processes, Consequences*. Cambridge University Press, New York.

Silvertown, J. and D. Charlesworth. 2001. *Introduction to Plant Population Biology*. Blackwell Science, Williston, VT, USA.

Chapter 4: Soils, Mineral Nutrition, and Belowground Interactions

Chapin, F. S., III. 1980. The mineral nutrition of wild plants. *Annual Review of Ecology and Systematics* 11: 233-260.

Aerts, R., and F.S. Chapin, III. 2000. The mineral nutrition of wild plants revisited: A re-evaluation of processes and patterns. *Advances in Ecological Research* 30: 1-67.

Informative Web Links

plants.usda.gov

provides lots of summary information on plant species that occur in the U.S.
can be searched by common name or scientific name

Discussion Papers

The theme of the discussions this semester is invasive plants. All discussion papers are available electronically through the UTA library. Go on-line to find the journal title in the library catalog, then click your way through to the volume you need and find the article. Read the paper thoroughly before class. Write down any questions you have about particular points, terms, etc., and be prepared to be called upon to discuss the experiments conducted, results, and implications of their findings. Please e-mail or drop by my office hours before the discussion period if you have trouble understanding the paper.

Thurs, 3 Sep Salt cedar (*Tamarix* spp.)

Taylor, J.P., L.M. Smith, and D.A. Haukos. 2006. Evaluation of woody plant restoration in the Middle Rio Grande: ten years after. *Wetlands* 26:1151-1160.

Tues., 15 Sep Mesquite (*Prosopis glandulosa*)

Ansley, R.J. and M.J. Castellano. 2006. Strategies for savanna restoration in the Southern Great Plains: effects of fire and herbicide. *Restoration Ecology* 14:420-428.

Thurs., 1 Oct Comparison of Native and Invasive Plant Populations

Ramula, S., et al. 2008. General guidelines for invasive plant management based on comparative demography of invasive and native plant populations. *Journal of Applied Ecology* 45: 1124-1133.

Thurs., 15 Oct Chinese tallow tree (*Sapium sebiferum*)

Rogers, W.E. and E. Siemann. 2004. Invasive ecotypes tolerate herbivory more effectively than native ecotypes of the Chinese tallow tree *Sapium sebiferum*. *Journal of Applied Ecology* 41:561-570.

Thurs, 5 Nov Giant Salvinia (*Salvinia molesta*)

These papers are NOT available through the library. They will be distributed in class on 29 October.

Owens, C.S., R.M. Smart, and G.O. Dick. 2004. Regeneration of Giant Salvinia from apical and axillary buds following desiccation or physical damage. *J. Aquat. Plant Manage.* 42: 117-119.

Owens, C.S., R.M. Smart and R.M. Stewart. 2005. Low temperature limits of Giant Salvinia. *J. Aquat. Plant Manage.* 42:91-94.

Thurs., 19 Nov Review of Time Since Introduction Effects

Hawkes, C.V. 2007. Are invaders moving targets? The generality and persistence of advantages in size, reproduction, and enemy release in invasive plant species with time since introduction. *American Naturalist* 170: 832-843.