

## GRADUATE ASSISTANTSHIPS IN TREE-GRASS INTERACTIONS

The proliferation of shrubs and trees in arid/semiarid grasslands and savannas in recent decades has been widely documented. However, the ability of woody plants to encroach into grasslands varies widely among species. Why are some so successful and others not? We seek two graduate students interested in addressing this question in an NSF-funded study that will focus on determining how woody plants gain their foothold in grasslands during the critical establishment phase. Complimentary field and controlled environment studies will emphasize comparative plant ecophysiology (gas exchange, water stress, water extraction and rooting dynamics). Prospective students should have a background and strong interest in one or more of these areas. The goals of the study are two-fold: (1) to develop guidelines for identifying potential (but as yet unknown) problem species and characterize the conditions under which they are likely to establish, (2) to generate information that is needed to develop models that can forecast when and where woody plant invasions are likely to occur, so that land managers have time to develop and implement appropriate preventative measures

This is a collaborative project between the University of Arizona and Texas State University. We seek one student for each institution. Candidates for Texas State University must be willing to spend the summer months near the field site in Tucson, Arizona. Assistantships include a \$16,000 stipend, benefits and tuition assistance. Starting date is flexible, but should occur between July 2005 (for the fall semester) and January 2006 (for the spring semester). See <http://www.ag.arizona.edu/snr/> and <http://www.aquaticresources.bio.txstate.edu/> for admission requirements. Send (email preferred) a cover letter summarizing your background, relevant experience, motivation and interests, a resume including relevant coursework, and contact information for three references to: Susan Schwinning, Department of Biology, Texas State University, San Marcos, TX 78666, [schwinn@txstate.edu](mailto:schwinn@txstate.edu); or Steve Archer, School of Natural Resources, PO Box 210043, University of Arizona, Tucson, AZ 85721, [sarcher@ag.arizona.edu](mailto:sarcher@ag.arizona.edu).