

Graduate fellowship, prairie restoration

The Texas Institute for Coastal Prairie Research and Education at the University of Houston Coastal Center invites applications for a graduate fellowship in the area of prairie restoration.

We are currently restoring ~80 acres of coastal tallgrass prairie that has been invaded by Chinese Tallow trees. The restoration focuses on several patches on the ~925 acre UHCC property (Figure 1), which includes both high quality prairie stands and solid stands of forest that are mostly Chinese Tallow. Approximately 20 acres were lightly invaded, 30 moderately invaded and 30 acres heavily invaded (Figure 2) but all the stands contain an understory of prairie plants that should support regrowth of prairie plants without seeding. Tallow trees are being treated by direct application of herbicide (hack and squirt), and, in moderately and heavily invaded areas, some combination of mechanical mulching and burning. Whether or not areas are mulched, it is likely that some but not all of the areas will be burned in the first 4 or 5 months of 2019. We will seek to establish a regular routine of mowing and/or burning in these areas thereafter.

We seek proposals for monitoring and research to be done within these restored stands. Projects should contain three elements. **1) Establish permanent plots** in restored areas and nearby pristine prairie that can be monitored non-destructively in 2019 and future years to assess restoration success. The proposal should include a plan to establish these plots, obtain GPS coordinates for each, monitor the vegetation in them, and submit a well-curated dataset. **2) A research project** within the restored areas that seeks to improve prairie restoration practices. This could focus, for example, on outcomes as a function of initial tallow density, on secondary treatments that may improve restoration success, or on indicators of restoration success that are not usually measured. Projects can be of any duration; multi-year projects should include a short statement about how work in future years will be funded. **3) A commitment to providing an on-site tour** of the research project to attendees of the North American Prairie Conference in June 2-6, 2019.

Applications should be submitted as a single pdf file consisting of a two page project description (single spaced, 12 point font, 1 inch margins), a one page biography and explanation of the applicant's qualifications, a one-page budget and justification, and a list of milestones that should include submission of the monitoring plot dataset and submission of a final report no later than March 2020. Applicants should arrange for a letter of recommendation to be submitted directly by a reference.

The budget should not exceed \$15,000. Allowable expenses include a summer stipend, travel costs, analytical fees, and expendables. Funds will be released in increments following successful completion of milestones. We welcome projects that will continue beyond March 2020 with other sources of funding.

For more information about the site, see <http://www.uhcc.uh.edu/>.

Applications should be submitted electronically to Dr. Steven Pennings (scpennin@central.uh.edu) by January 10, 2019. Proposals will be evaluated by a committee whose decision is final. Applicants may be asked to revise their proposal to clarify or modify tasks, milestones and budget items before the fellowship is awarded.

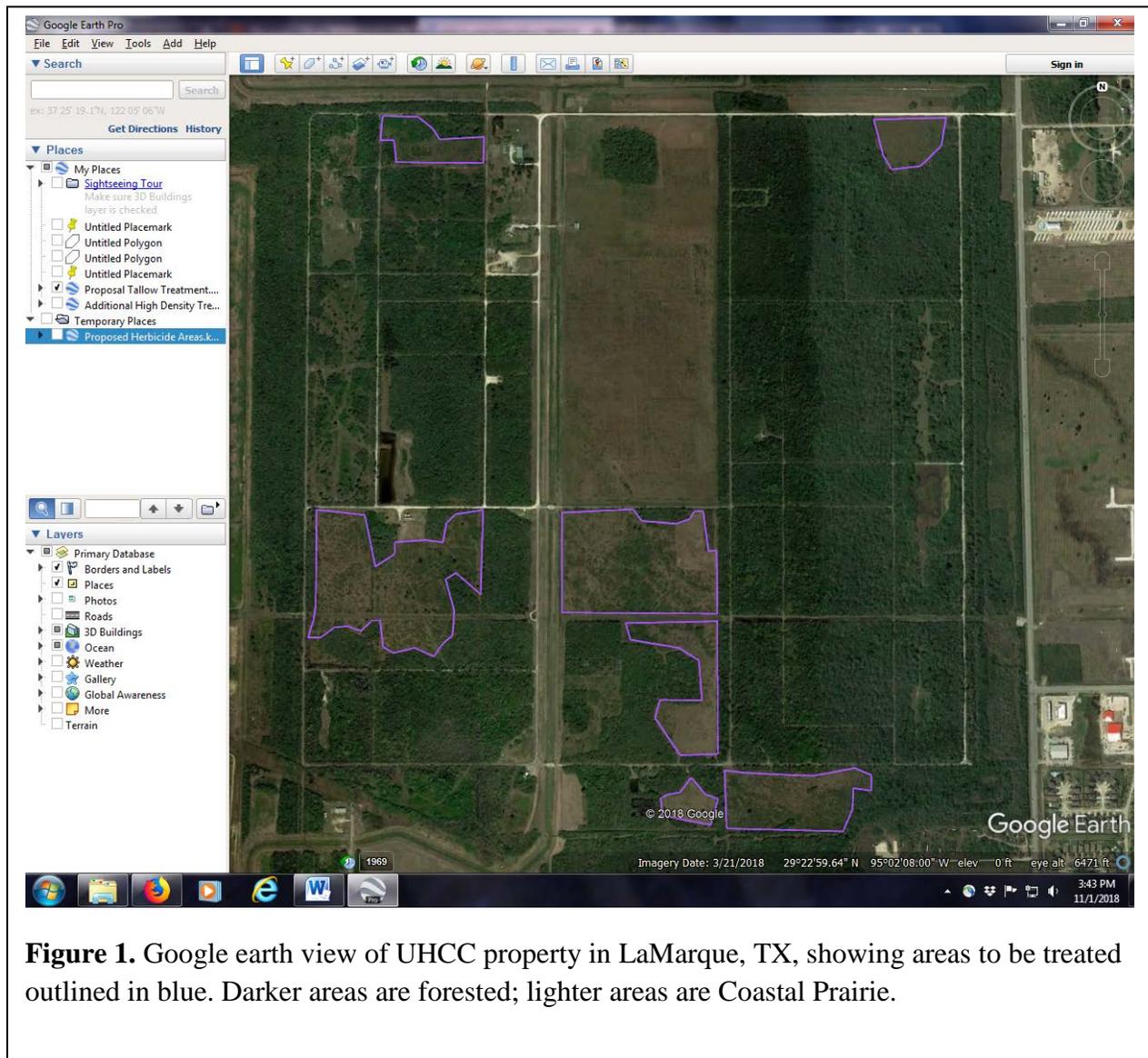




Figure 2.
Photographs showing
lightly invaded (top)
and heavily invaded
(bottom) prairie.