

Graduate Student Opportunity

Aspen (*Populus tremuloides*) Reforestation in the Intermountain West
Utah State University
Quinney College of Natural Resources

We are seeking a MS student interested in aspen (*Populus tremuloides*) distribution, adaptation, and restoration in the Intermountain West. The student will be involved in a broader research effort to understand the genetic, physiological, and cytological aspects of aspen distribution and adaptation at the landscape scale, with an emphasis on restoration implications. The MS student will have a lead role in an established project to explore the propagation and utility of aspen seedlings in reforestation efforts in southern Utah. This project will entail construction, planting, and monitoring of up to 20 small exclosures on private land near Cedar City, Utah. The student will be expected to work effectively and professionally with landowners, project collaborators, and a crew of undergraduate students. The work will build on a variety of previous on aspen research at USU:

DeRose et al. (2014) *Can J For Res*
Fairweather et al. (2014) *For Sci*
Callahan et al. (2013) *J Biogeog*
Mock et al. (2013) *For Ecol Mgt*
Long & Mock (2012) *Can J For Res*
Mock et al. (2012) *PLoS One*
St. Clair et al. (2010) *For Sci*
Mock et al. (2008) *Mol Ecol*
DeWoody et al. (2008) *West N Am Nat*
Kanaga et al. (2008) *Can J For Res*

The student will be affiliated with the QCNR Department of Wildland Resources, and will be advised by Dr. Karen Mock, but may draw on the expertise of several other USU faculty members, including Drs. James Long, Justin DeRose, and James Lutz in the Department of Wildland Resources.

Qualifications:

We encourage applications from students with a variety of interests and skills related to the project. Applicants should:

- have a BS degree in Forestry, Natural Resources, Biology, Botany, Ecology, or a related field completed by May 2015,
- have a competitive GPA (>3.5 cumulative preferred, >3.0 required) and GRE scores (>70% preferred, >40% required),
- have experience related to the project goals (e.g. fence construction & maintenance, plant growth and physiology metrics, greenhouse propagation, field data collection, statistical analysis, GIS and mapping, etc.),
- be physically able to perform fieldwork in remote locations with little supervision (e.g. lifting, driving 4wd vehicles, digging, hiking, camping), and
- be able to oversee small crews of undergraduate students in field conditions

We encourage applicants with previous experience and coursework in plant physiology, forestry, and genetics. We particularly encourage applications from groups that are underrepresented in natural resource careers. Proficiency in spoken and written English is a necessity. Selection of a student will be based on academic achievements, reference letters and relevant experience/skills.

Specifics:

The position will begin in early May 2015. We anticipate that the student will receive assistantship support of \$17,000 per annum. Student health insurance will be subsidized. Students may also be eligible for tuition awards and will have the opportunity to serve as a teaching assistant. We expect the student to become familiar with the project and to work with project collaborators (Drs. Karen Mock at Utah State University, Simon Landhausser at the University of Alberta, and Owen Burney at New Mexico State University) on project logistics and planning prior to initiation in May 2015. This may require some travel, which will be covered by the project.

About Utah State University:

Utah State University is located in a mountainous valley in northern Utah. There are many outdoor recreation opportunities very near campus and the cost of housing is quite low. The faculty and graduate student community in QCNR, Biology, and the Ecology Center is active, collaborative, and multidisciplinary.

Application:

Candidates must apply to the USU School of Graduate Studies. However, before beginning this application process, prospective students should email the following to Dr. Karen Mock (karen.mock@usu.edu):

- a letter of interest (2 pages)
- a CV describing qualifications and experience
- unofficial transcripts (official transcripts will be required for formal application)
- unofficial GRE scores (official GRE scores will be required for formal application)
- contact information for three references who can describe your qualifications

Applications will be accepted and reviewed until the position is filled.

To learn more about this opportunity, please communicate with Dr. Karen Mock (karen.mock@usu.edu)