## **David L Nieland**

## Subject:

PhD Assistantship - Sustainability of Forest Biomass Harvesting at CSU

Sustainability of Biomass Harvesting in Beetle-Killed Rocky Mountain Forests

Biomass harvests are being increasingly promoted as an option for managing forests impacted by extensive bark beetle outbreaks in the Rocky Mountains. However, the effects of these intensive harvest removals on the ecosystem processes that control forest productivity are poorly

understood. We seek a motivated and qualified PhD student to evaluate the

ecological sustainability of forest practices associated with biomass harvesting in beetle-killed forests. Field research will be conducted in forest ecosystems spanning from Colorado to Montana. The research is part of the Biomass Alliance Network of the Rockies (BANR) project

(http://banr.colostate.edu/) led by Colorado State University.

The graduate student will be co-advised by Chuck Rhoades at the US Forest Service Rocky Mountain Research Station (http://www.fs.fed.us/rm/boise/awae\_home.shtml) and Monique Rocca at Colorado State University (http://warnercnr.colostate.edu/~rocca/). Other key members of our research group, the environmental impacts subgroup of the larger BANR team, include Eldor Paul of the National Resource Ecology Laboratory at CSU, and Dan Tinker at Univ. Wyoming. The student will enroll in the Graduate Degree Program in Ecology at Colorado State University (http://ecology.colostate.edu/). The assistantship comes with substantial flexibility in research topics to accommodate the interests of the student. A portion of the funding for this position will be tied to BANR education and outreach activities, so we especially encourage applications from prospective students who have interest in educating broader audiences in ecosystem sustainability and biofuels.

Qualified students should have 1) excellent written and oral communication skills, 2) university coursework, experience, and enthusiasm for ecosystem ecology, soil science, C and N biogeochemistry, and active land management. Interested applicants should send a letter of interest, resume, university transcripts (unofficial version is ok), and contact information for professional references to Dr. Chuck Rhoades, <u>crhoades@fs.fed.us</u>. All applications received before date January 15th

2015 will be given full consideration. We hope to hire a candidate by May 2015 who can participate in the summer field season.