

## **EFFECTS OF POCKET GOPHERS ON ASPEN REGENERATION AND HERBACEOUS VEGETATION IN UTAH**

### **Investigators:**

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### **Objective:**

To determine the impact of pocket gophers on aspen regeneration and herbaceous vegetation.

### **Methodology:**

The effect of pocket gophers on aspen regeneration and herbaceous vegetation will be observed in a series of plots assigned to one of four treatments. These treatments include (1) a control group [no treatment], (2) baited treatment [pocket gopher removal], (3) fenced treatment [ungulate exclusion], and (4) a combined fenced and baited treatment [pocket gopher removal and ungulate exclusion]. The density, height, growth, and mortality of aspen suckers will be measured. Biomass of grasses and forbs and plant species diversity will also be determined.

### **Results:**

Fencing increased aspen sucker growth and height but not their density. Pocket gopher removal had no effect on aspen density, height or growth. Plant species diversity was not affected by any treatment. Fencing increased total herbaceous plant biomass, forb biomass, and grass biomass, but pocket gopher removal had no effect on these variables.

### **Products:**

- (1) Coggins, S. T. 2004. Effects of pocket gophers on aspen regeneration and herbaceous vegetation in Utah. M.S. Thesis. Utah State University, Logan.
- (2) Coggins, S. T., and M. R. Conover. 2005. Effects of pocket gophers on herbaceous vegetation. *Wildlife Society Bulletin*. In press.
- (3) Coggins, S. T., and M. R. Conover. 2005. Effect of pocket gophers on aspen regeneration. *Journal of Wildlife Management*. In press.

### **Additional Research Questions:**

### **Other Funding Partners:**

Jack H. Berryman Institute, U.S. Forest Service