



## **Post-Fire Restoration of Grazing Lands Invaded by Cheatgrass: Integrating Multiple Values**

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In 1996, the Bridger-Knoll wildfire burned approximately 53,000 acres on the Kaibab National Forest, including critical winter range for a world renowned mule deer herd and portions of a livestock grazing allotment. The area is also close to a popular overlook of the Grand Canyon. Droughty conditions, poor native species recovery, and dramatic expansion of cheatgrass led to concerns about increasing risk of more frequent fires. Support by sportsmen's groups such as the Arizona Deer Association enabled the Arizona Game and Fish Department to procure funding to develop a 24,000 acre restoration project, fund NEPA analyses to be conducted by the U. S. Forest Service, and collect seed from key browse species. To date, 3,000 acres have been treated. Support from the permittee, Grand Canyon Trust, was critical in procuring funding from the Natural Resources Conservation Service's Grazing Land Conservation Initiative to inter-seed native shrubs on 500 acres that were severely burned and infested with cheatgrass and to conduct replicated experiments to test the effectiveness of herbicide treatments to control cheatgrass and seeding treatments to restore native species. The Rocky Mountain Research Station provided additional funding to explore germination requirements of shrub seeds, sensitivity of shrub seeds and seedlings to herbicide, and whether the fire reduced soil mycorrhizae. This project is an example of how buy-in from, and integration of the diverse values of, land managers, permittees, sportsmen's groups, researchers, and game agencies provided the impetus and funding to conduct and monitor the effectiveness of this large scale restoration project.

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