

Equipment and Methods for Restoring Sage-Grouse Habitat

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Sagebrush lands in the Intermountain West have undergone significant alterations in the past 125 years, which is reflected in range-wide declines of sage-grouse distribution and abundance. Sagebrush is one of the most imperiled ecosystems in the United States and less than 10 percent remains in undisturbed condition. Degradation of the sagebrush ecosystem has been attributed to historic overgrazing, disruption of natural fire cycles, and establishment of exotic plants. Active habitat management will be required to restore sagebrush habitat and enhance sage-grouse populations. However, current knowledge is insufficient to provide fully comprehensive management recommendations for restoration of sagebrush rangelands to benefit sage-grouse populations. In addition to sagebrush cover, native herbaceous vegetation and the associated arthropods in sagebrush stands play an equally critical role for sage-grouse reproduction and survival. Restoration of these key habitat components is hindered by the typically arid environment of sagebrush lands and slow response times, lack of an adequate seed source for native plants, and the inability to control the establishment and spread of exotic annual grasses. In addition, these difficulties are amplified by the scale at which restoration must occur to affect sage-grouse populations. The purpose of this presentation is to identify the major issues that limit restoration of sage-grouse habitat and stimulate thinking towards new innovative restoration techniques.