Native and Introduced Seed Mix Performance on Cheatgrass Rangelands Charlie D. Clements and Dan N. Harmon USDA, Agricultural Research Service, Great Basin Rangelands Research Unit Reno, NV



United States Department of Agriculture Great Basin Rangelands Research Unit

Invasive annual grass, cheatgrass, has significantly increased the chance, rate, spread and season of wildfire. With each passing wildfire season, more and more critical wildlife habitat and grazing resources are disturbed.

Pre-emergent herbicide, Sulfometuron methyl /Chlorsulfuron (Landmark XP), controlled cheatgrass by 98.7%





The best known method at suppressing cheatgrass densities and associated fuels is through the establishment of perennial grasses.



Cheatgrass competition must be reduced *prior* to seeding



2 of 3 years of seeding trials introduced perennial grasses outperformed native perennial grass seed mixes

(B)

(A)

Native seed mix

Cheatgrass Suppression Zone

(A) Native perennial grasses performed well following favorable precipitation of over 335 mm (>13"), and (B) failed when the site received less than 220 mm (<8") of annual precipitation. Izzenhood NV, 178 mm (7") – 228 mm (9") zone

On arid sites throughout the Intermountain West, it is important to understand the inherent potential of selected perennial grass species to germinate, emerge and establish in environments that receive more unfavorable precipitation years than favorable to improve restoration/rehabilitation efforts.