

Seeding Techniques to Promote Woody Plant Establishment in the Northern Great Plains¹

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Abstract: The majority of the grassland areas in south central Montana include woody plants such as Wyoming big sagebrush and Winterfat. Establishing woody plants in reclamation can be challenging because of the direct competition with desirable and undesirable grasses. Additionally, reclamation requirements include establishing an adequate amount of native grasses to control erosion, control weeds, and provide adequate ground cover for wildlife and livestock. The Spring Creek Mine³ (SCM) uses different soil substrates and segregated seeding techniques to promote an ecological environment where woody plants can establish. SCM has successfully used the seeding techniques since 2013 and has successfully used different substrates since 1997. SCM received the 2017 Office of Surface Mining Excellence in Reclamation award for success using these techniques. The poster will detail reclamation techniques used to promote an ecological environment for woody plant establishment. Using different soil substrates and segregated seeding techniques can usually be implemented by making simple changes to revegetation methods. The result can be improved ecological diversity providing important forage for wildlife and livestock.

Additional Key Words: soil substrates, vegetation competition, reclamation

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3. Work reported here was conducted near 45°12' N, 106°91' W.