

1. Holzworth, Larry K.; Hunter, Harold; Winslow, Susan R.
2. 19
3. Poster
4. USDA – Natural Resources Conservation Service
5. 10 East Babcock Street, Bozeman, MT 59715; 1755 Moffit Gulch Road, Bozeman, MT 59715; RR 2, Box 1189, Bridger, MT 59014
6. 406.587.6838, larry.holzworth@mt.usda.gov; 406.662.3579
susan.winslow@mt.usda.gov
7. Member
8. Susan R. Winslow
9. N/A
10. Poster

11. DISTURBED FORESTLAND REVEGETATION

EFFECTIVENESS MONITORING-RESULTS OF 30 YEARS.

Larry Holzworth, USDA-NRCS, 10 East Babcock Street, Bozeman, MT 59715; Harold Hunter, 1755 Moffit Gulch Road, Bozeman, MT 59715; Susan Winslow, USDA-NRCS Plant Materials Center, RR2 Box 1189, Bridger, MT 59014.

12. Wildfires, combined with extended drought, have devastated millions of acres of forest and grazing lands in the West. Over the past 3 years, more than 272,000 wildfires occurred on 18.5 million acres across the United States. In the aftermath of the destruction, there are important questions such as: should intense burns be seeded, with what species and methods, will soil and water resources be protected and invasive species suppressed, and will seeded species impact timber regeneration? In 1974, the USDA Natural Resources Conservation Service (NRCS) began investigating these issues with the establishment of three field evaluation plantings (FEPs) representing five forest habitat types on privately owned land in western and eastern Montana. The FEPs were installed as replicated and unreplicated plots in the fall or winter following disturbance from timber harvest. In 1988, following widespread criticism of aerial seeding conducted under the NRCS Emergency Watershed Program, six fire-impacted watershed-monitoring studies were established. Burned, or harvested and mechanically scarified sites were seeded with introduced and native grasses at an average rate of 60-80 pure live seed/ft². Plant cover was monitored for more than 10 years. Results indicate grass seeding had little effect on tree regeneration, invasive species were significantly suppressed on some sites, and soil erosion was reduced by one-half on successfully treated sites. The planting of adapted native or introduced forage grass species can provide the benefits of erosion control, weed suppression, and an enhanced forage resource on a variety of sites without significantly affecting the survival of tree seedlings.