



Rangeland seeding is a way of restoring degraded land while providing forage for livestock at the same time. Perennial or self-sustaining plants such as grasses, forbs, legumes, shrubs and trees are used that are appropriate for the soil and climate conditions and for the nutritional needs of the livestock grazing it. As the roots of the plants grow deep they promote soil health by building soil organic matter, increasing soil nutrients and improving water infiltration. Additional benefits are reductions in soil erosion by wind or water and increased carbon sequestration. It is recommended to use a mix of seeds to increase biodiversity. Using native versus non-native species is more likely to bring success.



Benefits

- Improves soil health
- Improves soil microbiology
- Reduces soil erosion
- Improves water infiltration
- Improves forage availability
- Improves forage nutrition
- Increases carbon sequestration
- Increases biodiversity
- Improves ecosystem function and resiliency
- Aids in reclamation of burned areas



Potential Considerations

- Might require training and time to learn what will work best for your operation
- Initial investment in seed and labor cost can be high
- Might need seeding equipment
- Waiting at least one year before grazing a newly seeded field is recommended.
- Shifts in land management practices along with seeding may be beneficial
- Risks related to unpredictable weather and low rainfall, especially in the west



Resources



NRCS Conservation Practice Standard: Range Planting (Ac.) Code 550

Definition and criteria for a variety of purposes.
<https://bit.ly/3v83ymt>



USDA-NRCS Crop Nutrient Content Tool

Estimates of the nutrient content in harvested plant biomass for many different crops.
<https://bit.ly/3iyOBqO>



Seeding Rangelands After Fire

Advice and links useful for successful reseeding and applying for financial assistance. From UCANR.
<https://bit.ly/2SqTzLz>



Assessment of Range Planting as a Conservation Practice

Selection of plant materials, seed quality, planting methods, use of mulch, seed depth, seeding rate, etc. <https://bit.ly/2SqoDZ1>



Calculating Seeding Rates for Conservation Plantings

Applying seed at the proper rate to balance costs, weed suppression, and stand health.
<https://bit.ly/3zgoHht>



Seeded Range Plants for California

Grasses and legumes currently used for range reseeding and disturbed land reclamation in California. <https://bit.ly/3xa4SqD>

Research

Benayas, J., A. Newton, A. Diaz, et al. 2009. *Enhancement of biodiversity and ecosystem services by ecological restoration: A meta-analysis*. *Science* 325:1–10. <https://bit.ly/2TPtyWB>

Davy, J., Dykier, K., Turri, T. and Gornish, E., 2017. *Forage seeding in rangelands increases production and prevents weed invasion*. *California Agriculture*, 71(4), pp.239-248. <https://bit.ly/2RFc5zD>

De Deyn, G., R. Shiel, N. Ostle, et al. 2010. *Additional carbon sequestration benefits of grassland diversity restoration*. *Journal of Applied Ecology* 48:600–608. <https://bit.ly/2SfoTKr>

Montalvo, A., P. McMillan, and E. Allen. 2002. *The relative importance of seeding method, soil ripping, and soil variables on seeding success*. *Restoration Ecology* 10:52–67. <https://bit.ly/2TjW8iU>

Learn More About Rangeland Seeding at The Center for Regenerative Agriculture and Resilient Systems
<https://bit.ly/352UGE7>