Fiscal Year 2023 (FY23)

NMDA's Healthy Soil Program Resource Concern Guide Sheet for RANGELAND

This guide sheet is designed to help you select agricultural practices to address your existing resource concerns on rangeland. It is intended as a starting point rather than as an exhaustive list of all resource concerns and agricultural practices that can address existing resource concerns. These agricultural practices align with those promoted by the New Mexico office of USDA's Natural Resources Conservation Service (NRCS). The three-digit codes associated with NRCS New Mexico Practice Standards are listed and hyperlinked below to provide additional information.

The soil health principles as defined in the 2019 Healthy Soil Act are listed below. They correspond with the numbers in the right-hand column of the chart that follows.

- 1) keeping soil covered
- 2) minimizing soil disturbance on cropland and minimizing external inputs
- 3) maximizing biodiversity
- 4) maintaining a living root
- 5) integrating animals into land management, including grazing animals, birds, beneficial insects or keystone species, such as earthworms

Resource Concern	Agricultural Practice on Rangeland	Soil Health Principle
Decreased plant productivity and health Lack of overall forage production and health of existing plant species	Prescribed grazing (528)	1, 2, 3, 4, 5
	Native grass and/or pollinator habitat	1, 2, 3, 4, 5
	establishment (<u>550</u>), (<u>327</u>)	
	Temporary fencing * (382)	
	Organic-based soil amendments (compost,	3
	manure, biochar, etc.) (<u>484</u>), (<u>590</u>)	
Insufficient plant species and	Prescribed grazing (528)	1, 2, 3, 4, 5
composition	Native grass and/or pollinator habitat	1, 2, 3, 4, 5 1, 2, 3, 4, 5
Plant community composition of	establishment (<u>550</u>), (<u>327</u>)	
warm-season grasses, cool-season	Cover crops to improve soil fertility/plant	1, 3, 4, 5
grasses, forbs, and shrubs not	diversity (340)	
consistent with management goals	Temporary fencing * (382)	
	Organic-based soil amendments (compost,	3
	manure, biochar, etc.) (<u>484</u>), (<u>590</u>)	
Lack of soil biodiversity	Prescribed grazing (528)	1, 2, 3, 4, 5
A lack of diversity among the	Native grass and or pollinator habitat	1, 2, 3, 4, 5 1, 2, 3, 4, 5
plants, animals, and soil organisms	establishment (<u>550</u>), (<u>327</u>)	
interacting with the soil	Cover crops to improve biodiversity (<u>340</u>)	1, 3, 4, 5
	Temporary fencing* (382)	

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Resource Concern	Agricultural Practice on Rangeland	Soil Health Principle
Low soil organic matter	Prescribed grazing (528)	1, 2, 3, 4, 5
Lack of organic materials at various stages of decomposition within the	Native grass and or/pollinator habitat establishment (550)	1, 2, 3, 4, 5
soil	Cover crops to improve soil organic matter (340), (327)	1, 3, 4, 5
	Temporary fencing * (382)	
	Organic-based soil amendments (compost, manure, biochar, etc.) (484), (590)	3
	Bale grazing (E528P)	1, 5
Soil erosion (wind and water)	Prescribed grazing (528)	1, 2, 3, 4, 5 1, 2, 3, 4, 5
Presence of eroding soil (soil movement both on to and off of the	Native grass and or pollinator habitat establishment (550), (327)	1, 2, 3, 4, 5
land) due to wind or rain	Cover crops to maintain soil structure and increase infiltration (340), (327)	1, 3, 4, 5
	Temporary fencing * (382)	
	Organic-based soil amendments (compost, manure, biochar, etc.) (484), (590)	3
Water infiltration and	Prescribed grazing (<u>528</u>)	1, 2, 3, 4, 5 1, 2, 3, 4, 5
percolation	Native grass and or pollinator habitat	1, 2, 3, 4, 5
Poor water movement into and	establishment (<u>550</u>), (<u>327</u>)	
within the soil (ponding of water after rain events)	Cover crops to maintain soil structure and increase infiltration (340)	1, 3, 4, 5
	Temporary fencing * (382)	
	Organic-based soil amendments (compost, manure, biochar, etc.) (484), (590)	3

^{*} Temporary fencing is a facilitating practice used to enhance other agricultural practices. Temporary fencing does not directly correlate to a soil health principle but instead must be utilized in conjunction with other agricultural practices and an overall management plan.