Adapting to Change: Avoid, Reduce, Restore

October 7, 2021 Co-Hosted by the Colorado Chapter of the Society for Range Management the Colorado Plateau Science and Management Forum









Global Rangelands

Distribution of rangeland types globally

Source 1: Terrestrial ecoregions of the world. Downloaded in 2021 from:

https://globil-panda.opendata.arcgis.com/datasets/wwf-priority-35-ecoregions?geometry=-172.266%2C-86.819%2C172.266%2C89.233.
Original source: Olson, D. M., Dinerstein, E., Wikramanayake, E. D., Burgess, N. D., Powell, G. V. N., Underwood, E. C., D'Amico, J. A., Itoua, I., Strand, H. E., Morrison, J. C., Loucks, C. J., Allnutt, T. F., Ricketts, T. H., Kura, Y., Lamoreux, J. F., Wettengel, W. W., Hedao, P., Kassem, K. R. (2001). Terrestrial ecoregions of the world: a new map of life on Earth. Bioscience 51(11): 933-938.

No	Rangeland types	Area km²
1	Deserts and xeric shrublands	27,984,644.64
2	Flooded grasslands and savannas	1,096,129.62
3	Mediterranean forests, woodlands, and scrub	3,227,266.28
4	Montane grasslands and shrublands	5,203,411.00
5	Temperate grasslands, savannas, and shrublands	10,104,079.63
6	Tropical and subtropical grasslands, savannas, and shrublands	20,295,424.19
7	Tundra	11,598,465.28
	Total	79,509,420.64

Deserts and xeric shrublands

Flooded grasslands and savannas

Mediterranean forests, woodlands, and scrub

Montane grasslands and shrublands

Temperate grasslands, savannas, and shrublands

Tropical and subtropical grasslands, savannas, and shrublands

Tundra

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AVOID

REDUCE

Avoid: Land degradation can be avoided by addressing drivers of degradation and through proactive measures to prevent adverse change in land quality of nondegraded land and confer resilience, via appropriate regulation, planning and management practices.

Reduce: Land degradation can be reduced or mitigated on agricultural and forest land through application of sustainable management practices (sustainable land management, sustainable forest management).

REVERSE

Reverse: Where feasible, some (but rarely all) of the productive potential and ecological services of degraded land can be restored or rehabilitated through actively assisting the recovery of ecosystem functions.

Morning Schedule

8:00:00 AM	Welcome, housekeeping, and introduction of the conference theme - avoid, reduce, restore.	Retta Bruegger, Nichole Barger
8:30:00 AM	Climate change, ecological drought, and western slope ecosystems	John Bradford
9:15:00 AM	Economic impacts of climate change to ranching	John Ritten
9:45:00 AM	Break – Coffee/ pastries/ fruit are outside in the pop-up tents	
10:00:00 AM	Sustainability and innovation in the livestock industry	Kim Stackhouse- Lawson
10:30:00 AM	Grazing management for resilience on the Colorado Plateau	Eric Thacker
11:00 AM	Discussion break-out	Baili Foster
12:00:00 PM	Presentation of Awards: Conservation Excellence	Stephanie Pitt
	Lunch	

Afternoon Schedule

1:15:00 PM	The latest, greatest, and what we don't need to do again in rangeland restoration science	Carrie Havrilla
2:00:00 PM	Land Knowings, Lessons and Truths: Indigenous Tellings of Change, Adaptation and Restoration	Doreen Martinez
2:45:00 PM	Break	
3:00:00 PM	Strategies for collaborative conservation with the Intermountain West Join Venture	Mandi Hirsh & Joy Morris
3:30:00 PM	Discussion break-out	Baili Foster
4:30:00 PM 5:0:00 PM	Ending discussion, synthesis and networking Adjourn	Nichole Barger

Describe in one word your interest in this symposium

Graduate Students and Post-Docs!