References:

Antle JM, Diagana B (2003) Creating incentives for the adoption of sustainable agricultural practices in developing countries: The role of soil carbon sequestration. American Journal of Agricultural Economics 85:1178–1184

Barberán A, Ladau J, et al. (2015) Continental-scale distributions of dust-associated bacteria and fungi. Proceedings of the National Academy of Sciences of the United States of America 112:5756–5761

Barberán A, Mcguire KL, et al. (2015) Relating belowground microbial composition to the taxonomic, phylogenetic, and functional trait distributions of trees in a tropical forest. Ecology Letters 18:1397–1405

Barberán A, Casamayor EO, Fierer N (2014) The microbial contribution to macroecology. Frontiers in Microbiology 5:1–8

Barberán A et al. (2016) Microbes should be central to ecological education and outreach. Journal of Microbiology & Biology Education 17:23–28

Bashan Y et al. (2012) Restoration of eroded soil in the Sonoran Desert with native leguminous trees using plant growth-promoting microorganisms and limited amounts of compost and water. Journal of Environmental Management 102:26–36

Batista BD, Singh BK (2021) Realities and hopes in the application of microbial tools in agriculture. Microbial Biotechnology 0:1–11

Berdugo M et al. (2020) Global ecosystem thresholds driven by aridity. 790:787–790

Van Den Berg L, Kellner K (2005) Restoring degraded patches in a semi-arid rangeland of South Africa. Journal of Arid Environments 61:497–511

Blumenthal DM, Lecain DR, Augustine DJ (2017) Composted manure application promotes long-term invasion of semi-arid rangeland by Bromus tectorum. Ecosphere 8

Chen Y et al. (2021) Life-history strategies of soil microbial communities in an arid ecosystem. ISME Journal 15:649–657

Economic Research Service (2021) Cattle & beef: statistics & information. United States Department of Agriculture

Fierer N (2017) Embracing the unknown: Disentangling the complexities of the soil microbiome. Nature Reviews Microbiology 15:579–590

Gornish E (2019) Seed ball strategies for gardening and restoration in arid landscapes.

Gornish E, Arnold H, Fehmi J (2019) Review of seed pelletizing strategies for arid land restoration. Restoration Ecology 27:1206–1211

Gornish ES, Miller TE (2010) Effects of storm frequency on dune vegetation. Global Change Biology 16:2668–2675

Gornish ES et al. (2021) Novel Approaches to Ecological Restoration in Semi-Arid and Arid Habitats.

Gornish ES, Simpson A, Caballero-Reynolds M (2018) A bicycle-powered seed pelletizer for use in gardening and restoration.

Grandlic CJ et al. (2008) Plant growth-promoting bacteria for phytostabilization of mine tailings. Environmental Science and Technology 42:2079–2084

Gravuer K, Gennet S, Throop HL (2019) Organic amendment additions to rangelands: A meta-analysis of multiple ecosystem outcomes. Global Change Biology 25:1152–1170

Harris J (2009) Soil microbial communities and restoration ecology: facilitators or followers? Science 325:573–574

Harrison SP, Gornish ES, Copeland S (2015) Climate-driven diversity loss in a grassland community. Proceedings of the National Academy of Sciences of the United States of America 112:8672–8677

Hayat R et al. (2010) Soil beneficial bacteria and their role in plant growth promotion: A review. Annals of Microbiology 60:579–598

Jackson L et al. (2012) Adaptation strategies for agricultural sustainability in Yolo County, California.

Kaminsky LM et al. (2019) The Inherent Conflicts in Developing Soil Microbial Inoculants. Trends in Biotechnology 37:140–151

Léger A (2020) Mulch and compost for restoration of soil health in a semi-arid rangeland.

McConnell KE (1983) An economic model of soil conservation. American Journal of Agricultural Economics 65:83–89

McFarland MJ et al. (2010) Use of Biosolids to Enhance Rangeland Forage Quality. Water Environment Research 82:455–461

Mitchell JE (2000) Rangeland resource trends in the United States: A technical document supporting the 2000 USDA Forest Service RPA Assessment. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station

Moebius-Clune BN et al. (2016) Comprehensive Assessment of Soil Health - The Cornell Framework Manual.

Naamala J, Smith DL (2021) Microbial Derived Compounds, a Step Toward Enhancing Microbial Inoculants Technology for Sustainable Agriculture. Frontiers in Microbiology 12:1–12

O'Callaghan M (2016) Microbial inoculation of seed for improved crop performance: issues and opportunities. Applied Microbiology and Biotechnology 100:5729–5746

Plaza-Bonilla D et al. (2015) Carbon management in dryland agricultural systems. A review. Agronomy for Sustainable Development 35:1319–1334

Plaza C et al. (2018) Soil resources and element stocks in drylands to face global issues. Scientific Reports 8:1–8

Reynolds JF (2001) Desertification. In: Encyclopedia of Biodiversity. Levin, SA, editor. Vol. 2 pp. 61–78.

Ribeiro IDA et al. (2020) Use of Mineral Weathering Bacteria to Enhance Nutrient Availability in Crops: A Review. Frontiers in Plant Science 11:1–20

Richardson AE, Simpson RJ (2011) Soil microorganisms mediating phosphorus availability. Plant Physiology 156:989–996

Sutton PC et al. (2016) The ecological economics of land degradation: Impacts on ecosystem service values. Ecological Economics 129:182–192

Ward N (1998) Sustainable ranching: a rancher's perspective. Rangelands 20:33–37

Yang B et al. (2021) Does restoration of plant diversity trigger concomitant soil microbiome changes in dryland ecosystems? Journal of Applied Ecology 0–3