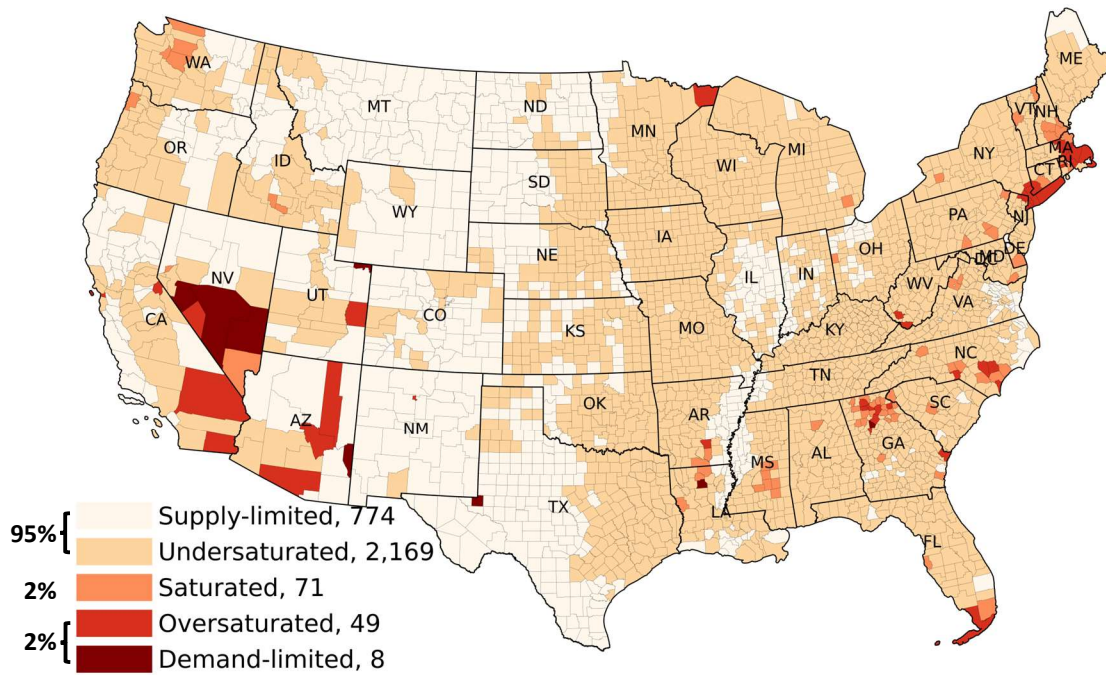


Imbalanced Nutrient Supply and Demand for Regenerative Agriculture

a. Spatial distribution of county-level nutrient saturation ratio (supply/demand)



b. Spatial clusters of county-level nutrient saturation ratio (supply/demand)

c. Spatial outliers of county-level nutrient saturation ratio (supply/demand)

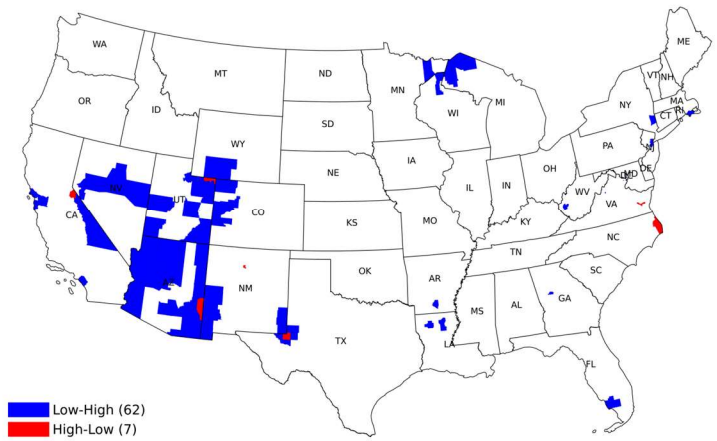
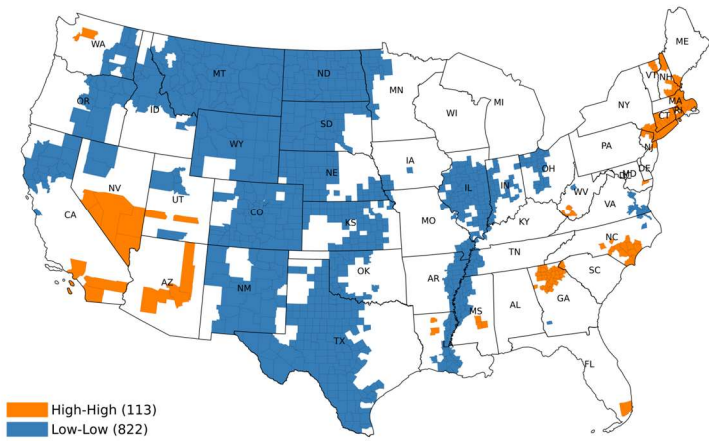


Figure 1. Spatial distribution and clustering of county-level nutrient saturation ratios. a. Cutoff values of 0.05, 0.75, 1.25, and 10 for nutrient saturation ratios are used to distinguish between supply-limited, undersaturated, saturated, oversaturated, and demand-limited counties. b. The categories of High-High and Low-Low represent spatial clusters, where counties with high/low nutrient saturation ratios are surrounded by counties that share similar high/low values. c. The Low-High and High-Low categories represent spatial outliers, where counties with high nutrient saturation ratios are surrounded by counties with low nutrient saturation ratios, and vice versa.