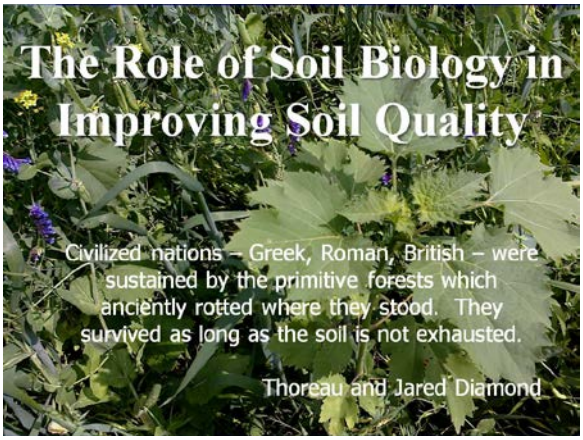
MRBI: The Role of Soil Biology in Improving Soil Quality

Training Objective: Learn about the role of soil biology in improving soil quality, and how the soil food web can be managed to increase nutrient cycling, water holding capacity, and other dynamic soil functions.

Training Description: Soil as the heart of the farming ecosystem is driven by biological activities to increase soil organic matter, which represents a small percentage of the soil by weight, but controls over 90% of the soil functions. This presentation introduces participants to the concepts of 1) rhizosphere biology, the area immediately surrounding the plant root with the highest concentration of microbiological activity; 2) soil "livestock" consisting of bacteria, fungi, nematodes, protozoa and microarthropods and representing the greatest concentration of biomass anywhere on the planet; 3) glomalin, a biological glue that holds soil together and improves soil aggregation; and 4) building soil biota to improve soil quality, increase nutrient cycling, and long term sustainability using cover crops, no-till, and other sustainable farming practices. Participants can take advantage of the many resources provided by the speaker, Dr. Kristine Nichols, USDA-ARS. This is the fourth of seven Mississippi River Basin Initiative (MRBI) webinars on the role of healthy soils in nutrient management to improve water quality.



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Associated Documents:

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