

Long-term ecological considerations of a soil's health, or the capacity of a soil to function within ecosystem boundaries in order to sustain biological productivity, maintain environmental health, and promote plant and animal health through the generations while meeting this growing population demand are needed. Soil health improves with perennial vegetation including grasses and legumes; a reduced tillage/soil disturbance; incorporation of livestock grazing and manure into the system; increased rotation diversity including cash crops and forages; and cover crops for increased soil cover and diversity of the microbial population. Utilizing all of these options for improving soil health may not be practical in every management scenario. Since 1914, Extension educators have been responsible for adult education and improving the lives and economy of citizens at the local level. Extension educators continue to provide research-based information and education to help "show me" the benefits of managing our living, breathing Missouri soils.