An Integrated Social, Economic, and Ecologic Conceptual (ISEEC) Framework for Considering Rangeland Sustainability

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Development of standard approaches to assessing sustainability in rangeland systems has led to the review and implementation of indicator programs designed to monitor trends in these landscapes. However, accurate implementation of indicator programs requires thorough understanding of interactions of ecosystem functions and processes in both the biophysical and socio-economic subsystems. Praxis, the art of applying conceptual frameworks to real world concerns, frequently leads ecologists and social scientists to employ models dependent upon less-than-perfect empirical representations to describe highly complex systems. Since 2001, the Sustainable Rangeland Roundtable has engaged in an ongoing program to identify, validate, and promote indicators of sustainable rangeland management. To validate selected indicators and examine the relationships between them, a subgroup of SRR, produced a conceptual model, the Integrated Social, Economic, and Ecological Conceptual (ISEEC) framework. This framework was created by focusing on rangelands and the social, economic and ecological forces that affect their condition. As a part of this process, disciplines shed their assumptions of system equilibrium, dealt with complexities of local conditions that may not be expressed at larger aggregations of analysis, and grappled with understanding spasmodic rates of change. Although these disciplines have tended to operate in isolation, building the ISEEC framework revealed remarkable similarity among conceptual and methodological orientations of inquiry. The basis of this framework and future applications will be presented. To frame its application, an example for conservation of Golden Cheeked Warbler Habitat in central Texas will be described.