Ecological Succession Database

Michael G. Willoughby
Rangeland Management Branch, 4th Flr. 9920 108th Str. Edmonton. AB. T5K1M4
Email: mike.willoughby@gov.ab.ca

Michael A. Alexander
Rangeland Management Branch, Provincial Building, Pincher Creek, AB.
Email: mike.alexander@gov.ab.ca
Rocky Mountain Forest Range Association (RMFRA)
Box 118, Nanton. AB. T0L 1R0

Key Points

- Over ten percent (6 million acres) of Alberta's landscape is public rangeland representing some of the most ecologically diverse areas within the province.
- In order to detect changes in rangeland diversity that exceeds the range of natural variation and to provide warnings on changes to rangeland health, baseline information that characterizes the ecological process and functions of representative community types is required across the province.
- In 1997 the Rocky Mountain Forest Range Association (RMFRA) started collecting rangeland ecological information and in 1999 Rangeland Management Branch initiated the development of Ecological Succession Description database (ESD) in order to summarize this information. The primary objective of the database was the development of a plant community classification system that can be used by field staff and the public to assess the ecology, health and sustainable stocking rate of ecological sites within each natural subregion.
- The key result of this project was to provide an on demand web based hard copy product that permitted rapid and low cost dissemination of ecological site information. This information is being used by livestock producers, government and non-government staff in the day to day management of the rangeland resource.

Introduction

Biodiversity represents the living building blocks of our natural world. It is the natural capital that supports our current social and economic well-being, as well as opportunities for the future. Over ten percent (6 million acres) of Alberta's landscape is public rangeland representing some of the most ecologically diverse areas within the province. These rangelands are important for watershed protection and are sources of timber, forage for livestock, wildlife habitat and recreation opportunities. A key link to maintaining biodiversity is health and functional status of the landscape and our ability to monitor it related to performance measurables. When landscapes are healthy and functional, (eg. healthy range) it can be said that opportunities for the many values (economic, social, ecological) and uses can be realized (Figure 1).