# Sustainable Rangelands Roundtable -- Indicator #23

Number of Domestic Livestock on Rangeland

## What is the indicator & why is it important?

Cattle production is one of the most important economic uses of grasslands and shrublands, and remains an important part of the social fabric of many parts of the West. The annual per capita consumption of beef has remained constant over the past decade, but, with an increasing U.S. population, demand for beef is expected to slowly increase. The number of cattle on grasslands and shrublands is a direct indicator of the degree to which these lands produce this important commodity. The fraction of all cattle that are on grasslands and shrublands (as opposed to those in confined feeding operations or feedlots) has remained steady within a range of 90 to 93 percent during the reporting period.



### What does the indicator show?

The number of cattle on grasslands and shrublands declined nationally from 103 million in 1994 to 96 million in 2000. This change reflects the bottoming of a cattle cycle. The U.S. cattle inventory has undergone cycles lasting roughly 10 years since the 1880's. According to other data, the U.S. national herd size has stayed fairly constant over the past two cycles and is expected to remain so in the next decade. Collectively, the seven states shown above have about 40 percent of all U.S. cattle on grasslands and shrublands during the summer.

#### How to Interpret these Data:

These data are intended to represent the degree to which grasslands and shrublands are used for raising cattle. Since many cattle spend some time on feedlots for finishing prior to slaughter, we have chosen to report cattle that are feeding on grasslands or shrublands, including pastures, in July as the most representative of overall conditions. In winter, some cattle are placed on croplands to consume plant products left behind. More importantly, the digestibility and amount of protein of grass plants decline greatly in winter, so the forage supply on grasslands and shrublands is inadequate. Thus, in many regions, ranchers must feed hay to cattle in winter.

## Limitations, Data Gaps and Related Issues:

These data are from reports produced by USDA National Agricultural Statistics Service (NASS). The data may be obtained from their on-line data base at <u>http://www.usda.gov/nass/</u>. NASS obtains data using surveys to farmers, ranchers, and feedlot owners.

Cattle numbers on grasslands and shrublands are estimated by subtracting the number of cattle on feed from total cattle numbers in July. Total cattle numbers include cows that have calved, bulls, heifers, steers, and calves. Most calves have not weaned by July; however, increased forage consumption by lactating cows compensates for it as an indicator of grassland/shrubland use. The number of cattle on feed includes steers, heifers, cows, and bulls. NASS estimates for cattle on feed in July underestimates true numbers because the data only include animals in feedlots holding at least 1000 animals. We don't expect this difference to be substantial because many smaller feeding operations are found on farms and ranches where livestock are not confined in summer. Past cattle numbers are limited by a lack of feedlot data prior to 1994 and total cattle numbers by state between 1981 and 1998.

